DICTIONARY of INDUSTRIAL TERMINOLOGY

2nd Edition

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&
EMMA HOLLOWAY

Scrivener Publishing

WILEY

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Scrivener Publishing
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Beverly, MA 01915-6106

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This edition first published 2021 by John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, USA and Scrivener Publishing LLC, 100 Cummings Center, Suite 541J, Beverly, MA 01915, USA

For more information about Scrivener publications please visit www.scrivenerpublishing.com.

Wiley Global Headquarters
111 River Street, Hoboken, NJ 07030, USA

For details of our global editorial offices, customer services, and more information about Wiley prod-ucts visit us at www.wiley.com.

Library of Congress Cataloging-in-Publication Data

ISBN 9781119363446

Cover design by Kris Hackerott

Set in size of 9pt and Minion Pro by Manila Typesetting Company, Makati, Philippines

Printed in the USA

10 9 8 7 6 5 4 3 2 1

This work is dedicated to Phil Carmical for his dedication, patience, drive, and determination and to the memory of the late Edgar and Elvera Meseck, Leon and Joan Holloway.

List of Contributors

Chikezie Nwaoha: Co-Editor on First Edition
Peighton Hornung: Industrial Relations Editor

Forewords

The very basis of communicating depends on agreeing on a meaning. If we show a 6 month-old child an orange and consistently call it a banana for the next 18 years of his sheltered life, he will not believe the person who tells him that what he calls a banana is, in fact, an orange. The point of this analogy comes into full focus as we consider what could happen with miscommunications in virtually everything we hear, do, say, or perceive. Whether it is conduct or behavior, designing, making, using, selling, or buying—we must agree on definitions.

In this second edition of a successful book, the father–daughter authors Michael and Emma Holloway maintain the spirit of this theme but update the long list of terms and items that require adherence to definitions. In the process of doing so, they often ask us to challenge our preconceived notions and opinions. One person's preconceived opinions can be seriously at odds with somebody else's opinions, unless an agreed-upon definition becomes the central core of our understanding.

This is of great relevance in the expanding Universe of Industry. The relevance of definitions becomes clear in hundreds of different pursuits and endeavors, although space and time available force us to verbalize a motto that, hopefully, is accepted by those seeking safety and reliability in work processes and asset management: "Discover Reliability Facts; Rethink Old Assumptions." This book will prove helpful to those who seek to add value rather than engaging in dead-ended debates and flawed arguments.

Heinz P. Bloch, P.E.

There's a story about when Spanish explorers first arrived in the Gulf of Mexico, they wanted to know what the name of the land was. They asked the first local that they encountered, "What do you call this place?" The Maya, who resided on the peninsula said, "Yucatan" which has been the name of the peninsula ever since. Unfortunately, Yucatan in Mayan means, "I don't understand." Oops.

Misunderstandings in the industrial place can have less comical outcomes. The first step in avoiding miscommunication is by having shared lexicon. Mr. Holloway and Ms. Holloways' 2nd edition of the Dictionary of Industrial Terminology is the industry's benchmark to standardize lexicon used across maintenance, engineering, and reliability disciplines. This literary tome is a must-have anchor on the bookshelf of any technician, engineer or thought leader in the industrial space.

Congratulations on amassing such a valuable document, which will be a guiding resource for years to come as the first line of defense against miscommunications in the workplace.

Greg Livingstone
Chief Innovation Officer
Fluitec

This is an often-repeated story by communication experts about an old lady who hoped to rent a room in Switzerland. She voiced her concerns regarding the availability of a commode that she referred to as WC (Water Closet). The recipient, the landlord, presumed WC to be a Wayside Chapel. His response is naturally hilarious.

> "I take great pleasure in informing you that the WC is located 9 miles from the house. It is located in the middle of a grove of pine trees, surrounded by lovely grounds. It can hold 229 people and is open on Sundays and Thursdays. As there are many people expected in the summer months, I suggest you arrive early. There is, however, plenty of

> standing room. This is an unfortunate situation especially if you are in the habit of going regularly. It may be of some interest to you that my daughter was married in the WC, as it was there, that she met her husband. It was a wonderful event. There were 10 people in every seat. It was wonderful to see the expressions on their faces. We can take photos in different angle. My wife, sadly, has been ill and unable to go recently. It has been almost a year since she went last, which pains her greatly. You will be pleased to know that many people bring their lunch and make a day of it. Others prefer to wait till the last minute and arrive just in time. I would recommend your ladyship plan to go on a Thursday as there is an organ accompaniment. The acoustics are excellent and even the most delicate sounds can be heard everywhere. The newest addition is a bell which rings every time a person enters. We are holding a bazaar to provide plush seats for all, since many feel it is long needed. I look forward to escorting you there myself and seating you in a place where you can be seen by all."

Words are important! They provide a compass to our thoughts and endeavors. Almost 2,500 years ago, Socrates stated, "The beginning of wisdom is the definition of terms." In a world that is more than ever tied up in the exchange of information, knowledge, and ultimately wisdom, we need to heed Socrates. In this fast-paced world, where communication aspires to be super-luminal, we need to be precise, concise, accurate and succinct, because success hangs on the efficacy of this communication. Since we are all in the pursuit of excellence, it is a boon to have an agreed-upon definition of words that we use on a daily basis and even words that we rarely use, provided we all understand the definition going forward and work towards that goal of reducing failure and producing excellence. The team of Holloway and Holloway has undertaken a mammoth challenge. Collecting and defining in agreement with what we all must drive towards—a universal understanding of communication of the utterances we use daily as not to contribute to confusion. Terms have been classified under various categories to assist the reader as well as various industrial acronyms, abbreviations and commonly used phrases have been thoroughly explained. The father/daughter team has established themselves as an asset to our industry.

Dr. Raj Shah
Director
Koehler Instrument Company, NY

The 2nd edition of Dictionary of Industrial Terminology fills a much-needed role for stakeholders across numerous industries. By compiling a comprehensive lexicon of industrial terms—each contributed by a recognized subject matter expert—Michael and Emma Holloway have admirably updated and expanded the terms defined in this volume. Users will find expanded definitions and illustrations useful—particularly when translating terms from English to other languages. Where a given term is used in multiple ways, the Holloways have included all of the relevant definitions. The Dictionary uses clear concise language, making it a valuable desktop reference for engineers, operations personnel, and managers.

Dr. Fredrick Passman
President
BCA, Inc.

"You two need to stop skylarking and turn to!!! I want this overhead dusted and the deck swabbed!" If you've ever served in the US Navy, you might have an idea of what you just read. You may have even heard it or something similar. If you've never been in the military, specifically the US Navy; that phrase may just sound like a bunch of gibberish. What it means is for the two sailors to stop messing around and get busy, the ceiling, with the vents and piping all need to be dusted, and the floor needs to be mopped. While I was in boot camp I learned, what seemed at the time an entirely new language. After I retired and started working in maintenance, I had to relearn English. Much of the terminology I learned in the Navy is different for the same items, and concepts in the civilian world.

If there had only been a text, I could turn to that would have helped me to translate what I was thinking into the civilian terms, that would have been a huge help and radically reduced the learning curve! Some of the terms in this book may be different than what you call them. That is fine, honestly that is kind of the point, to help us all to learn

a common language so that we are literally on the same page when we are talking about things and comparing ideas and strategies.

For this to be most effective you may need to challenge your preconceived notions of what something is or is not. We all come from different backgrounds and learned much of this maintenance and reliability stuff through tribal knowledge. It has been passed down from generation to generation of technicians since the beginning of time, or most likely, we made it up as we went along.

In the few years I have been involved in maintenance and reliability, I have been blessed to have met and worked with many experts in our field. As an "expert" we get used to being asked all of the questions, so we begin to think that we are always right. I challenge you, to humble yourself, as this text may not contain the words that you would use as a particular term, but that doesn't mean it's wrong, it's just different. A good friend of mine says, "seek first to understand, then to be understood." I think that this applies here, as new technologies are developed, new terms will develop as well. As technologies advance so should our reliability language that may require us to take off the "expert" hat and become the student for a bit.

In closing I want to say "Thank You" to Michael. For both putting something like this together, I truly wish I had found something like this earlier in my civilian career! It would have helped me to at least sound like I knew what I was talking about. Also, to say thank you for honoring me, by asking me to write this.

Loren Green, MLTII, MLAIII, MLE, CLS

This book is like a relief valve for me, to relieve my frustrations associated with how people interpret words that are ill-defined in the marketplace. Under such circumstances, individuals will utilize this ambiguity in understanding, to hijack that word for their own purposes (i.e.—confirmation bias). Oftentimes such interpretations are made for commercial reasons. Sadly, I have been in the problem-solving business (Root Cause Analysis or RCA) for over 35 years, and I have been unable to solve this dilemma alone. Even in my field of RCA, the term is so ill-defined it is useless. No matter what approach anyone is using to solve problems, they will call it 'RCA'. This makes it impossible to compare effectiveness of any one approach. As this book will demonstrate, my experience is not unique by any means. Just look at commonly used terms like Reliability Centered Maintenance, Predictive Maintenance, Failure, Reliability, Safety and the list goes on. There will certainly be preconceived opinions about the terminology in this book and that will evoke a constructive debate. That is how we will define the success of this book!

This book seeks to unify these 21,000+ words, terms, and phrases, for the betterment of our respective fields. The gracious contributors to this book are the Who's Who of experts in their respective fields. They share a passion for ensuring that we, as practitioners, have unity in purpose when it comes to operating our facilities in a safe and responsible manner. We do so while being good stewards to our employees, our customers, and the communities in which we operate.

My gratitude goes out to Michael and Emma for taking on this enormous, but necessary challenge. This is a must read for those who constantly experience undesirable outcomes due to miscommunications, simply because the same words meant different things to different people. This book will literally help steer your career!

Robert J. Latino
CEO
Reliability Center, Inc.

My twenty-five years of experience in Asset Reliability Management, qualifies me to recommend the importance of this dictionary, as the language of technical keywords is extremely important for day-to-day tasks in the manufacturing industry. It has indeed been a remarkable feat by Dr. Holloway to have created and compiled a dictionary of the industrial lexicon and now with its updated second edition, the dictionary adds on new terminologies and any previously uncovered terms and their definitions. Practitioners and academics alike will appreciate the significance of this timely update which signifies the importance of building upon the literature of the manufacturing and industrial field(s). Skillsets are built with practice and with each Holloway's contribution, we must embrace this vision that

it is the combination of knowledge and skill sets that will create safer, efficient, and more productive manufacturing environments. The first edition was received with much enthusiastic praise and this new dictionary will undoubtedly continue to be an invaluable tool for all working with the manufacturing industry. It is a reference work which should be in the hands of all those in any way connected to the manufacturing industry, as my experience has taught me that learning the industrial language is of utmost importance. The dictionary encapsulating the language of technical keywords will be an invaluable source for the global manufacturing industry.

Syed Munawer Hasan
Founder & CEO
Plant Asset Efficiency (PAE) Solutions

It is my absolute honor to write this foreword for Michael and Emma. Michael is a pioneer in the industry and really embodies the true spirit of a multifaceted Industrial Expert as he has worked for over 35 years in all fields of this ever-evolving sector. It also gives me great pleasure to support Emma, a fellow female STEM colleague, as she paves her way into the Industrial sector. She brings with her a wealth of knowledge and an unparalleled vocabulary! Michael and Emma have accurately documented thousands of words that are used in the Industry and provided simple explanations to allow readers to comprehend the meanings and use the terminology in the correct context.

When I first started in the industry as a fresh engineering graduate over a decade ago, I realized that I did not speak the same language as the technicians, other engineers, and industry professionals. Every time I heard a new word, I would write it down in my little notepad and look it up later. That notepad got filled quickly! However, even after researching the meanings of the new words and trying to use them, I realized that I would use them in the wrong context! This can be very embarrassing when you are presenting to a room filled with Managers and other Industry Professionals!

As I continued working in the industry, I constantly picked up new terms, but I kept wondering, *"What if there was one place that I could find all of this information? It would be so much easier for me and other professionals in the industry!"* I was then introduced to Michael D. Holloway and I needed a larger notepad for all those terms! Michael is a walking encyclopedia of information and it is no surprise that his daughter, Emma also inherited this trait!

The *Dictionary of Industrial Terminology* is an absolute must for anyone working in the Industry or with colleagues in the Industry. It lays the foundation for the bridging of the communication gaps that exist among industry professionals and can even assist sales personnel to utterly understand the needs of their industrial customers. This Second Edition is a game changer for our graduates now entering the industrial sector and for those who have been in the sector but never really comprehended some of the terms used on a daily basis. I would recommend this installment for all personnel within the Industrial sector and urge Supervisors to make it part of their initiation package for all new members of the team to ensure that everyone can communicate effectively.

Ms. Sanya Mathura MLE
Managing Director
Strategic Reliability Solutions Ltd

The rapidly evolving world of technology has necessitated an update to this dictionary. In so many applications, the various meanings of words can be a useful way of communicating. However, the variety of word meanings can be especially confusing, and thereby potentially costly, in the industrial technology arena. Within the scope of the this second edition, the elder and younger Holloway have provided a thorough catalog of words, and their appropriate definitions, to assist students, as well as professionals, in their performance in this constantly changing environment.

Mark Holloway
Brother

My relationship with Mike for 56 years has been outstanding and based upon communication and understanding. The main factors in personal and business success and growth are one's ability to communicate effectively, understand subject matter, and understand how words are used. A good dictionary to reference, especially in business, is critical to these factors. This work satisfies those needs in a brilliant fashion. Collaboration is important, the fact that a parent and child can contribute in unison is unique and honorable.

Chris Holloway
Twin Brother

Preface

It is our intent that this work act as a small contribution to your efforts in developing products and providing service. Industry began when we first manipulated our environment to provide increased comfort, convenience, and control. It is our responsibility to offer what we can for everyone's benefit. Please make the best use of resources and energy for a better life. All the royalty money made from the sale of this work will go towards sustaining intellectual content at universities. We hope that you take on the responsibility to produce with environmental and social concerns in mind. Everything we do should be to make things better and in doing so we will take on the true spirit of industry.

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Term	Definition	*Industry*
A Class Items	A general meaning of this term is the most important item. When a group of products is analyzed according to some criterion and the individual products in the group ranked—i.e., placed in order—according to the criterion used, it is common to subdivide the products in the ordered list into three categories. The "A" category, or A Class, products are those products at the top of the list; the "B" category products are next, and the "C" category products are those at the bottom of the list. A common criterion applied in the analysis of the original group of products is according to each product's "annual value." Annual value is often thought of as reflecting a product's importance, and is defined as the product's annual usage multiplied by its unit value. (For example, if 200 products are used per annum and one unit costs $7, the annual value is $1,400). It will typically be found that if the A Class items are defined as the top 20% of the items at the top, they account for 80% of the total value of all the items. See ABC Classification and the vital few.	*Quality*
A priori analyses	See Planned analyses	*Quality Engineering*
A Programmable Logic Controller (PLC, or Programmable Controller)	A ruggedized, microprocessor-based system, which provides factory or plant automation by monitoring sensors and controlling actuators in real time.	*Electrical Engineering*
A to D or A/D Converter	A to D means Analog to Digital. This electronic hardware converts an analog signal like voltage, electric current, temperature, or pressure into a digital number that a computer can process and interpret.	*Process Control*
A.B. Meco-Moore	The A.B. Meco-Moore was a joint development of Anderson Boyes and the Mining Engineering Companies, hence the name. The first genuine cutter-loader machine developed to perform two operations simultaneously on a long wall face and therefore did away with any need for blasting.	*Mining*
A.C. Electrical Variable Speed Ratio	0.417361111	*Manufacturing*
A.G.M.A.	Abbreviation for "American Gear Manufacturers Associations," an organization serving the gear industry.	*Oil Analysis*
A.S.T.M. = "American Society for Testing Materials"	A society for developing standards for materials and test methods.	*Oil Analysis*
A/D	Analog-to-digital.	*Electrical Engineering*
A/D Converter	A device that changes an analog signal such as voltage or current into a digital signal (consists of discrete data values).	*Electrical Engineering*
A/F	Air/fuel ratio	*Petro-Chemical Abbreviations*

Term	Definition	*Industry*
AAA	AAA—See: Actors and Artists of America; Associated (AFL-CIO), See: American Arbitration Association	*Industrial Relations*
AAM	Alliance of Automobile Manufacturers—comprised of 10 North American manufacturers of passenger cars and light trucks.	*Mechanical, Process, and Operations*
AAMA	American Automobile Manufacturers Association	*Petro-Chemical Abbreviations*
AAR	American Association of Railroads	*Petro-Chemical Abbreviations*
A-Arm	A suspension linkage formed in the shape of an "A" or "V" found commonly on the front suspension. The sides of the two legs of the A-arm are connected to the chassis by rubber bushings and the peak of the A-arm is attached to the wheel assembly. In this way, the wheel can freely move up and down. Sometimes there is an upper A-arm, a lower A-arm, or both upper and lower A-arms. The British call it a "wishbone."	*Mechanical Engineering*
A-arms	A component of suspension, these metals or carbon fiber rods connect the tires and wheels to the chassis. They are usually shaped like an "A," with the point of the A connected to the wheel and the bottom two points of the A connected to the chassis. There are usually two A-arms at each wheel, one top and bottom. Also called wishbones	*NASCAR*
Abalyn ($C_{19}H_{29}COOCH_3$)	Commercial name for methyl abietate (b.p. 360–365°C, 705.6–714.6°F), used as plasticizer in lacquers and plastics.	*Material Process*
Abandon	(1) The proper plugging and abandoning of a well in compliance with all applicable regulations, and the cleaning up of the wellsite to the satisfaction of any governmental body having jurisdiction with respect thereto and to the reasonable satisfaction of the operator. (2) To cease efforts to find or produce from a well or field. (3) To plug a well completion and salvage material and equipment.	*Petroleum Drilling*
Abandoned	A well that is permanently closed off when no viable hydrocarbons are discovered or it is depleted and no longer capable of producing profitably.	*Petroleum Engineering*
Abandoned well	A well that is no longer in use, whether dry, inoperable, or no longer productive.	*Petroleum Drilling*
Abandonment	Converting a drilled well to a condition that can be left indefinitely without further attention and will not damage freshwater supplies, potential petroleum reservoirs, or the environment.	*Petroleum Engineering*
Abandonment plans	Plans required by law to be deposited with the authorities upon the closure of a coalmine, or section of a mine. They must be durable, and show the workings in relation to surface features and record information with respect to orientation, contours, scales, boundaries, faults, etc. The plans must also show the last recorded workings for the safety of any future operations.	*Mining*
ABAP	Advanced Business Application Engineering.	*Quality*
Abatement	(1) The act or process of reducing the intensity of pollution. (2) The use of some method of abating pollution.	*Petroleum Drilling*
ABB	Activity Based Budgeting.	*Quality*
ABC	In costing, Activity Based Costing (qv).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
ABC Classification	The division of products in a group into three sub-groups: Group A, Group B and Group C. Division is usually accomplished by the following three step process: (1) the calculation for each product of its annual value, this being its "annual usage x its unit value"; (2) the ranking, or ordering, of all the products into an order based on their annual values, as calculated in Step 1, thus forming a list of products in descending order of annual value; and (3) the sub-division of the list in Step 2 into three groups according to Pareto principles. (The Pareto principle is that the top 20% (approx) of the products in the ordered list will account for some 80% of the total annual value of all the products together.) Thus the products in the list are split into the top group, called "A" (20% of the products, but 80% of the total annual value), the next group "B" (say, 30% of the products, about 15% of the total annual value) and the bottom group "C" (50% of the products, 5% of the total value). In fact, the split is arbitrary and it may be preferable to subdivide the products in other ways (e.g., the top 10% A, the next 15% B and the bottom 75% C). It may also be desirable to create a fourth group D—say, the bottom 20%, perhaps representing a mere 1% of the total annual value. Note also that if A products are to be looked after closely, and C products not at all so, then it may be desirable to promote a few "line stoppers" from Class C to Class A. The notion of the vital few and the trivial many is widely used. For example, in quality, Dr. Joseph Juran maintained that 80% of trouble was caused by 20% of the problems, so, he recommended, fix the 20% as first priority!	*Quality*
ABCD Checklist	The late Oliver Wight, and, through him, the MRP training company that bears his name, have established an assessment and scoring system whereby companies that have installed MRPII can judge how well they have succeeded. Originally, there were 20 or so criteria, and the rating of a company (Class A, Class B, Class C, and Class D) was simply a bit of fun. In Wight's eyes, Class A companies are using the system and literally working to the numbers it produces; Class B are using the system but still retain "little black books", Class C are running the system but not using it, and in Class D companies only the computer department ever see the output! There are now over 300 criteria and the process is taken very seriously. Very few companies—perhaps 20 in the UK—have attained Class A. Instead of concluding from this that it is MRP which is the problem, the promoters of this methodology conclude that the problems lie with the staff of the Class B to D companies (who clearly did not spend enough money on training).	*Quality*
ABCW	ABCW—See: Bakery and Confectionary Workers' International Union; American (AFL-CIO)	*Industrial Relations*
ABDOMEN	The third or posterior major division of the insect body; consists normally of nine or ten apparent segments; bears no functional legs in the adult stage, but may bear prolegs or false legs in the larval stage.	*Forestry*
Abietic acid $((CH_3)_2CH(CH_3)_2C_{14}H_{16}$	The chief constituent of rosin, a yellow, amorphous powder. Rosin and abietic acid derivatives are used as modifiers, especially as plasticizers, in various synthetic resin compositions. Rosin is used as driers in certain cold molded bituminous preparations and in some alkyd resin compositions to be used for coatings.	*Material Process*
ABIL	Agriculture-based industrial lubricants	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ability (in layoff and promotion)	Training, skill, aptitude, and other factors essential in the performance of a job. It is the factor considered most important employers in promotion and generally ranks with length of service in layoffs, rehires, and transfers. The relative importance of ability (in connection with such factors as length of service, training, etc.) will vary from contract. Where job performance is based on acquired skills with a minimum of discretion as on some mass production jobs, length of service plays a greater role. Where substantial discretion and careful judgment are important, the factor of ability looms greater. A contract clause which combines ability and length of service may read as follows: "Promotions to all vacancies and positions created during the term of this agreement will be made from the basis of ability and seniority. Among employees whose ability is relatively equal, seniority will determine the choice for promotion." Ability has been measured by performance on the job, by work records, and other ratings designed to measure an employee's day-to-day handling of his job.	*Industrial Relations*
Ability Tests	Tests to measure the capacity to perform work of to determine aptitudes to pursue certain vocations are in widespread use. General intelligence tests used in vocational education have been adapted and modified to meet industrial needs. Current batteries of tests are being utilized for perceptiveness, manipulative ability, verbal facility, and a wide variety of factors, which may be of particular interest to a company in the performance of a particular service or productive operation.	*Industrial Relations*
Ability to Pay	A factor generally considered in labor-management negotiations. It is almost always an "implied" item to be kept in mind. Occasionally, it becomes a major "overt" criterion in wage determination. It has received widespread public consideration where the employer has claimed that he is unable to bear the brunt of the wage increase requested by the union. The detailed consideration of the company's financial ability or inability leads to a maze of complexities. For example, would a company's cash or profit picture permit an increase if it had not "expanded" or developed or purchased new equipment the previous year? Has it invested for the purpose of showing a limited ability to absorb a large wage increase? Does the company's ability to pay depend on future developments which it is difficult to assess at the time negotiations are taking place? What constitutes a company's ability to pay may be a highly controversial issue. For example, does a company's other expansion, which results in a poor liquid showing and high interest payment, show that it is unable to pay? An examination of union briefs on this point indicates that many issues have been raised which touch on the methods of company accounting an go much beyond the mere existence of cash surplus out of which a wage increase may be met. The ability to pay argument has been used by both labor and management to support a specific position in specific negotiations. Invariably, the financial position of a company cannot help but be the background of any wage negotiation. During the Second World War the National War Labor Board in a series of cases following the passage of The Wage Stabilization Act indicated that because of the necessity to stabilize wages it could not consider the company's ability to pay as a factor in determining what would constitute a proper wage adjustment. The Board also took the position that a company's financial inability to pay, during the stabilization period, should not deny the employees wage adjustments otherwise appropriate.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Abiotic	Not biotic; not formed by biologic processes.	*Chemical*
Abiotic pathogen	A nonliving, disease-causing entity, e.g., drought, salt, air pollutants.	*Forestry*
Able and Willing to Work	Criterion generally applied in state laws providing unemployment benefits to those out of work in covered occupations who report to the employment offices as "able and willing" to take employment.	*Industrial Relations*
Able-Bodied Labor	A term generally applied to workers who possess the physical strength to perform a variety of manual tasks. The term excludes the very young and the very old in the population as well as those incapacitated through physical or mental disability. "Ability to work" under unemployment compensation statutes has been defined variously to determine the claim by the individual for benefit payments.	*Industrial Relations*
Abnormal Demand	See Non-Consuming Demand and Unreasonableness Checks.	*Quality*
ABOT	Aluminum beaker oxidation test	*Petro-Chemical Abbreviations*
Above ground level (AGL)	Distance of the aircraft above the ground. Synonyms: radar altitude	*Aeronautical Engineering*
Above sea level (ASL)	Distance of the aircraft above mean sea level	*Aeronautical Engineering*
Above-Market Cost	The cost of a service in excess of the price of comparable services in the market.	*Energy*
Above-Market Generation	Electricity produced at costs higher than prevailing market prices.	*Energy*
Abradable Coatings	Coatings which are designed to be abraded by a mating surface to form a tight gas or air seal, while retaining good erosion resistance.	*Paint and Coatings*
ABRASION	A wearing, grinding, or rubbing away of material. The products of abrasion will be introduced into the system as generated particulate contamination.	*Mechanical, Process, and Operations*
Abrasion	A general wearing away of a surface by constant scratching, usually due to the presence of foreign matter such as dirt, grit, or metallic particles in the lubricant. It may also cause a breakdown of the material (such as the tooth surfaces of gears). Lack of proper lubrication may result in abrasion.	*Lubrication*
Abrasion Resistance	Ability of material or cable to resist surface wear.	*Electrical*
Abrasion-Resistance	The ability of the galvanized coating to resist damage caused by contact with hard, rough, or coarse media or objects	*Materials Process*
Abrasive blasting	The process of using a forceful stream of particles, available in varying hardness, to remove residue and contaminants from steel surfaces to prepare for galvanizing and/or to profile steel surfaces for paint application	*Materials Process*
Abrasive Blasting	A process for cleaning and roughening a surface by means of an abrasive directed at high velocity against the work piece.	*Paint and Coatings*
Abrasive Wear	Wear between two surfaces in relative motion due to particles (three-body) or surface roughness (two-body).	*Lubrication*
Abrasive Wear	Wear due to hard particles or hard protuberances forced against and moving along a solid surface.	*Paint and Coatings*
Abrasive wear	Wear occurring when a rough, hard surface slides on a softer surface. Grooves and wear particles form on the softer surfaces.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Abrogation of Agreement	The cancellation or setting aside of a collective bargaining agreement or any portion of it. This may be implied in the signing of the preceding agreement or may be spelled out by including a specific clause which sets aside all previous agreements or understandings. Some contracts set forth conditions under which the agreement may be voided. For example: "Should either party of this agreement violate any of its provisions, same shall be deemed sufficient cause for cancellation of this agreement by the other party." Title III, section 301 of the Taft–Hartley Act provides specific remedies in the federal courts for contract violations. See also: Separability clause, Savings Clause.	*Industrial Relations*
Absence	A temporary unavailability for work lasting for one or more days or shifts. It is to be distinguished from lateness which is of lesser duration than one day or shift, even though the employee may be unavailable when needed for work assignment.	*Industrial Relations*
Absence Rate (A.R.)	A measure, usually, in the form of a statistical estimate, to determine the time lost (in terms of hours or man-days) by being away from the job as against the time worked, or the time employees could have worked had they been present. The Bureau of Labor Statistics maintains data on absence rates. BLS records a "man-day lost" when the employee is absent on a day he was scheduled to work. Comparability of company or industry data privately maintained will depend upon the definition of such factors as: man-days, time worked, normal work period, work schedule, workday available.	*Industrial Relations*
Absentee	A worker who is unavailable for work for one or more days or shifts, when he has been assigned to or scheduled for or expected to report to work.	*Industrial Relations*
Absenteeism	The practice of a worker of failing o report for work for a period of one or more days or shifts, when he has been assigned to or scheduled to work. During war periods government agencies have sought to reduce absenteeism in order to increase the productive potential of industry. Collective bargaining agreements sometimes provide disciplinary action and discharge for excessive absenteeism. Where no standard has been established, the interpretation of "excessive" may give rise to the difficulty and require occasional submission to arbitration.	*Industrial Relations*
Absenteeism	This phenomenon relates to employee absence from work which, so far as the employer is concerned, is unauthorized and therefore unanticipated. A company analyzing absenteeism among its employees may distinguish between absence due to illness, supported by medical evidence, and absence due to other reasons. For a company department, a percentage measure of absenteeism is: (total number of staff days lost)/(total number of staff working days) x 100%.	*Maintenance*
Absenteeism Rate	Absenteeism Rate—See: Absence Rate	*Industrial Relations*
Absolute	A standard, fixed reference, as opposed to moving reference; Compare: relative;	*Aeronautical Engineering*
Absolute Viscosity	Absolute Viscosity. Absolute viscosity or the coefficient of absolute viscosity is a measure of the internal resistance. In the centimeter, gram, second (cgs) or metric system, the unit of absolute viscosity is the poise (abbreviated P), which is equal to 100 centipoise (cP). The English units used to measure or express viscosity are slugs per foot-second or pound force seconds per square foot. Sometimes, the English units are also expressed as pound mass per foot-second or poundal seconds per square foot.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Absolute Accuracy	A measure of the uncertainty of an instrument reading compared to that of a primary standard traceable to NJST.	*Reliability Engineering*
ABSOLUTE FILTRATION RATING	The diameter of the largest hard spherical particle that will pass through a filter under specified test conditions. This is an indication of the largest opening in the filter element. It does not indicate the largest particle that will pass through the element, since particles of greater length than diameter may pass.	*Mechanical, Process, and Operations*
Absolute Filtration Rating	The diameter of the largest hard spherical particle that will pass through a filter under specified test conditions. This is an indication of the largest opening in the filter elements.	*Lubrication*
Absolute humidity	Actual density of water vapor in the atmospheric usually expressed per volume unit.	*Material Process*
Absolute Losses	Production deferred or lost due to the specified element or system, as a percentage of the total potential production.	*Maintenance*
Absolute Majority	A vote n which 51% of those eligible to cast their vote do so in favor of or in opposition to a specific proposition. See: Elections, majority Rule	*Industrial Relations*
Absolute Pressure	Gage pressure plus atmospheric pressure.	*Electronic Process*
Absolute Pressure Sensor	A sensor which measures pressure in relation to zero pressure (a vacuum on one side of the diaphragm).	*General*
Absolute Pressure Transducer	A transducer which measures pressure in relation to zero pressure (a vacuum on one side of the diaphragm).	*Electronic Process*
Absolute risk	The observed or calculated probability of an event in the population under study.	*Analysis*
Absolute risk difference	The difference in the risk for disease or death between an exposed population and an unexposed population.	*Analysis*
Absolute risk reduction (ARR)	The difference in the rates of adverse events between study and control populations (i.e.: the difference in risk between the control group and the treated group: ARR=CER-EER)	*Analysis*
Absolute vibration	Vibration of an object relative to a fixed point in space. Seismic sensors (accelerometers and velocity pickups) measure absolute vibration. Contrasts with relative vibration.	*Reliability Engineering*
Absolute Viscosity	A measure of a fluid's resistance to tangential or shear stress. Also referred to as dynamic viscosity; see also viscosity. Units are usually given in centipoise.	*Chemical*
Absolute Viscosity	A term used interchangeably with viscosity to distinguish it from either kinematic viscosity or commercial viscosity. Absolute viscosity is the ratio of shear stress to shear rate. It is a fluid's internal resistance to flow. The common unit of absolute viscosity is the poise. Absolute viscosity divided by fluid density equals kinematic viscosity. It is occasionally referred to as dynamic viscosity. Absolute viscosity and kinematic viscosity are expressed in fundamental units. Commercial viscosity such as Saybolt viscosity is expressed in arbitrary units of time, usually seconds.	*Lubrication*
Absolute Zero	Temperature at which thermal energy is at a minimum. Defined as 0 Kelvin, calculated to be -273.15°C or -459.67°F.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Absorb	Ability to pick up.	*Material Process*
Absorbent filter	A filter medium that holds contaminant by mechanical means.	*Oil Analysis*
Absorbents	Absorbents are material that take up or absorb any liquids or vapors that come in contact with it.	*Chemical*
Absorber	A device capable of reducing, of attenuating, of "soaking up" vibration, usually converting it to heat.	*Reliability Engineering*
Absorber Capacity	The maximum volume of natural gas that can be processed through an absorber at a specified absorption oil rate, temperature, and pressure without exceeding pressure drop or any other operating limitation.	*Petroleum Drilling*
Absorbing Well	A well for draining off surface water and conducting it to absorbent earth underground. Also called "dry well, waste well."	*Civil Engineering*
Absorption	Uptake of a gas into the bulk of a liquid. Example: In the liquid of a scrubber tower where an up-streaming gas is washed by a down-going flow of a scrubber solution.	*Chemical*
Absorption Costing	See Costing (Absorption).	*Quality*
Absorption Oil	A hydrocarbon liquid used to absorb and recover components from natural gas before being processed.	*Petroleum Drilling*
Abstract	A brief summary of the study and its results. It should tell you what the study tried to show, how the researchers went about it, and what they found.	*Quality Engineering*
Abutment	In coal mining, (1) the weight of the rocks above a narrow roadway is transferred to the solid coal along the sides, which act as abutments of the arch of strata spanning the roadway; and (2) the weight of the rocks over a long wall face is transferred to the front abutment, that is, the solid coal ahead of the face and the back abutment, that is, the settled packs behind the face.	*Mining*
Abyssinian well	A perforated pipe driven into the ground for pumping out collected ground water; well point.	*Civil Engineering*
AC	Alternating Current	*Energy*
AC Fine Test Dust (ACFTD)	A test contaminant used to assess both filters and the contaminant sensitivity of all types of tribological mechanisms.	*Oil Analysis*
ACA	ACA - See: Communications Association; American (Ind)	*Industrial Relations*
Acaricide	A substance that kills mites or ticks.	*Agriculture*
ACAS	Advisory, Conciliation & Arbitration Service, a UK Government body with branches throughout the country, offering advice and assistance on matters to do with employer/employee law and relations. Visit http://www.acas.org.uk.	*Quality*
ACBM	Acronym for "asbestos-containing building material."	*Energy*
ACC	American Chemistry Council - a trade association representing North American chemical manufacturers	*Mechanical, Process, and Operations*
Accelerant	A substance, catalyst, which accelerates a chemical processes.	*Material Process*
Accelerated Life Testing	This is a kind of testing carried out during the development of a new product in which parts are tested above the usual stress levels they would undergo in normal use, thereby causing early failures so that the results of the failure can be analyzed to create a profile of the failure behavior of the system.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Accelerated Stress Testing	This is a kind of post production test on a sampling of units which is carried out to detect latent failures and prevent flawed units from reaching the next level of assembly. Intensity is determined from the levels achieved during accelerated life testing.	*Reliability Engineering*
Accelerating Premium Pay	A wage incentive system under which the bonus or premium is progressively higher as the production standard is exceeded. An employee who exceeds his standard production by 5% may receive a 5% bonus, while one who exceeds his standard by 10% may receive a 15% bonus, and one who exceeds his standard by 20% may receive a 30% bonus.	*Industrial Relations*
Acceleration	Rate of change of velocity, either scalar or vector, often with subscripts such as ENU or XYZ to denote the coordinate frame; time derivative of velocity; time integral of jerk; Symbols: a, A; Typical Units: ft/s-squared, g; Dimensions: Length/Time-squared;	*Aeronautical Engineering*
Acceleration east	Aircraft acceleration in true east direction; Symbols: A sub E; Typical Units: ft/s-squared; Dimensions: Length/Time-squared.	*Aeronautical Engineering*
Acceleration north	Aircraft acceleration in true north direction; Symbols: A sub N; Typical Units: ft/s-squared; Dimensions: Length/Time-squared.	*Aeronautical Engineering*
Acceleration Stress	The additional stress that is imposed on a wire rope as a result of an increase in the load velocity.	*Wire Rope & Cable*
Accelerator	Fuel pedal or throttle. A foot-operated pedal or hand-operated lever connected by linkage or electronics to control vehicle speed.	*Mechanical Engineering*
Accelerator	Energizer, activating agent, catalyst. A substance that hastens a reaction, especially one that reduces the curing or hardening time of thermosetting plastics.	*Material Process*
Accelerometer	An inertial device for measuring acceleration, usually in three orthogonal axes (lateral X, longitudinal Y, and vertical Z); accelerometers usually consist of a mass, spring, and damper; accelerometers are usually included in inertial sensors, such as AHRS and INS.	*Aeronautical Engineering*
Accept	To allow to proceed, for example with a position update, usually by an operator; Compare: reject.	*Aeronautical Engineering*
Acceptable Quality Level (AQL)	If a supplier sends parts to a buyer, then the two parties may agree that a sampling plan should be used by the buyer to validate their quality on receipt. Among other things, the sampling plan will be selected on the basis that the incoming parts are to be at an agreed quality level of "p%" or better. Naturally, the supplier of the items wishes to be assured that if the quality of parts he actually sends is indeed equal to or better than p%, then there will be a very high probability that they will be duly accepted under the plan (i.e., that the plan will not result in their rejection). On the other hand, the recipient wishes to be assured that if the quality of the goods he receives is worse than p%, then there is a very high chance that they will be rejected. In summary, the term acceptable quality level means the level of quality (p%) at which a sampling plan is liable to result in the parts' acceptance. In fact, the "Dodge-Romig/Military Plans" plans give the supplier 95% assurance that if quality is at p% or better, material will be accepted. Note therefore that the word "acceptable" means, literally, "liable to acceptance"—it does not have the alternative common English meanings of "welcome" or "satisfactory." See AQL sampling tables. See also ATI.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Acceptance (of Goods)	A formal acknowledgement by a recipient that goods which have been physically delivered are satisfactory with regard to their identity (i.e., type), quality, quantity and other matters of central concern in the contract. By the Sale of Goods Act 1979, goods which are merely delivered are not deemed to be accepted until the recipient has been given a chance to inspect them or until a reasonable time has elapsed (without the recipient saying he rejects them) or unless the recipient begins to use the goods. The significance of legal acceptance is that the buying company thereby acknowledges that the main points of the contract have been fulfilled, and so cannot terminate the contract for breach of conditions. See Section 2.3.3 of the free on-line purchasing course at this site and sub-section 3.4.2 of the on-line course on stores, also at this site.	*Quality*
Acceptance of Offer (by Post, Fax or E-mail)	The convention is adopted in law that a party is deemed to accept a contractual offer at the moment he posts a letter saying he has so accepted it, not when the letter is actually received. This convention applies only to an acceptance: it does not apply, for example, to other matters such as counteroffers, revocations or the making of offers themselves. When the party transmits his acceptance of an offer by fax or e-mail, acceptance is deemed to take place when the transmission is actually received by the other party, not when it was sent.	*Quality*
Acceptor level	Energy level near the valence band in a p-type semiconductor.	*Material Process*
Access Charge	A charge for a power supplier, or its customer, for access to a utility's transmission or distribution system. It is a charge for the right to send electricity over another's wires.	*Energy*
Access to Company Books and Records	This issue may come up on contract negotiations when there is a question of the company's ability to pay, or when the union claims that the company's profits are greater than those actually reported. There are few instances in which employers voluntarily give the union access to the company's financial books and records. There are some exceptions to this rule. In the men's clothing industry the contract provides that the arbitrator or his representative make examine those records necessary to make a proper determination of the issues in dispute, or whether the contract is being lived up to. In the public utility field, State Public Utility Commissions in most cases have access to the records and books of companies within their jurisdiction. Such provisions flow from the rate fixing powers of the commission. The problem comes up in collective bargaining and may come before the NLRB when negotiations break down and the unions file an unfair labor practice charge alleging "refusal to bargain" or failure to bargain "in good faith" because the company withheld basic financial data. Access to company records may also be involved in seniority problems. Although company books and records generally are not accessible to union representatives, companies generally will permit union representatives to examine the records in connection with the promotion, transfer, or discharge or employees. The collective bargaining agreement may specify the type of records available to the union.	*Industrial Relations*
Access to Company Property by Employees and Company Representatives	Rights, variously applied, protecting employees not on strike to enter company premises for the purpose of working. These rights may be safe guarded by limiting the number of pickets at the plant entrance or providing police protection for those desiring to work during a labor dispute. See also: Strike, Picketing	*Industrial Relations*

Term	Definition	*Industry*
Access to Plant by Union Representatives	Provision often is made to permit union officers or agents other than those working on the premises, access to the place of work of employees. The purpose of such permission may be to allow them to collect dues or to handle or investigate grievances. The details as t time, place of entrance, method of escort etc., will vary from plant to plant and the conditions, which are present in the particular industry. Frequently the agreement may require a specific pass for the union representatives, and assurances from them that there will be no interference with production.	*Industrial Relations*
Access tunnel	Opening in natural draft tower used for access to the cold water basin. It can be large enough for a man only, or large enough for mechanical equipment.	*Facility Engineering*
Accessibility	A measure of the related ease of access to various portions of an item for operation or maintenance.	*Reliability Engineering*
Accession	Addition to the work force of a new employee or the rehiring of a former employee. Information on accession is maintained by employers in order to measure turnover in the plant. The Bureau of Labor Statistics computes turnover rates by diving the number of separations and accessions by the total number working during a specified period. See also: Accession Rate, Separation, Labor Turnover	*Industrial Relations*
Accession Rate (A.R.)	The number of new or rehired employees added to the workforce per hundred of employees. It is generally computed on a monthly basis.	*Industrial Relations*
Accident	A sudden, unforeseen, or unexpected occurrence, which results in injury, disability, or death to the person employed.	*Industrial Relations*
Accident Frequency Rate	A statistical measure showing the rate of accidents. This is usually in the form of a ratio of the number of man-hours (employee hours) worked to the number of disabling accidents or injured per 1,000,000 man hours worked. The number of hours actually worked sometimes is referred to as the number of hours the employees are "exposed" to accidents. The formula used by the Bureau of Labor Statistics is the total number of disabling injuries per one million man hours actually worked.	*Industrial Relations*
Accident Insurance	Laws in effect in most states providing for payments to employees injured on the job.	*Industrial Relations*
Accident Prevention	Efforts on the part of government boards, employers, and labor-management committees to eliminate and reduce the causes of industrial injuries and accidents.	*Industrial Relations*
Accident Prone	Term applied to workers who are involved in an unusually large number of accidents.	*Industrial Relations*
Accident Rate	Accident Rate - see: Accident Frequency Rate	*Industrial Relations*
Accident Reporting Laws	Provisions in many state statutes which require employers to report all disabling accidents marking absence from the job for more than one day or shift.	*Industrial Relations*
Accident Severity Rate	A statistical measure of the total number of days lost because of industrial accident per 1,000 man-hours of exposure.	*Industrial Relations*
Account (An)	A logical grouping of either receipts, expenditures, stocks or transactions relating to some particular activity having financial consequences. Examples of accounts are: the VAT account; the wages account; the copper raw materials account; the fuel expenditure account etc. (The term "accounting" originally meant the management of these accounts.)	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Account classification	The way in which suppliers of electricity, natural gas, or fuel oil classify and bill their customers. Commonly used account classifications are "Residential," "Commercial," "Industrial," and "Other." Suppliers' definitions of these terms vary from supplier to supplier. In addition, the same customer may be classified differently by each of its energy suppliers.	*Energy*
Account of others (natural gas)	Natural gas deliveries for the account of others are deliveries to customers by transporters that do not own the natural gas but deliver it for others for a fee. Included are quantities covered by long-term contracts and quantities involved in short-term or spot market sales.	*Energy*
Accounting Equation	In financial accounting, the accounting equation relating to a company's finances is: (assets + expenses) = (capital + liability + revenue). The effect of the equation may be summarized thus: if there is an increase in the company's assets, or if there is an incurrence of an expense, the increase must be balanced by a corresponding increase in liabilities, or capital, or revenue. These principles are incorporated in "double entry bookkeeping."	*Quality*
Accounting system	A method of recording accounting data for a utility or company or a method of supplying accounting information for controlling, evaluating, planning and decision-making.	*Energy*
Accounts (Type of)	Asset accounts, expense accounts, liability accounts, capital accounts and revenue accounts.	*Quality*
Accredited herd	A herd of dairy cattle certified by two successive tests to be free of tuberculosis. The tests are conducted by the USDA. Sometimes the term is mistakenly applied to a brucellosis-free herd.	*Agriculture*
Accrual	Funds are accrued, (lined), to cover a purchase which has not yet been invoiced.	*Procurement*
Accumulating Conveyor	Any conveyor designed to allow collection (accumulation) of material. May be roller, live roller, belt and gravity conveyors.	*Manufacturing*
Accumulation Conveyor	Any conveyor designed to permit accumulation of packages, objects, or carriers. May be roller, live roller, roller slat, belt, vibrating, power-and-free, or tow conveyors. See Minimum pressure accumulation conveyor and Zero pressure	*Equipment*
Accumulator	A vessel in which a gas is trapped and compressed by the liquid in a hydraulic system, thus storing energy to supply liquid under pressure to the system when needed.	*Mechanical*
Accumulator hydropneumatic	An accumulation in which compressed gas applies pressure to the stored liquid.	*Mechanical, Process, and Operations*
Accuracy	Measure of exactness, possibly expressed in percent; Compare: precision.	*Aeronautical Engineering*
Accuracy	Conformity of an indicated value to an accepted standard value, or true value.	*Process Control*
Accuracy (of a measurement)	A measurement process that has a small variability is said to have high precision. This does not mean, however, that the measured value is the true value. If the measured value is M and the true value is T, then the total error = M - T. This expression can be split into Total Error = (M - dx) + (dx - T). The first expression (M - dx) is the random deviation inherent in making any measurement - random error that can be "averaged away" by taking many repeated measurements. The second expression (dx - T) is bias due to a systematic fault in the measuring process (perhaps due, say, to an uncalibrated instrument). Bias can	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	only be detected and removed by investigation. The term (dx - T) can be found by averaging many measurements, and is referred to as the accuracy of the measuring process. 'Accuracy' in the context of stock records accuracy is dealt with in Section 1.4 of the free on-line course on Stock Records Accuracy, at this site.	
Accuracy, Reference	A number or quantity which defines the limit that errors will not exceed when the device is used under reference operating conditions. Note: Reference accuracy includes the combined conformity, hysteresis and repeatability errors. The units being used are to be stated explicitly. It is preferred that a + and - sign precede the number or quantity. The absence of a sign infers a + and – sign. Reference accuracy can be expressed in a number of forms. The following examples are typical: 1. Reference accuracy expressed in terms of the measured variable. Typical expression: The reference accuracy is + 1. 2. Reference accuracy expressed in percent of span. Typical expression: The reference accuracy is + ½% of span. 3. Reference accuracy expressed in percent of actual output reading. Typical expression: The reference accuracy is + 1% of actual output reading.	*Process Control*
ACE	Automated Commercial Environment.	*Quality*
ACEA	Association des Constructeurs Européens de l'Automobile (Association of European Automotive Manufacturers)	*Mechanical, Process, and Operations*
ACERT	Advanced Combustion Emission Reduction Technology (Caterpillar)	*Petro-Chemical Abbreviations*
Acetal	Acetal is a thermoplastic that was introduced in 1956. It is widely recognized as a potential replacement for die-cast metals because it is very rigid, yet not brittle. Acetal has a high melting point, is resistant to fatigue, and very strong. Currently, acetal is used to create cams, bearings, gears, bushings, housings, and conveyors. In addition, acetal is used in automotive seat belt components and door handles, shaver cartridges, in the moving parts in appliances and business machines, in gas tank caps, in plumbing fixtures, and in zippers.	*Material Engineering*
Acetaldehyde (CH_3CHO)	A colorless, fuming, inflammable liquid. Acetaldehyde reacts with phenol or the cresols to form thermosetting resins similar to the phenolics and also reacts with polyvinyl alcohol to form polyvinyl acetal. Acetaldehyde itself polymerizes to form paraldehyde.	*Material Process*
Acetaldehyde resins	Plastics derived from acetaldehyde and phenolic materials.	*Material Process*
Acetamide (CH_3CONH_2)	A colorless hexagonal liquid or rhombohedral deliquescent needles crystallizing from chloroform.	*Material Process*
Acetanilide ($CH_3CONHC_6H_5$)	Rhombohedral white leaflets crystallizing from water. Acetanilide derivatives are used as plasticizers.	*Material Process*
Acetate (CH_3COO-)	A compound containing the acetate group (CH_3COO-), cellulose acetate, sodium acetate; common name for cellulose acetate plastics.	*Material Process*
Acetate butyrates	Common name for cellulose acetate butyrate plastics.	*Material Process*
Acetic acid (CH_3COOH)	Colorless liquid with a sharp odor. Acetic acid is used in the preparation of cellulose acetate and cellulose mixed esters, and in the preparation of polyvinyl acetate. It occurs in dilute form in vinegar.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Acetylene (CH CH)	A colorless inflammable gas used as raw material for the production of certain synthetic resins, notably vinyl resins and vinylidene chloride resins. It is also a raw material for the production of many solvents and other organic modifiers used in plastics.	*Material Process*
Acetone (CH_3COCH_3)	A highly useful solvent, especially in the manufacture of celluloid and cellulose nitrate lacquers and dopes, and an intermediate in the production of methyl methacrylate plastics. A colorless inflammable volatile liquid with an either like odor and burning taste.	*Material Process*
Acetone cyanohydrin	An intermediate in the manufacture of methyl methacrylate.	*Material Process*
Acetyl	Any chemical compound with an acetate group.	*Chemical*
Acetyl peroxide ($(CH_3CO)_2O_2$)	An oxidizing agent and polymerization catalyst for such synthetic resins as polystyrene, vinyl ester resins and acrylic resins.	*Material Process*
Acetyl triethyl citrate ($C_{14}H_{22}O_8$)	A crystalline compound, used as plasticizer for cellulose acetate.	*Material Process*
Acetylation	The process of introducing one or more acetyl groups into a compound.	*Material Process*
Acetylene C_2H_2 (ethyne)	Unsaturated aliphatic hydrocarbon gas. Used as a fuel gas in combustion thermal spray processes, welding and cutting. Acetylene has the highest flame temperature and requires the smallest amount of oxygen to form a neutral flame.	*Paint and Coatings*
Acetylene tetrachloride ($CHCl_2CHCl_2$)	A colorless poisonous liquid, an intermediate product in the manufacture of vinylidene chloride, formed by the reaction of chlorine and acetylene and again reacting with them to form vinylidene chloride.	*Material Process*
acfm	Actual cubic feet per minute	*Facility Engineering*
Achievement Test	Examinations designed to measure, through established norms or standards, the progress of an employee after specialized education or training programs.	*Industrial Relations*
Acid	It is a water soluble sour tasting chemical compound. An acid has pH less than 7. The molecule contains hydrogen and are sour tasting compounds and their generic formula is AH.	*Chemical*
Acid	A water substance with pH less than 7 that reacts with and neutralizes an alkali.	*Chemistry*
Acid deposition or acid rain	Refers loosely to a mixture of wet and dry "deposition" (deposited material) from the atmosphere containing higher than "normal" amount of nitric and sulfuric acids. The precursors or chemical forerunners of acid rain formation result from both natural sources, such as volcanoes and decaying vegetation, and man-made sources, primarily emissions of sulfur and nitrogen oxides resulting from fossil fuel combustion.	*Mining*
Acid mine drainage	This refers to water pollution that results when sulfur-bearing minerals associated with coal are exposed to air and water and form sulfuric acid and ferrous sulfate. The ferrous sulfate can further react to form ferric hydroxide, or yellow boy, a yellow-orange iron precipitate found in streams and rivers polluted by acid mine drainage.	*Energy*
Acid mine drainage (AMD)	Runoff caused by water flowing over and through sulfur-rich areas, such as coal or metal mines, is one of the main pollutants (pdf link) of surface water in this region, raising long-term ecological and economic concerns. This has had a huge environmental impact in Pennsylvania, especially in the western part of the state. There are proposals to use AMD as a source for frack water (see definition below) with the help of recycling facilities to reduce AMD's impact on waterways.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Acid mine drainage	Acidic run-off water from mine waste dumps and mill tailings ponds containing sulfide minerals. Also refers to ground water pumped to surface from mines.	*Mining*
Acid mine water	Mine water that contains free sulfuric acid, mainly due to the weathering of iron pyrites.	*Mining*
Acid Number	A measure of the amount of KOH needed to neutralize all or part of the acidity of a petroleum product.	*Lubrication*
Acid Number	The quantity of base, expressed in milligrams of potassium hydroxide, that is required to neutralize the acidic constituents in 1 g of sample.	*Lubrication*
Acid rain	Also called acid precipitation or acid deposition, acid rain is precipitation containing harmful amounts of nitric and sulfuric acids formed primarily by sulfur dioxide and nitrogen oxides released into the atmosphere when fossil fuels are burned. It can be wet precipitation (rain, snow, or fog) or dry precipitation (absorbed gaseous and particulate matter, aerosol particles or dust). Acid rain has a pH below 5.6. Normal rain has a pH of about 5.6, which is slightly acidic. The term pH is a measure of acidity or alkalinity and ranges from 0 to 14. A pH measurement of 7 is regarded as neutral. Measurements below 7 indicate increased acidity, while those above indicate increased alkalinity.	*Energy*
Acid Sludge	The residue left after treating petroleum oil with sulfuric acid for the removal of impurities. It is a black, viscous substance containing the spent acid and impurities.	*Lubrication*
Acid Treating	A refining process in which unfinished petroleum products, such as gasoline, kerosene, and lubricating oil stocks, are contacted with sulfuric acid to improve their color, odor, and other properties	*Lubrication*
Acid treatment	A process in which unfinished petroleum products such as gasoline, kerosene, and lubricating oil stocks are treated with sulfuric acid to improve color, odor, and other properties.	*Petroleum Engineering*
Acidic precipitation	Snow and rain that have a low pH, caused by sulfur dioxide and nitric oxide gases from industrial activity released into the atmosphere.	*Mining*
Acidic rocks	Igneous rock carrying a high (greater than 65%) proportion of silica.	*Mining*
Acidity	In lubricants, acidity denotes the presence of acid-type constituents whose concentration is usually defined in terms of total acid number. The constituents vary in nature and may or may not markedly influence the behavior of the lubricant.	*Oil Analysis*
Acidophilus milk	Milk to which Lactobacillus acidophilus bacteria have been added to aid in the digestion of lactose (milk sugar). Some humans have difficulty digesting lactose. When they drink regular milk they may suffer diarrhea, abdominal bloating and discomfort.	*Agriculture*
Acidosis	Acid poisoning in the blood	*Chemical*
Acknowledgment	A communication (written or electronic) used to inform the buyer that the supplier has accepted the purchase order. An acknowledgment may add additional terms. However, a bilateral agreement is consummated as a result of this acknowledgment, as long as the terms of the acknowledgment are not substantively different from those of the purchase order.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
ACME thread	A flat topped screw thread for power transmission. This thread has a 29º included angle between adjacent thread faces compared with the 60º angle of the U.S. standard "V" thread.	*Mechanical*
Acorn Nut	A nut (so-called because of its shape) that has a domed top so that it prevents contact with the external thread.	*Maintenance*
Acoustic Emission	Acoustic emissions are sound or ultrasound pulses generated during crack initiation or propagation in materials and coatings as a result of being subjected to stress. Acoustic emissions can be detected by transducers.	*Paint and Coatings*
Acoustic Emission Analysis	Like vibration analysis, patterns of acoustic emission spectra are monitored and diagnosed. Acoustic emission analysis technology is applied to study bearing faults, detect flaws and cracks in welding and pipe-work, and to study de-lamination, de-bonding, and fracture in aerospace materials.	*Maintenance*
Acoustic emission testing	A type of nondestructive testing in which defects are monitored as a results of ultrasonic emission caused by stressing the flawed material.	*Material Process*
Acoustic Ultrasound	A predictive maintenance technology that is applied to thickness, density, flow and level sensing. It is associated with the measurement of sound above 15 kHz.	*Reliability Engineering*
Acoustics	The degree of sound. The nature, cause, and phenomena of the vibrations of elastic bodies; which vibrations create compressional waves or wave fronts which are transmitted through various media, such as air, water, wood, steel, etc.	*Electronic Process*
Acquire	To begin reception of useful data.	*Aeronautical Engineering*
Acquisition (crude oil)	The volume of crude oil acquired by the respondent for processing for his own account in accordance with accounting procedures generally accepted and consistently and historically applied by the refiner concerned, or in the case of processing agreement, delivered to another refinery for processing for the respondent's own account.	*Energy*
Acquisition (foreign crude oil)	All transfers of ownership of foreign crude oil to a firm, irrespective of the terms of that transfer. Acquisitions thus include all purchases and exchange receipts as well as any and all foreign crude acquired under reciprocal buy-sell agreements or acquired as a result of a buy-back or other preferential agreement with a host government.	*Energy*
Acquisition (minerals)	The procurement of the legal right to explore for and produce discovered minerals, if any, within a specific area; that legal right may be obtained by mineral lease, concession, or purchase of land and mineral rights or of mineral rights alone.	*Energy*
Acquisition costs, mineral rights	Direct and indirect costs incurred to acquire legal rights to extract natural resources. Direct costs include costs incurred to obtain options to lease or purchase mineral rights and costs incurred for the actual leasing (e.g., lease bonuses) or purchasing of the rights. Indirect costs include such costs as brokers' commissions and expenses; abstract and recording fees; filing and patenting fees; and costs for legal examination of title and documents.	*Energy*
acre	The unit most commonly used to measure farm and ranch land in the United States . An acre is 43,560 square feet, or 0.4048 hectares. To convert acres to hectares, multiply acres by .4048. (Example: 100 acres X .4048 = 40.48 hectares.)	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Acreage	An area, measured in acres, that is subject to ownership or control by those holding total or fractional shares of working interests. Acreage is considered developed when development has been completed. A distinction may be made between "gross" acreage and "net" acreage:	*Energy*
Acre-foot	The volume of water that will cover an area of 1 acre to a depth of 1 foot.	*Energy*
Acrolein or Acrylic aldehyde (CH2 CHCHO)	A colorless inflammable liquid, unstable. A substance with an acrid, irritating odor. Acrolein readily polymerizes to form a resin, especially in the presence of small amounts of peroxide formed by contact with air.	*Material Process*
Across-the-Board-Increase	a wage adjustment given at one time to all or a significant group of the workers in a plant, company, or industry.	*Industrial Relations*
Acrylates	A group of thermoplastics resins produced by polymerization of acrylic acid derivatives, particularly methyl metacrylate.	*Material Process*
Acrylic	Acrylics became a part of the plastics family in 1936 and were used in World War II as aircraft canopies. Acrylics are known for being rigid, hard, and transparent. It is particularly useful in products that will be exposed to sunlight or other weather elements for periods of time because it is very resistant to sunlight and weathering. Today, acrylics are used in outdoor signs, lighting diffusers, washbasins, automobile tail lights, sinks, tables, safety shields, and skylights. Acrylics are also used for large enclosures, such as swimming pools and room dividers.	*Material Engineering*
Acrylic	Type of polymer popular for floor finishes. Also, a manmade synthetic fiber used in spun yarn to resemble wool in carpet.	*Chemistry*
Acrylic acid (CH2CHCOOH)	Plastics derived from acrylic acid or its derivatives. Variants acrylates, methyl methacrylates.	*Material Process*
Acrylic acid ($CH_2CHCOOH$)	An unsaturated acid which polymerizes to form resins.	*Material Process*
Acrylonitrile (vinyl cyanide) (CH_2CHCN)	Colorless liquid (b.p. 170 °F, 76.66 °C). Derived from alcohol and hydrogen cyanide. One of the raw for oil resistant synthetic rubbers. Used as an ingredient in the production of Buna rubbers.	*Material Process*
Acrylonitrile-Butadiene-Styrene (ABS)	This thermoplastic, which was introduced in 1948, is made by combining acrylonitrile, butadiene, and styrene. As a result, it draws upon the strengths of each. ABS is very durable against impact and has a high mechanical strength. Therefore, it is commonly used in automotive parts, appliances, business machines, pipes, and telephone components.	*Material Engineering*
ACS	American Chemical Society	*Petro-Chemical Abbreviations*
ACSI	American Customer Satisfaction Index - a metric devised by the ASQ and others attempting to express and track customer satisfaction as delivered by a wide range of companies and government institutions.	*Quality*
Act	Frequently used interchangeably with the word "law."	*Industrial Relations*
Actual Hours Worked	the number of hours spent by an employee on the job during a fixed reporting period, weekly or monthly.	*Industrial Relations*
acting."	acting."	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Actinic	Capable of effecting chemical changes by radiant energy.	*Material Process*
Actinomycetes	any of numerous, generally filamentous, and often pathogenic, microorganisms resembling both bacteria and fungi.	*Chemical*
Action Date	The day that the next action on a part is scheduled to take place.	*Quality*
Activate	To begin performing a mission objective, such as flying along a radial of a radio station; usually refers to a mode of radio navigation, such flying along that radial after capturing that radial; See Also: capture criterion; Compare: arm, capture.	*Aeronautical Engineering*
Activated Alumina	A highly porous material produced from dehydroxylated aluminum hydroxide. Is used as a desiccant and as a filtering medium.	*Lubrication*
Activated Carbon	A granular material usually produced by the roasting of cellulose-based substances, such as wood or coconut shells, in the absence of air. It has an extremely porous structure and is used in water conditioning as an adsorbent for organic matter and certain dissolved gases. Sometimes called "activated charcoal."	*Petroleum Engineering*
Activation Energy	Energy barrier that must be overcome by atoms in a given reaction or process	*Material Process*
Active Model Capture	This technology involves the automated capture of process models from naturally-occurring process data. For example, when the operator makes a set point change, a process model can be developed. For more on active model capture, click here	*Process Control Engineering*
Active power	The component of electric power that performs work, typically measured in kilowatts (kW) or megawatts(MW). Also known as "real power." The terms "active" or "real" are used to modify the base term "power" to differentiate it from Reactive Power. See Power, Reactive Power, Apparent Power	*Energy*
Active Redundancy	Redundancy in which all redundant items operate simultaneously.	*Reliability Engineering*
Active solar	As an energy source, energy from the sun collected and stored using mechanical pumps or fans to circulate heat-laden fluids or air between solar collectors and a building.	*Energy*
Active workings	Any place in a mine where miners are normally required to work or travel and which are ventilated and inspected regularly.	*Mining*
Activity (ai)	A thermodynamic term for the apparent or active concentration of a free ion in solution. It is related to concentration by the activity coefficient.	*General Engineering*
Activity (ai)	A thermodynamic term for the apparent or active concentration of a free ion in solution. It is related to concentration by the activity coefficient.	*Electronic Process*
Activity Based Costing (ABC)	A costing procedure devised by Robert Kaplan (*) and Robin Cooper in 1988 whereby the costs incurred in manufacturing are not accumulated by geographic area, and then assigned to products based on a simple "cost driver", such as the number of employees in the area, but instead are accumulated by type of activity undertaken. Examples of activities are machine set ups; quality management; purchase order placement; etc.. The costs incurred in these activities are then allocated to products based on the demand the products make on the activities. The argument against the adoption of ABC is that action taken by staff to reduce the demand of a particular product on an activity, and so reduce its cost, are	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	likely to be disruptive. For example, a manager may reduce the demand of a product on purchase placement costs by ordering very large lots of material at infrequent intervals. (*Kaplan is also co-inventor of the balanced scorecard, qv.)	
Activity Coefficient (fi)	A ratio of the activity of species i (ai) to its molality (C). It is a correction factor which makes the thermodynamic calculations correct. This factor is dependent on ionic strength, temperature, and other parameters.	*General Engineering*
Activity-based costing system	A system that tracks costs based on the activities that are responsible for driving costs in the production of manufactured goods	*Quality*
Actors and Artistes of America; Associated (AFL-CIO)	a national union chartered by the American Federation of Labor in July 1919.	*Industrial Relations*
Actors and Artistes of America; Associated Actors' Equity Association (AFL-CIO)	originally launched in 1913. Affiliated with the American Federation of Labor in 1919.	*Industrial Relations*
Actual Peak Load Reductions	The actual reduction in annual peak load (measured in kilowatts) achieved by consumers that participate in a utility Demand Side Management (DSM) program. It reflects the real changes in the demand for electricity resulting from a utility DSM program that is in effect at the same time the utility experiences its annual peak load, as opposed to the installed peak load reduction capability (i.e., Potential Peak Load Reduction). It should account for the regular cycling of energy efficient units during the period of annual peak load.	*Energy*
Actual Peak Load Reductions	Reduction in annual peak load by consumers who participate in a DSM program that reflect changes in demand.	*Energy*
Actual peak reduction	The actual reduction in annual peak load (measured in kilowatts) achieved by customers that participate in a utility demand-side management (DSM) program. It reflects the changes in the demand for electricity resulting from a utility DSM program that is in effect at the same time the utility experiences its annual peak load, as opposed to the installed peak load reduction capability (i.e., potential peak reduction). It should account for the regular cycling of energy efficient units during the period of annual peak load.	*Energy*
Actual Wages	the term has been used as synonymous with "real" wages, or the actual purchasing power of the dollar-generally measured by changes in the consumer price index.	*Industrial Relations*
Actual well path	a best estimate of where a well bore exists in 3D space, as computed with directional survey data and the minimum curvature survey calculational method.	*Petroleum Drilling*
Actuarial Analysis	Statistical Analysis Of Failure Data To Determine The Age-Reliability Characteristics Of An Item.	*Plant Engineering*
Actuarial Equivalent	Equivalent pension rates established after equating such factors as interest, form of pension, and mortality.	*Industrial Relations*
Actuary	an individual trained or engaged in the practice of applying probability in the field of mortality to determine the financial risk involved.	*Industrial Relations*
Actuato	A device that carriers out a function in response to an input signal.	*Material Process*
Actuator	A mechanism of the switch or switch enclosure which operates the contacts.	*Electrical Engineering*

Term	Definition	*Industry*
Actuator	In electrical engineering, the term actuator refers to a mechanism that causes a device to be turned on or off, adjusted or moved, usually in response to an electrical signal. In some literature the terms actor or effector are also used. The term "effector" is preferred by programmers, whereas engineers tend to favor "actuator." An example of an actuator is a motor that closes blinds in response to a signal from a sunlight detector. Actuators enable computers to control complex manufacturing processes without human intervention or supervision.	*Electrical*
Acute Angle	An angle that is less than 90°.	*Math*
Acute injury	Injury, usually involving necrosis, which develops within several hours to a few days after a high dose exposure to a pollutant; expressed as fleck, scorch, bifacial necrosis, etc.	*Forestry*
ACV	All Commodity Volume.	*Quality*
ACWA	ACWA - See: Clothing Workers of America; Amalgamated	*Industrial Relations*
Ad Hoc Arbitration	Ad Hoc Arbitration - see : Arbitration, Ad Hoc	*Industrial Relations*
Ad Valorem	A customs duty levied according to the value of the goods.	*Quality*
Adair v. United States	a major labor case in which the Supreme Court, in 1908, held that section 10 of the Erdman Act of 1898 (30 Stat. 424, c. 370) was unconstitutional.	*Industrial Relations*
Adams v. Tanner	decision by the Supreme Court in 1917 holding unconstitutional a statute passed by the State of Washington which prohibited employment agencies in the state from collecting fees from the employees.	*Industrial Relations*
Adamson Act	act of Congress passed in 1916 at the request of President Woodrow Wilson. It provided the 8-hour day for interstate railroad employees.	*Industrial Relations*
Adapter	A mechanism or device for attaching non-mating parts.	*Electronic Process*
Adapter spool	An extension which is added to a short face-to-face valve, to conform to standard API 6D face-to-face dimensions.	*Mechanical*
Adapters or Reducer Couplings	reduces large drill motor thread to smaller thread for use with smaller bits (i.e. bots smaller than 1.25 inches).	*Petroleum Drilling*
Adaptive Automatic Transmission	Some transmissions can "learn" and adapt to the driver's style, altering shift points and other transmission functions to produce the most efficient operation.	*Mechanical Engineering*
Adaptive Control	Method of control whereby tuning (response) of the control system is varied with the process conditions, unlike other control where tuning is manual and remains constant.	*Electrical Engineering*
Adaptive Cruise Control	One step beyond cruise control, adaptive cruise control uses a radar sensor mounted in the front of the vehicle to maintain a safe cruising distance between your vehicle and the vehicle in front of you. Most systems allow you to set the interval (distance between vehicles) and will then accelerate and brake (within reason) to maintain that interval. In many cases, the systems can take into account hilly terrain and passing situations. All have the ability to act like regular cruise control, and they still require the driver to steer the vehicle normally. Some automakers refer to it as "intelligent" cruise control.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Adaptive Exponential Smoothing	Devised by Derek Trigg originally in connection with the tracking of the Nylon 8 process at ICI in Wilton, Co. Durham, Adaptive Smoothing is the only naive forecasting technique to incorporate a built-in ability to adapt its own behavior as circumstances change. The exponent alpha in single exponential smoothing is replaced by a variable "A," calculated from the past "n" forecast errors, where A = (sum of the errors where signs cancel)/(absolute sum of the errors). In short, as errors start to increase, A gets bigger and the forecasts start to catch up to the new level of demand. Adaptive smoothing is not a sound forecasting technique and is no longer used; it is regarded as a curiosity.	*Quality*
Adaptor Flange	An intermating flange that connects between two other flanges that are different connection types from each other. Two types are available:-	*Petroleum Engineering*
Adaptor Spool	A pressure control housing body with two different end connections to fit between two other pieces of equipment. Can often be used instead of a Double Studded Adaptor because at least one of the components to which it connects has a studded flange connection.	*Petroleum Engineering*
ADC	Analogue to Digital Convertor	*Control Engineering*
ADC	Analogue to Digital Converter, or Automated Data Collection.	*Quality*
Added Value	See Value Added.	*Quality*
Addendum	Height of tooth above pitch circle or the radial distance between the pitch circle and the top of the tooth.	*Mechanical Engineering*
Addition Polymerization	Chain growing by a chemical reaction in which molecules combine through interaction of unsaturated groups without splitting off any by products.	*Material Process*
Additional Requirements	complies with the requirements of the applicable code and standard and any additional requirements established by the owner.	*Maintenance and Repair*
Additive	Any material added to a base stock to change its properties, characteristics or performance.	*Lubrication*
Additive	A chemical substance added to a petroleum product to impart or improve certain properties. Common petroleum product additives are: antifoam agent, anti-wear additive, corrosion inhibitor, demulsifier, detergent, dispersant, emulsifier, EP additive, oiliness agent, oxidation inhibitor, pour point depressant, rust inhibitor, tackiness agent, viscosity index (VI.) improver.	*Lubrication*
Additive company	A specialty chemicals business which produces ingredients which enhance the performance of base oils for specific purposes, such as lubricating passenger car engines.	*Mechanical, Process, and Operations*
Additive Level	The total percentage of all additives in an oil. (Expressed in % of mass (weight) or % of volume)	*Lubrication*
Additive model	A statistical model in which the combined effect of several factors is the sum of the effects produced by each of the factors in the absence of the others. For example, if one factor increases risk by a% and a second factor by b%, the additive combined effect of the two factors is (a + b)%. See also: Multiplicative model	*Quality Engineering*
Additive stability	The ability of additives in the fluid to resist changes in their performance during storage or use.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Additives	In the manufacturing process of plastics, polymer is just one constituent. There are other chemicals like impact modifiers, colorants, reinforcements, plasticizers and stabilizers etc that give specific properties to the plastics. These are called additives.	*Chemical*
Address	The label or number identifying the memory location where a unit of information is stored.	*General*
ADE	Automated Data Entry.	*Quality*
Adequacy (electric)	The ability of the electric system to supply the aggregate electrical demand and energy requirements of the end-use customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements. NERC definition	*Energy*
Adequate Remedy at Law	a solution or remedy which is practical, efficient, plain, and complete to achieve the ends of justice and its prompt administration as a remedy in equity.	*Industrial Relations*
Adherence	the act, action, or quality of zinc bonding to steel, measured in pounds per square inch (psi) or mega pascals (MPa)	*Materials Process*
Adhesion	The attraction or joining of two materials, such as a lubricating grease and a metal.	*Lubrication*
Adhesive Wear	Wear caused by metal-to-metal contact; characterized by local welding and tearing of the surface.	*Lubrication*
Adhesive Wear	Wear occurring when two smooth surfaces slide over each other. fragment are pulled off one surface and adhere to the other.	*Material Process*
Adiabatic	Without loss or gain of heat	*Chemical*
Adipic acid ($COOH(CH_2)_4COOH$)	A dibasic acid useful for the production of polyamides or Nylons, or for alkyl resins. A colorless monoclinic prisms substance.	*Material Process*
Adit	A nearly horizontal passage from the surface by which a mine is entered and dewatered. A blind horizontal opening into a mountain, with only one entrance.	*Mining*
ADIT	A passageway or opening driven horizontally into the side of a hill generally for the purpose of exploring or otherwise opening a mineral deposit. An adit is open to the atmosphere at one end, a tunnel at both ends.	*Mining*
Adit	An entrance to a mine, generally a horizontal tunnel.	*Mining*
Adjacent	Angles that have the same vertex and a common arm. They lie on opposite sides of the common arm.	*Math*
Adjunction	the resolution of a dispute by a tribunal or court.	*Industrial Relations*
Adjustable speed drives	Drives that save energy by ensuring the motor's speed is properly matched to the load placed on the motor. Terms used to describe this category include polyphase motors, motor oversizing, and motor rewinding.	*Energy*
Adjustable Suspension	Provides better ride or handling. A variety of systems are used to vary shock-absorber firmness. Some automatically sense road conditions and adjust shock-absorber settings accordingly. Others include a switch on the dashboard or console that allows the driver to adjust shock-absorber settings to provide a softer or firmer ride, or sharper handling.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Adjusted analysis	An analysis that controls (adjusts) for baseline imbalances in important patient characteristics. See also: Confounder	*Quality Engineering*
Adjusted electricity	A measurement of electricity that includes the approximate amount of energy used to generate electricity. To approximate the adjusted amount of electricity, the site-value of the electricity is multiplied by a factor of 3. This conversion factor of 3 is a rough approximation of the Btu value of raw fuels used to generate electricity in a steam-generation power plant.	*Energy*
Adjustment	A summarizing procedure for a statistical measure in which the effects of differences in composition of the populations being compared have been minimized by statistical methods.	*Analysis*
Adjustment bid	A bid auction conducted by the independent system operator or power exchange to redirect supply or demand of electricity when congestion is anticipated.	*Energy*
Adjustment Board	an agency designed to deal with a specific set of labor-management problems.	*Industrial Relations*
Adjustment of Disputes	Adjustment of Disputes - see: Dispute Adjustment	*Industrial Relations*
Adjustment of Grievances	Adjustment of Grievances - see: Grievance Adjustment	*Industrial Relations*
Adkins v. Children's Hospital	the Supreme Court decision in 1923 which held unconstitutional a law passed by Congress in 1918 providing for the fixing of minimum wages for women and children in the District of Columbia.	*Industrial Relations*
Administration	the process of carrying out or enforcing a statute.	*Industrial Relations*
Administration of the Agreement	Administration of the Agreement - see: Agreement, Administration of	*Industrial Relations*
Administrative and general expenses	Expenses of an electric utility relating to the overall directions of its corporate offices and administrative affairs, as contrasted with expenses incurred for specialized functions. Examples include office salaries, office supplies, advertising, and other general expenses.	*Energy*
Administrative Costs	All executive, organizational, and clerical costs associated with the general management of an organization rather than with manufacturing, marketing, or selling.	*Procurement*
Administrative Employee	a class of management employees exempt from the provisions of the Fair Labor Standards Act (Wage-Hour Law).	*Industrial Relations*
Administrative Law	a body of law established by rules, regulations and court interpretations of actions by an administrative agency established by the Federal Government or the state legislature.	*Industrial Relations*
Administrative Order (ruling or interpretation)	a regulation or order issued by an administrative agency or administrator setting forth detailed procedures and interpretations of the law.	*Industrial Relations*
Administrative Procedure Act	a law passed by Congress in June 1946 to establish uniform procedures for administrative and quasi-judicial agencies.	*Industrial Relations*
Administrator	a person who has the responsibility of carrying out the purposes and provisions of the law.	*Industrial Relations*
Administrator (of a Cochrane Review Group)	See Managing Editor (previously known as Review Group Co-ordinator (RGC))	*Quality Engineering*

Term	Definition	*Industry*
Adminors	The name of the e-mail discussion list for Managing Editors. See also: Managing Editor (previously known as Review Group Co-ordinator (RGC))	*Quality Engineering*
Admission to Union	Admission to Union - see: Union Membership Regulations	*Industrial Relations*
Admixture	Addition to cement to provide desirable features, for example, coloring agent.	*Material Process*
ADSL	Asymmetric Digital Subscriber Line, a methodology enabling a single copper wire carrying a telephone signal to transmit data at anything from 10x the normal rate to 40x the normal rate—i.e., it is a digital connection over a normal telephone line that is also capable of carrying high speed traffic. "Asymmetric" means that the user cannot send ("upload") data as fast as he can receive it. As well, what is important from the user's point of view, is that the connection is "always on." ADSL Max denotes new technology intended to improve performance, especially for users a long way from the telephone exchange.	*Quality*
Adsorbent Filter	A filter medium primarily intended to hold soluble and insoluble contaminants on its surface by molecular adhesion.	*Lubrication*
Adsorption	Attachment of a molecule or atom to a solid surface. Adsorption involves a chemical bond between the adsorbed species and the surface.	*Chemical*
Adsorption	Adhesion of the molecules of gases or liquids to the surface of solid materials.	*Petroleum Engineering*
Adsorptive Filtration	The attraction to, and retention of particles in, a filter medium by electrostatic forces, or by molecular attraction between the particles and the medium.	*Lubrication*
Adust	Dry or burnt, in the humoral system of medicine	*Breakroom*
Advance	Mining in the same direction, or order of sequence; first mining as distinguished from retreat.	*Mining*
Advance on Wages	payments of earnings prior to the regular pay day.	*Industrial Relations*
Advance royalty	A royalty required to be paid in advance of production from a mineral property that may or may not be recoverable from future production.	*Energy*
Advance Shipping Notice	See ASN.	*Quality*
Advanced composites	Synthetic fiber reinforced composites with relatively high modulus fibers. The fiber modulus is generally higher than that of E-glass.	*Material Process*
Advanced head or Advanced heading	a heading in advance of the coalface often known as a 'pilot heading' or 'advanced gate'.	*Mining*
Advanced Metering	Device for recording or communicating actual electric use during minutes, hours, days or weeks useful for time-of-day, on-peak/off peak or other billing rates.	*Energy*
Advanced Mobile Phone System	An analog only, 1G standard that operates in the 800MHz to 900MHz frequency band. It is still widely used in the United States.	*Electrical Engineering*
Advanced Planning and Scheduling	See APS.	*Quality*
Advanced planning and scheduling system	Planning and optimization tool that balances demand with plant capacity, thus allowing manufacturers to identify bottlenecks and divert workload to alternative production cells.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Advanced Power Management	Power management standard for computers that provides five power states: Ready, Stand-by, Suspended, Hibernation, Off.	*Electrical Engineering*
Advanced Power Management	Power management standard for computers that provides five power states—Ready, Stand-by, Suspended, Hibernation, Off.	*Electrical Engineering*
Advanced process control (APC)	In general terms, advanced process control refers to large-scale computer systems that are used to monitor and control processing plants such as cement factories or oil refineries. The systems extend traditional process control, which is used to monitor and control individual processes, by evaluating and controlling multiple processes across the plant. By monitoring multiple processes, APC systems can optimize operations for multiple parameters, evaluating the impact each adjustment will have on neighboring operations by referencing current and historical data. With a broad yet detailed view of an entire plant's operations, APC applications allow processes to operate closer to their maximum capacity, while maintaining the necessary standards of reliability and safety.	*Electrical*
Advanced Product Quality Planning	System developed by the AIAG automotive organization to communicate common product quality planning and control plan guidelines for suppliers to the automotive industry.	*Electrical Engineering*
Advances from municipality	The amount of loans and advances made by the municipality or its other departments to the utility department when such loans and advances are subject to repayment but not subject to current settlement.	*Energy*
Advances to municipality	The amount of loans and advances made by the utility department to the municipality or its other departments when such loans or advances are subject to current settlement.	*Energy*
Advancing Face	Advancing Face – see Face	*Mining*
Advection	the process of transfer of fluids (vapors or liquid) through a geologic formation in response to a pressure gradient that may be caused by changes in barometric pressure, water table levels, wind fluctuations, or infiltration.	*Chemical*
Adverse effect	An adverse event for which the causal relation between the drug/intervention and the event is at least a reasonable possibility. The term 'adverse effect' applies to all interventions, while 'adverse drug reaction' (ADR) is used only with drugs. In the case of drugs an adverse effect tends to be seen from the point of view of the drug and an adverse reaction is seen from the point of view of the patient. See also: Adverse event, Side effect Also called: Adverse reaction	*Quality Engineering*
Adverse event	An adverse outcome that occurs during or after the use of a drug or other intervention but is not necessarily caused by it. See also: Adverse effect	*Quality Engineering*
Adverse reaction	See Adverse effect	*Quality Engineering*
Adverse water conditions	Reduced stream flow, lack of rain in the drainage basin, or low water supply behind a pondage or reservoir dam resulting in a reduced gross head that limits the production of hydroelectric power or forces restrictions to be placed on multipurpose reservoirs or other water uses.	*Energy*
Adverse Weather Conditions	Reduced streamflow, lack of rain in the drainage basin, or low water supply behind a pondage or reservoir dam resulting in a reduced gross head that limits the production of hydroelectric power or forces restrictions to be placed on multipurpose reservoirs or other water uses.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Advice Note	A message from a supplier to a receiving company stating that goods ordered are in the process of being actually dispatched. The advice note may be paper or electronic, and will include the relevant Order Number. An advice note is equivalent to an ASN.	*Quality*
Advisory	A signal to indicate safe or normal configuration, condition of performance, operation of essential equipment, or to attract attention and impart information for routine action purposes (from MIL-STD-1472D); an annunciator that is the least critical (less than a caution or a warning).	*Aeronautical Engineering*
Advisory Council	an agency, generally tri-partite in structure, designed to assist in a consultative or advisory capacity on major policy issues.	*Industrial Relations*
Advisory Council on Employment Security	state employment service agencies operating under the Wagner-Peyser Act are required to establish tri-partite Advisory Councils on Employment Security.	*Industrial Relations*
AEA	AEA - See: Actors and Artistes of America; Associated-Actors' Equity Association (AFL-CIO)	*Industrial Relations*
AECC	Automobile Emissions Control by Catalyst	*Petro-Chemical Abbreviations*
Aecial stage (aecium)	A spore stage of the rust fungi; a cuplike structure bearing aeciospores.	*Forestry*
AEG	Allgemeine Elektricitäts—Gesellschaft.	*Quality*
AEI	Associated Electrical Industries.	*Quality*
AEN	Ambient electromagnetic noise. The electrical and magnetic waves measured in decibels that are generated in the air by electrical devices—sortation systems, conveyors, alarm systems, radio VDUs etc. A major problem with AEN lies in the installation of RFID - the radio waves generated and read by the RFID devices are interfered with by the AEN. Prior to setting up an RFID system, therefore, it is necessary to carry out a site assessment or site survey. In the site assessment, a Full Faraday Cycle Analysis is performed over a 24-hour working day of the proposed RFID interrogation zone to determine the AEN present. By doing so, RFID readers can be positioned so as to minimize AEN radio interference. The subjects of AEN, site surveys and Full Faraday Cycle Analyses remind us that in setting up an RFID system, in, say, a warehouse, problems are as much matters of physics and electronic engineering as they are of systems analysis.	*Quality*
AER	AER - See: Anticipated earned rate	*Industrial Relations*
Aeration	the process of bringing air into contact with a liquid (typically water), usually by bubbling air through the liquid, spraying the liquid into the air, allowing the liquid to cascade down a waterfall, or by mechanical agitation. Aeration serves to (1) strip dissolved gases from solution, and/or (2) oxygenate the liquid. The rate at which a gas transfers into solution can be described by Fick's First Law.	*Chemical*
Aerial magnetometer	An instrument used to measure magnetic field strength from an airplane.	*Mining*
Aerial tramway	A system for the transporting of ore or rock in buckets which are suspended from a cable.	*Mining*
Aerobe	An organism that grows only in the presence of free (molecular) oxygen.	*Chemical Engineering*
Aerobic	Requiring oxygen.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Aerodynamic Noise	Noise produced by a gas accelerating to supersonic velocity at critical or higher pressure drops through the valve trim.	*Industrial Engineering*
Aerodynamics	The science of managing airflow plays a major role in racecar design and tuning because modern day open wheeled cars are highly sophisticated aerodynamic devices. Areas of high and low pressure are carefully managed to maximize downforce (to give a car grip) while minimizing drag (to maximize speed). You can see the wings on the nose and the large wing at the rear of the car. Underneath, two large grooves (like funnels cut in half) suck the car down on the track by creating a partial vacuum under the car. This is generally referred to as "ground effects." Wind tunnels play a key role in modern day open wheeled cars design and evolution.	*NASCAR*
Aeromagnetic survey	A geophysical survey using a magnetometer aboard, or towed behind, an aircraft.	*Mining*
Aerophor Breathing Apparatus	The Aerophor was introduced in 1910. The apparatus supplied oxygen from a liquid air source. The liquid air container and regenerator were carried on the back, and the breathing bag was worn on the chest. The overall weight of the apparatus was about 40 lbs.	*Mining*
Aerosol	An extremely fine mist or fog consisting of solid or liquid particles suspended in air. Also, term used for products that mechanically produce such a mist.	*Chemistry*
Aerotight Nut	A torque prevailing nut of all metal construction. The nut is slotted in two places which, after the nut has been tapped, are bent slightly inwards and downwards. When the nut is screwed onto the bolt thread the two slotted parts are forced back to their original position. Their stiffness causes the nut threads to bind onto the bolt threads and thus provides a prevailing torque. Aerotight is a registered trade mark of The Premier Screw and Repetition Co. Ltd of Woodgate, Leicester, United Kingdom, LE3 5GJ.	*Maintenance*
AEU	Amalgamated Engineering Union.	*Quality*
AFC	adaptive fuel control	*Petro-Chemical Abbreviations*
Affecting Commerce	Much of the federal legislation regulating labor-management relations is based on the authority on Congress to regulate commerce between the states.	*Industrial Relations*
Affidavit	a written statement given under oath and accepted as evidence when no better proof is available.	*Industrial Relations*
Affiliate	An entity that is directly or indirectly owned, operated, or controlled by another entity.	*Energy*
Affiliated Power Producer	A generating company that is affiliated with a utility.	*Energy*
Affiliated Retail Electric Provider	A Retail Electric Provider (REP) that is owned, but separately operated, by a former monopoly electric utility.	*Energy*
Affiliated Schools for Workers	a group of summer schools first organized during the 1920's such as Bryn Mawr and Oberlin to provide women wage earners with college guidance and training in economics, labor history, etc.	*Industrial Relations*
Affiliation	the joining or association of a group with a parent or national organization.	*Industrial Relations*

Term	Definition	*Industry*
Affirmative Action	A provision of the Equal Opportunity Act of 1972 that requires all firms to take affirmative action to move toward achieving a work force that accurately reflects the composition of the local labor pool. In recent years, this interpretation has been liberalized somewhat. The current definition is: "Any effort taken to expand opportunity for women or racial, ethnic, and national origin minorities by using membership in those groups that have been subject to discrimination as a consideration."	*Procurement*
Affirmative Order	an order issued by the National Labor Relations Board or State Labor Boards requiring an employer or union to take specific action to undo a wrong committed in violation of law.	*Industrial Relations*
Afforestation	Planting of new forests on lands that have not been recently forested.	*Energy*
AFGE	AFGE - See: Government Employees; American Federation of (AFL-CIO)	*Industrial Relations*
AFGM	AFGM - See: Grain Millers; American Federation of (AFL-CIO)	*Industrial Relations*
AFGW	AFGW—See: Glass Workers' Union of North America; Americana Flint (AFL-CIO)	*Industrial Relations*
AFHW	AFHW—See: Hosiery Workers; American Foundation of (AFL-CIO)	*Industrial Relations*
AFI	Average Fraction Inspected. A term used in quality and acceptance sampling to gauge the financial effectiveness, to a recipient of incoming goods, of a sampling inspection table or procedure. AFI is defined as ATI / N, where N is the number of the incoming items.	*Quality*
AFL-CIO	AFL-CIO - See: American Federation of Labor-Congress of Industrial Organizations	*Industrial Relations*
AFL-CIO Collective Bargaining Report	monthly report issued by the Research Department of the AFL-CIO.	*Industrial Relations*
AFL-CIO COPE	the Committee on Political Education was formed with the merger of the AFL-CIO in 1955.	*Industrial Relations*
AFM	AFM - See: Musicians; American Federation of (AFL-CIO)	*Industrial Relations*
AFNOR	Association Français de Normalisation	*Petro-Chemical Abbreviations*
A-Force	to hole a board into an adjoining board unintentionally, (N. East).	*Mining*
AFT	AFT - See: Teachers; American Federation of (AFL-CIO)	*Industrial Relations*
AFTE	AFTE - See: Engineers; American Federation of Technical (AFL-CIO)	*Industrial Relations*
After Sales Service	All services proposed by the vendor or manufacturer after the purchase.	*Maintenance*
After yellowing	The property of becoming yellow from age or exposure often exhibited by clear varnishes and lacquers containing synthetic resins.	*Material Process*
Afterburner	An off-gas posttreatment unit for control of organic compounds by thermal oxidation. A typical afterburner is a refractory-lined shell providing enough residence time at a sufficiently high temperature to destroy organic compounds in the off-gas stream.	*Chemical*
Aftercooler	A device which cools a gas usually after it has been compressed. AIR BLEEDER - A device for removal of air from a hydraulic fluid line.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Afterdamp	a mixture of non-inflammable gasses left after an explosion or fire in a coalmine. It usually has a high carbon monoxide (CO) content and is very low in oxygen. Afterdamp was responsible for more deaths among miners than were actually physically injured due to the explosions. Also known as "azote" (N. East).	*Mining*
Aftermarket	All products and services used in the repair and maintenance of vehicles that was not produced by the original vehicle manufacturer.	*Mechanical Engineering*
After-Market	Broad term that applies to any change after the original purchase, such as adding equipment not a part of the original purchase. As applied to alternative fueled vehicles, it refers to conversion devices or kits for conventional fuel vehicles.	*Energy*
Aftermarket converted vehicle	A standard conventionally fueled, factory-produced vehicle to which equipment has been added that enables the vehicle to operate on alternative fuel.	*Energy*
Aftermarket vehicle converter	An organization or individual that modifies OEM vehicles after first use or sale to operate on a different fuel (or fuels).	*Energy*
AFTRA	AFTRA - See: Actors and Artistes of America; Associated-American Federation of Television and Radio Artists (AFL-CIO)	*Industrial Relations*
AFUDC	Allowance for Funds Used During Construction	*Energy*
AFV	Alternative-Fuel Vehicle	*Energy*
AGA	American Gas Association	*Energy*
AGA	American Gas Association—A society comprising gas companies set up to achieve common goals.	*Mechanical*
Age Hardening	An increase in consistency (hardening) over time (also see Thixotropy).	*Lubrication*
Agent (legal)	An employee is the "agent" of an employer, whose function it is to assist the employer in the fulfillment of a contract. The limit of the agent's contractual involvement is that a contract of agency exists between him and his employer, and it is from this that he derives his authority to act. Such authority may be express, implied, apparent, ratified or of necessity. In general, the principal (i.e., employer) is bound by his agent's actions. This is not the case, however, if the agent acts contrary to the employer's specific instructions.	*Quality*
Agent	In pre-nationalization days the chief official of a large coalmine or group of mines under the same ownership was known as an Agent.	*Mining*
Agglomerate	Several particles adhering together.	*Paint and Coatings*
Agglomerate	A breccia composed largely or entirely of fragments of volcanic rocks.	*Mining*
Agglomerated Powder	A powder made up of agglomerates	*Paint and Coatings*
Agglomerating character	Agglomeration describes the caking properties of coal. Agglomerating character is determined by examination and testing of the residue when a small powdered sample is heated to 950 degrees Centigrade under specific conditions. If the sample is "agglomerating," the residue will be coherent, show swelling or cell structure, and be capable of supporting a 500-gram weight without pulverizing.	*Energy*
Agglomerating	refers to coal that softens when heated and forms a hard gray coke; this coal is called caking coal. Not all caking coals are coking coals. The agglomerating value is used to differentiate between coal ranks and also is a guide to determine how a particular coal reacts in a furnace.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Agglomeration	The potential of the system for particle attraction and adhesion.	*Oil Analysis*
Agglomeration	A method of concentrating valuable minerals based on their adhesion properties.	*Mining*
Agglutinating	refers to the binding qualities of a coal. The agglutinating value is an indication of how well a coke made from a particular coal will perform in a blast furnace. It is also called a caking index.	*Energy*
Aggravated Test	A test in which one or more conditions are set at a higher stress more level than the test item will encounter in the field, in order to reduce test time or assure a margin of safety.	*Reliability Engineering*
Aggregate	Inert solid bodies such as crushed rock, sand, gravel, crushed hydraulic cement concrete.	*Petroleum Drilling*
Aggregate	Coarse mineral material (e.g., sand, gravel) that is mixed with either cement to form concrete or tarry hydrocarbons to form asphalt.	*Chemical*
Aggregate Nonfibrous	Dispersed phase in a composite. Specifically refers to sand and gravel dispersed in concrete.	*Material Process*
Aggregate composite	Material reinforced with a dispersed particulate (rather than fibrous) phase.	*Material Process*
Aggregate data	Data summarized by groups, for example summary outcome data for treatment and control groups in a controlled trial. See also: Control group, Controlled trial, Treatment	*Quality Engineering*
Aggregate ratio	The ratio of two population aggregates (totals). For example, the aggregate expenditures per household is the ratio of the total expenditures in each category to the total number of households in the category.	*Energy*
Aggregate Strength	The strength derived by totaling the individual breaking strengths of the elements of the strand or rope. This strength does not recognize the reduction in strength resulting from the angularity of the elements in the rope, or other factors that may affect efficiency.	*Wire Rope & Cable*
Aggregation	Formation of aggregates. In drilling fluids, aggregation results in the stacking of the clay platelets face to face; as a result, viscosity and gel strength decrease.	*Petroleum Engineering*
Aggregation	The process of organizing small groups, businesses or residential customer into a larger, more effective bargaining unit that strengthens their purchasing power with utilities.	*Energy*
Aggregator	An entity that puts together customers into a guying group for the purchase of a commodity service. The vertically integrated investor owned utility, municipal utilities and rural electric cooperatives perform this function in today's power market. Other entities such as buyer cooperatives or brokers could perform this function in a restructured power market.	*Energy*
Aggressive environment	an environment that is particularly corrosive	*Materials Process*
Agile Manufacturing	Agile is an adjective from the Manufacturing Consultant's Golden Lexicon - a powerful word suggesting immediately that a company that is not agile is inferior to one that is (but we are not to enquire in what way the non-agile company is inferior). If agile manufacturing does have a meaning, it is that the company responds to a customer's requirement by the immediate commencement of fast manufacture, rather than through a reliance on forecasting and stock holding.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	Two examples of agile manufacture are: (1) in Just-in-Time, the instant response to market demand, through group technology, kanban and SMED; and (2) in quick response/assemble-to-order, the prior manufacture of machine options and their use in a final assembly stage.	
Aging	Allowing batches of synthetic resins, coatings, or various plastics materials to stand for some time to allow a natural change to take place, resulting in improved properties.	*Material Process*
Agitation	In metallurgy, the act or state of being stirred or shaken mechanically, sometimes accomplished by the introduction of compressed air.	*Mining*
AGM	AGM - See: Actors and Artistes of America; Associated-American Guild of Musical Artists, Inc. (AFL-CIO)	*Industrial Relations*
AGMA	An acronym for "American Gear Manufacturers Associations," an organization serving the gear industry.	*Lubrication*
AGMA Lubricant Numbers	AGMA specification covering gear lubricants. The viscosity ranges of the AGMA numbers (or grades) conform to the International Standards Organization (ISO) viscosity classification system (see ISO viscosity classification system).	*Lubrication*
AGR slant range	Straight-line distance from the aircraft to a point on the ground.	*Aeronautical Engineering*
Agribusiness	a way of farming that combines agriculture and business and usually involves large amounts of land, animals, and expensive technology be	*Agriculture*
Agricultural Land Commission (ALC)	The ALC is an independent Crown agency whose mission is to preserve agricultural land.	*Petroleum Engineering*
Agricultural Land Reserve (ALR)	The Agricultural Land Reserve (ALR) is a provincial zone in which agriculture is recognized as the priority use. Farming is encouraged and non-agricultural uses are controlled.	*Petroleum Engineering*
Agricultural Marketing Service, (AMS)	An agency of the USDA.	*Agriculture*
Agriculture	An energy-consuming subsector of the industrial sector that consists of all facilities and equipment engaged in growing crops and raising animals.	*Energy*
Agriculture, mining, and construction (consumer category)	Companies engaged in agriculture, mining (other than coal mining), or construction industries.	*Energy*
Agritourism	Agricultural tourism is a commercial enterprise at a farm, ranch or vineyard that provides enjoyment or education to visitors and generates supplemental income to growers. These enterprises also provide opportunities for urban populations to experience a farm. Agritourism can include farm stands, ag tours, wildlife viewing or bird watching, festivals, farm-animal petting zoos, wine tasting or u-picks. For more on Agritourism go here.	*Agriculture*
Agrochemical	Chemicals, like hormone, fungicide, or insecticide, that improve or protects the crop production.	*Chemical*
Agronomic	An adjective used to describe plants and plant products. Pertains to agronomy or agricultural plants and things affecting plants.	*Agriculture*

Term	Definition	*Industry*
Agronomy	Scientific discipline related to the production of agricultural crops. Universities aren't uniform in their organization of plant sciences into departments. For example, at some schools, scientists who work on corn would be found in the agronomy department. At other schools they would be found in the horticulture department.	*Agriculture*
AGV	AGV - See: Actors and Artistes of America; Associated American Guild of Variety Artists (AFL-CIO)	*Industrial Relations*
AGV (Automated Guided Vehicle)	A computer controlled device used in materials handling and factory internal transportation.	*Quality*
AH	Polycyclic aromatic hydrocarbons	*Petro-Chemical Abbreviations*
AHEM	Association of Hydraulic Equipment Manufacturers	*Petro-Chemical Abbreviations*
AI	Artificial Intelligence	*Control Engineering*
AIAG	Automotive Industry Action Group	*Gears*
AIAM	Association of International Automobile Manufacturers	*Petro-Chemical Abbreviations*
AIChE	American Institute of Chemical Engineers	*Petro-Chemical Abbreviations*
AID	Automatic Identification .... bar codes, RFID and contact memory buttons.	*Quality*
AIDAS	The tasks which the salesman must undertake in selling have been summarized by the mnemonic AIDAS, as follows: A = attention (making contact); I = interest; D = desire (showing the potential customer how the goods will benefit him); A = action (closing the sale); and S = satisfaction (making sure the business is retained).	*Quality*
Aiding	A process by which one or more sensors provide data to another sensor to produce results better than any single sensor; aiding occurs at the data source level or at the physical device level, depending upon specific implementation of the device and the data source (choice of implementation is transparent above the data source); aiding is automatically controlled by software without input from an operator; a basic control to a data source from navigation, radio navigation, or other devices Compare: update.	*Aeronautical Engineering*
Aileron	A control surface on fixed-wing aircraft, usually mounted on the aft edge of wings, that controls roll, and is controlled by the wheel; Symbols: delta sub A; Typical Units: rad, deg.	*Aeronautical Engineering*
AIM	(1) Application Integration Middleware; (2) Alternative Investment Market, a branch of the London Stock Exchange formerly known as the Unlisted Securities Market, launched in 1995 and having less stringent rules and regulations than the main stock exchange. The AIM was aimed at smaller, younger companies.	*Quality*
AIM	Automatic Identification Manufacturers ALPHANUMERIC-Description of a symbology's character set which consists of letters and numerals.	*Gears*
AIMS	Agile Infrastructure for Manufactured Systems (a program).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Air Bag	The air bag, also known as a Supplemental Inflatable Restraint System, is a passive safety device, supplemental to safety belts, that inflates to provide a cushion to absorb impact forces during moderate to severe frontal collisions. This system can help to lessen the chance of contact with the steering wheel, instrument panel and windshield. The air bag is actuated automatically by sensors located in the front of the vehicle.	*Mechanical Engineering*
Air Bag	The air bag, also known as a Supplemental Inflatable Restraint System, is a passive safety	*Mechanical Engineering*
Air bagging	Air bagging, -see Bagging	*Mining*
Air Bleeder	A device for removal of air from a hydraulic fluid line.	*Lubrication*
Air box	a square wooden tube used to convey air into the face of a single drift, or shaft in sinking.	*Mining*
Air breather	A device permitting air movement between atmosphere and the component in which it is installed.	*Mechanical, Process, and Operations*
Air bridge	Air bridge, -see Air crossing.	*Mining*
Air classification	The separation of powder into particle size fractions by means of an air stream of controlled velocity.	*Paint and Coatings*
Air cleaner	A device using filters or electrostatic precipitators to remove indoor-air pollutants such as tobacco smoke, dust, and pollen. Most portable units are 40 watts when operated on low speed and 100 watts on high speed.	*Energy*
Air collector	A medium-temperature collector used predominantly in space heating, utilizing pumped air as the heat-transfer medium.	*Energy*
Air conditioning	Cooling and dehumidifying the air in an enclosed space by use of a refrigeration unit powered by electricity or natural gas. Note: Fans, blowers, and evaporative cooling systems ("swamp coolers") that are not connected to a refrigeration unit are excluded.	*Energy*
Air conditioning intensity	The ratio of air-conditioning consumption or expenditures to square footage of cooled floor space and cooling degree-days (base 65 degrees F). This intensity provides a way of comparing different types of housing units and households by controlling for differences in housing unit size and weather conditions. The square footage of cooled floor space is equal to the product of the total square footage times the ratio of the number of rooms that could be cooled to the total number of rooms. If the entire housing unit is cooled, the cooled floor space is the same as the total floor space. The ratio is calculated on a weighted, aggregate basis according to this formula: Air-Conditioning Intensity = Btu for Air Conditioning/(Cooled Square Feet * Cooling Degree-Days)	*Energy*
Air course	an underground tunnel or passage used solely or mainly for ventilation.	*Mining*
Air coursing	system of ventilation introduced in about 1760, in which the air current was directed through all the underground roadways of the mine before going to the upcast shaft. The system necessitated the building of stronger stoppings, brick was now being brought into use, and better fitting doors.	*Mining*

Term	Definition	*Industry*
Air crossing	a bridge constructed to allow the return airway to pass either under (undercast) or over (overcast) the intake airway. The air crossing must be made airtight to avoid the mixing or short-circuiting of either of the two air-currents. It should also be constructed in such a manner as to be able to withstand the results of an explosion. Also called an 'air bridge'.	*Mining*
Air Data Computer (ADC)	A primary navigation data source. A navigation sensor based on atmospheric data sensors; usually measures static pressure, dynamic pressure, and outside air temperature; sometimes computes other atmospheric data, such as indicated airspeed, Mach number, calibrated airspeed As a guidance mode, ADC is least accurate of the listed modes and is used only as a last resort.	*Aeronautical Engineering*
Air data dead reckoning (ADDR0)	Dead reckoning navigation based on simple instruments as source (barometric altimeter, magnetic compass, airspeed indicator, known wind conditions); sometimes called dead reckoning.	*Aeronautical Engineering*
Air doors	Air doors, -see Doors.	*Mining*
Air Entrainment	A device which converts compressed gas into mechanical force and motion. It usually provides rotary mechanical motion.	*Lubrication*
Air Filter	A particulate air filter is a device composed of fibrous materials which removes solid particulates such as dust, pollen, mold, and bacteria from the air.	*Mechanical Engineering*
Air fin coolers	A radiator-like device used to cool or condense hot hydrocarbons; also called fin fans.	*Petroleum Engineering*
Air flow	Total amount of dry air and associated water vapor flowing through the tower, measured in cubic feet per minute at the exhaust from the tower and converted to standard air which has a density of 0.075 lb. per cu. ft.	*Facility Engineering*
Air Gap	Space between the spark plug electrodes, also known as gap, often adjusted to gain maximum performance.	*Mechanical Engineering*
Air head	a drift of small dimensions used for ventilation. (S. Staffs.).	*Mining*
Air horsepower	The measure of useful power required to move a given air rate against a given resistance. The ratio of air horsepower to fan input horsepower is the measure of fan efficiency.	*Facility Engineering*
Air Injection	A system that injects air into the exhaust ports of the engine for combustion of unburned hydrocarbons in the exhaust gases, thus producing "cleaner" exhaust emissions.	*Mechanical Engineering*
Air inlet	Opening in cooling tower through which air enters a tower. On induced draft towers, the air inlet is commonly called the louvered face.	*Facility Engineering*
Air Lock Civil Engineering	An airtight chamber permitting passage to or from a space, as in a caisson, in which the air is kept under pressure.	*Civil Engineering*
Air locks	Surface depressions on a molded piece caused by trapped air between the plastics material and the mold surface.	*Material Process*
Air Motor	The incorporation of air in the form of bubbles as a dispersed phase in the bulk liquid. Air may be entrained in a liquid through mechanical means and/or by release of dissolved air due to a sudden change in environment. The presence of entrained air is usually readily apparent from the appearance of the liquid (i.e., bubbly, opaque, etc.) while dissolved air can only be determined by analysts.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Air pollution abatement equipment	Equipment used to reduce or eliminate airborne pollutants, including particulate matter (dust, smoke, fly, ash, dirt, etc.), sulfur oxides, nitrogen oxides (NOx), carbon monoxide, hydrocarbons, odors, and other pollutants. Examples of air pollution abatement structures and equipment include flue-gas particulate collectors, flue-gas desulfurization units and nitrogen oxide control devices.	*Energy*
Air pressure	Mechanics can adjust a car's handling by raising or lowering air pressure in the tires. Flex in the sidewall of a tire acts like another spring in the suspension. Increasing the air pressure makes the overall spring rate higher, while lowering the pressure will make it softer. This adjustment can be made much more quickly and easily than changing a spring on a shock.	*NASCAR*
Air sampling	the taking of air samples at predetermined points throughout the mine workings for later analysis in the laboratory.	*Mining*
Air Set	Also known as a filter regulator. A device used to reduce plant air supply to the actuator or positioner. Also filters the air to remove water or dirt from the pneumatic system.	*Industrial Engineering*
Air shaft or Air pit	a shaft used wholly, or mainly, to ventilate a mine. Old shafts were often used as an additional upcast or downcast air passage.	*Mining*
Air slit	Air slit—See Stenton	*Mining*
Air split	The division of a current of air into two or more parts.	*Mining*
Air splitting	refers to ventilation and the practice of splitting the intake air current into a number of individual air circuits, each one ventilating a certain district of the underground workings, and each one of the splits having a separate intake and return.	*Mining*
Air Stripping	A mass transfer process in which a substance in solution in water is transferred to solution in a gas, usually air.	*Petroleum Engineering*
Air Suspension	Instead of steel coil or leaf springs, some vehicles have a bellows-like unit at each corner that contains pressurized air. As a rule, air suspensions can produce a softer ride.	*Mechanical Engineering*
Air Suspension	Instead of steel coil or leaf springs, some vehicles have a bellows-like unit at each	*Mechanical Engineering*
Air Traffic Control (ATC)	Standard aviation term.	*Aeronautical Engineering*
Air Vent	Air vents are vital in steam systems, as they remove of air and non-condensable gases. After a shut down the steam system cools, and steam within the system condenses. This will create a vacuum which will cause air to be drawn into the system. When the system is brought back on-line, all of the contained air must be expelled before steam can refill and reheat the equipment. Air vents are designed with temperature sensitive devices and vent valves that open and close thermostatically. Air, being cool relative to steam, will open the valve and exit through the air vent, allowing steam to fill the system. Steam reaching the air vent will heat the device and cause the vent to close accordingly.	*Industrial*
Air	the current of air circulating through and ventilating a mine.	*Mining*
Air, Compressed	Air at any pressure greater than atmospheric pressure.	*Oil Analysis*
Air, Compressed (Pressure)	Air at any pressure greater than atmospheric pressure. AIR, FREE - Air at ambient temperature, pressure, relative humidity and density.	*Mechanical, Process, and Operations*

Term	Definition	*Industry*
Air, Standard	Air at a temperature of 68 degrees F, a pressure of 14.7 pounds per square inch absolute, and a relative humidity of 36% (0.075 pounds per cubic foot) In gas industries the temperature of "STANDARD AIR" is usually given at 60 degrees F.	*Mechanical, Process, and Operations*
Air/Oil Systems	A solenoid that is sealed to prevent leakage of the liquid into the plunger cavity	*Lubrication*
Airbag	device, supplemental to safety belts, that inflates to provide a cushion to absorb impact forces during moderate to severe frontal collisions. This system can help to lessen the chance of contact with the steering wheel, instrument panel and windshield. The air bag is actuated automatically by sensors located in the front of the vehicle. To maximize effectiveness, seat and shoulder belts must always be used in conjunction with this system	*Mechanical Engineering*
Airborne survey	A survey made from an aircraft to obtain photographs, or measure magnetic properties, radioactivity, etc.	*Mining*
Aircraft Cables	Strands, cords and wire ropes made of special-strength wire, designed primarily for use in various aircraft industry applications.	*Wire Rope & Cable*
Airdox	an appliance for breaking down coal by the release of high-pressure air at the back of a shot hole.	*Mining*
Airfoil	An aerodynamic device designed to improve traction by increasing the down-force on the vehicle. The use of airfoils (also called wings) increases the cornering capability and improves stability at speed, but often at the expense of additional aerodynamic drag.	*Mechanical Engineering*
Air-Gap Solenoid	A lubrication system in which small measured quantities of oil are introduced into an air/oil mixing device which is connected to a lube line that terminates at a bearing, or other lubrication point. The air velocity transports the oil along the interior walls of the lube line to the point of application. These systems provide positive air pressure within the bearing housing to prevent the ingress of contaminants, provide cooling air flow to the bearing, and perform the lubrication function with a continuous flow of minute amounts of oil.	*Lubrication*
Air-Hardened Steel	A steel that hardens during cooling in air from a temperature above its transformation range.	*Maintenance and Repair*
Air-insulated switchgear	Air-insulated switchgear—see Switchgear.	*Electrical*
Air-leg support	a compressed air appliance that consisted of a steel cylinder and an air-operated piston that enabled one man to support and advance a heavy drilling machine during drilling operations.	*Mining*
Air-lock	a casing at the top of an upcast shaft to minimize surface air leakage to the ventilation fan.	*Mining*
Air-mass flight path angle	Angle in vertical plane of earth speed vector and groundspeed vector; occasional definition for flight path angle; Compare: earth-referenced flight path angle; Symbols: gamma sub A; Typical Units: rad, deg.	*Aeronautical Engineering*
Airstream helmet	a type of helmet used in modern mining. The helmet has a small fan, which pulls air up the back of the helmet through a filter. The air is redirected down the front onto the face of the wearer.	*Mining*
Air-To-Close	An increase in air pressure to the actuator is required to cause the valve to close. This is another way of saying the valve is fail open or normally open.	*Industrial Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Air-To-Open	An increase in air pressure to the actuator is required to cause the valve to open. This is another way of saying the valve is fail closed or normally closed.	*Industrial Engineering*
Airway	Any passage through which air is carried. Also known as an air course.	*Mining*
AISI American Iron & Steel Institute	An association of steel makers which sets standards for the chemical and physical properties of steel and iron in various shapes and forms—pipe, tubing, sheet, strip, wire.	*Mechanical*
AIT	Automatic Identification Technology (Auto ID) ... bar codes, RFID and contact memory buttons.	*Quality*
AIW	AIW - See: Industrial Workers of America; International Union, Allied (AFL-CIO)	*Industrial Relations*
AK	antiknocks	*Petro-Chemical Abbreviations*
ALA	ALA - See: Lithographers of America; Amalgamated (Ind)	*Industrial Relations*
ALAPCO	Association of Local Air Pollution Control Officials	*Petro-Chemical Abbreviations*
Alaskan System Coordination Council (ASCC)	One of the ten regional reliability councils that make up the North American Electric Reliability Council (NERC).	*Energy*
Alcohol	The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH(3)-(CH(2))n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol).	*Energy*
Alcohols	Alcohol in chemistry means any organic compound in which a hydroxyl group (OH) is bound to a carbon atom, further bound to other hydrogen and or carbon atoms.	*Chemical*
ALDA	Air Line Dispatchers Association (AFL-CIO)	*Industrial Relations*
Aldehyde	An important starting material and intermediate in organic synthesis. Many aldehydes of industrial significance are used as solvents, perfumes, and flavoring agents or as intermediates in the manufacture of plastics, dyes, and pharmaceuticals.	*Chemical*
ALE	Application Level Events (Standard). A software standard connected with RFID which deals with the collection, management and routing of data. (For example, an RFID reader is capable of multiple readings of the same RFID tag in a fraction of a second ... this "dirty data" must be filtered.) See also GEN2.	*Quality*
Alfa-hederin	See helixin.	*Material Process*
alfa-iodoacetophenone (C6H5COCH2I)	alfa-iodoacetophenone (C6H5COCH2I)	*Material Process*
Algae	chiefly aquatic, eucaryotic one-celled or multicellular plants without true stems, roots and leaves, that are typically autotrophic, photosynthetic, and contain chlorophyll. Algae are not typically found in groundwater.	*Chemical*
Algaecide	A toxic material that will kill algae. Some of the more commonly used algaecides are chlorine, copper sulfate and phenolic compounds.	*Chemical Engineering*
Algeria	(1969-present)	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Algorithm	A set of (mathematical) instructions or procedures for carrying out a specific task such as defining the steps taken by an automation system.	*Electrical*
Algorithms	Algorithms are routines to deal with particular situations; for example, a controller formula to correct an element in a continuous process.	*Control Engineering*
ALI	AutoResearch Laboratories Incorporated	*Petro-Chemical Abbreviations*
Aliasing	If the sample rate of a function (fs) is less than two times the highest frequency value of the function, the frequency is ambiguously presented. The frequencies above (fs/2) will be folded back into the lower frequencies producing erroneous data.	*General Engineering*
Alicyclic hydrocarbons	Cyclic (ringed) hydrocarbons in which the rings are made up only of carbon atoms.	*Petroleum Engineering*
Alighting station	a platform where men leave a man-riding belt.	*Mining*
Alignment	Placing the emitter (light source) and receiver (photoreceiver or reflector) so as to direct the maximum amount of light on the photosensor. At long distances, when the light beam has widened, the receiver should be centered in the beam to lessen the chance of the emitter and receiver drifting out of alignment due to vibration or shock.	*Electrical Engineering*
Alignment (Precision)	Refers to bringing or placing machine(s) shaft(s) in line. Misaligned shafts often cause problems with machine components (i.e. bearings). Specialized tools and personnel for precision alignment exist. A number of tools are based on laser technologies.	*Maintenance*
Aliphatic	Any organic compound in which the main structure is a chain of carbon atoms joined to each other.	*Chemical*
Aliphatic hydrocarbons	Hydrocarbons characterized by open-chain structures: ethane, butane, butene, acetylene, etc.	*Petroleum Engineering*
Aliquot	Measured portion of a whole having the same composition. General term referring to part of a solution, sample, mixture, etc.	*Quality*
Alizarin dyes	Any of various mordant dyes derived from anthraquinone, important for fast colors for plastics.	*Material Process*
Alkali	A compound that has the ability to neutralize an acid to form a salt. A substance which is somewhat irritating or corrosive to the skin, eyes and mucous membranes. Turns red litmus paper to blue. Common strong alkalis are sodium and potassium hydroxide.	*Chemical*
Alkali	A chemical substance with pH greater than 7 that reacts with and neutralizes an acid. Also called alkaline or base.	*Chemistry*
Alkaline	Any of various soluble mineral salts found in natural water and arid soils having a pH greater than seven. In water analysis, it represents the carbonates, bicarbonates, hydroxides, and occasionally the borates, silicates, and phosphates in the water.	*Petroleum Engineering*
Alkalinity	An expression of the total basic anions (hydroxyl groups) that is present in a solution. It also represents, particularly in water analysis, the bicarbonate, carbonate, hydroxyl and occasionally the borate, silicate, and phosphate salts which will react with water to produce acid neutralizable anions.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Alkanes	The homologous group of linear saturated aliphatic hydrocarbons having the general formula C(n)H(2n+2). Alkanes can be straight chains, branched chains, or ring structures. Also referred to as paraffins.	*Chemical*
Alkenes	Unsaturated hydrocarbons that contain one or more carbon-carbon double bonds.	*Chemical*
Alkyd Resin	A type of polyester resin used in paints and other surface coatings. The original alkyd resins were made by co-polymerizing phthalic anhydride with glycerol, to give a brittle cross. Linked polymer.	*Paint and Coatings*
Alkyd resins	Synthetic resins prepared from polyhydric alcohol and polybasic acids or anhydrides, glycerol phthalic anhydride resins.	*Material Process*
Alkyds	Developed in 1926, alkyds were originally used in paints, enamels, lacquers, and other coatings used for refrigerators, automobiles, and stoves. Today, this is still the main purpose for alkyds, though alkyd compounds are now also used as a molding material. In this capacity, it is used for encapsulation of capacitors and resistors, in circuit breaker insulation, in housings, in coal forms, in cases, and in switchgear components. This is largely due to the fact that alkyds have excellent dielectric strength as well as heat resistance.	*Material Engineering*
Alkylate	The product of an alkylation reaction. It usually refers to the high-octane product from alkylation units. This alkylate is used in blending high octane gasoline.	*Energy*
Alkylation	A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.	*Energy*
Alkylation	A process using sulfuric or hydrofluoric acid as a catalyst to combine olefins (usually butylene) and isobutane to produce a high-octane product known as alkylate.	*Petroleum Engineering*
Alkynes	the group of unsaturated hydrocarbons with a triple Carbon-Carbon bond having the general formula C(n)H(2n-2).	*Chemical*
All Purpose Cleaner	A powder or liquid detergent suitable for both general house cleaning duties and laundry. These products may not be as effective for specific cleaning jobs as products specially formulated for the task.	*Chemistry*
All Time Order	See All Time Supply.	*Quality*
All Time Supply	An expression coined by R. G. Brown to mean that quantity of stock that would just satisfy all remaining future demand for a product. Brown's use of the expression is in the calculation of the total potential remaining demand for a spare part related to a machine assembly, where the machine assembly itself has been discontinued by the manufacturer. For a few short years in this situation, the demand for spares for the main (discontinued) machine is normal and in accordance with normal service requirements. But as the discontinued machines remaining in the marketplace are withdrawn from service or are scrapped, it is found that the demand for spares for the surviving machines declines at an even rate, year on year. For example, the demand for spares in Year 2 may be 80% of the demand in Year 1, and the demand in Year 3 may be 80% of the demand in Year 2. The rate of decline is a geometric series, which	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	can therefore be summarized: if demand in one year is D and the rate of decline per year is L, the summation to infinity is D x L / (1 - L). For example, if the demand in one year is 100 units and the rate of decline of sales is 0.8 per year, the total remaining demand is 100 x 0.8 / (1 - 0.8), or 400 units. If the company guarantees providing spares for 5 years after withdrawal of the main machine, the demand over the 5 years can be readily calculated (100 x 0.8 + 64 x 0.8 + ... = 269 units). Consequently, in this case, by manufacturing a single lot of 400 units to cover the all time supply, and notwithstanding the cost of holding stock, the company is providing for the likely demand in its guarantee period, plus a "safety stock" of 131 units. An example in which the All Time Supply calculation might have been useful is the discontinuation in 2007 by the retailer PC World of sale of floppy disks due to ever-declining sales, to the detriment of a decreasing number of customers wanting them.	
All welded construction	Pertains to a valve construction in which the body is completely welded and cannot be disassembled and repaired in the field.	*Mechanical*
AllChemE	Alliance for Chemical Sciences and Technologies in Europe. The representative body for chemistry and chemical engineering in Europe.	*Chemical*
All-electric home	A residence in which electricity is used for the main source of energy for space heating, water heating, and cooking. Other fuels may be used for supplementary heating or other purposes.	*Energy*
Alliance	This is a contract between two or more parties which is usually long term in nature to carry out well defined business objectives by combining and maximizing each party's potentials.	*Reliability Engineering*
Alliance (Contract)	An alliance is a long term commitment between two or more entities for the purpose of achieving clearly stated business objectives by maximizing the effectiveness of each participant's skills and resources, leading to an "alliance contract."	*Maintenance*
Alligator Lacing	Lacing attached to the belt with a hammer for the purposes of joining the ends of the belt together to form a continuous loop.	*Manufacturing*
Alligator teeth	Rows of mounting pegs for each stand in the birdbath.	*Petroleum Drilling*
Alligatoring	A term describing the appearance of lacquer films that have cracked into large segments so as to resemble alligator hide. If the cracking is fine and incomplete it is called checking.	*Material Process*
Allocation	See Stock (Allocated).	*Quality*
Allocation Basis	See Cost Driver.	*Quality*
Allocation concealment	See Concealment of allocation	*Quality Engineering*
Allowable total error, Tea	An analytical quality requirement that sets a limit for both the imprecision (random error) and inaccuracy (systematic error) that are tolerable in a single measurement or single test result.	*Quality*
Allowance	An intentional clearance between internal or external thread and the design form of the thread when the thread form is on its maximum metal condition. Not all classes of fit have an allowance. For metric threads the allowance is called the fundamental deviation.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Allowance for Funds Used During Construction (AFUD)	Construction activities may be financed from internally generated funds (primarily earnings retained in the business), or from funds provided by other external sources (short- and long-term debt). The allowance for funds used during construction is intended to recognize the cost of these funds dedicated to construction activities during the construction period. To arrive at the "allowance," a common procedural method makes use of a formula that is based on the assumption that short-term debt is the first source of construction funds. The cost rate for short-term debt is based on current costs. Since a utility plant is subject to depreciation, the allowance for funds used during construction is recovered in the form of depreciation from ratepayers over the service life of the plant to which it applies.	*Energy*
Alloy	Metal composed of more than one element.	*Material Process*
Alloy 11	A compensating alloy used in conjunction with pure copper as the negative leg to form extension wire for platinum-platinum rhodium thermocouples Types R and S.	*General*
Alloy 200/226	The combination of compensating alloys used with tungsten vs. tungsten 26% rhenium thermocouples as extension cable for applications under 200°C.	*General Engineering*
Alloy 203/225	The combination of compensating alloys used with tungsten/3%-rhenium vs. tungsten/25%-rhenium thermocouples as extension cable for applications under 200°C.	*Electrical*
Alloy 405/426	The combination of compensating alloys used with tungsten 5% rhenium vs. tungsten 26% rhenium thermocouples as extension cable for applications under 870°C.	*General Engineering*
Alloy 405/426	The combination of compensating alloys used with tungsten 5% rhenium vs. tungsten 26% rhenium thermocouples as extension cable for applications under 870°C.	*Electronic Process*
Alloy layers	the interior layers of the galvanized coating comprised of iron/zinc intermetallics formed when molten zinc reacts with iron in the steel	*Materials Process*
Alloy steel	A steel consisting primarily of iron with some percentage of one or more other elements such as chromium, nickel, manganese, or vanadium deliberately added to enhance its properties.	*General Mechanical*
Alloy Wheels	A generic term used to describe any non-steel road wheel. The most common alloy wheels are cast aluminum. Technically, an alloy is a mixture of two or more metals. These wheels are known for their light weight and strength.	*Mechanical Engineering*
Alloy Wheels	A generic term used to describe any non-steel road wheel. The most common alloy	*Mechanical Engineering*
Alloy	A compound of two or more metals.	*Mining*
Alluvial	Pertaining to or composed of alluvium, or deposited by a stream or running water.	*Petroleum Engineering*
Alluvial or Bench Deposits	An ancient river-washed rock and gravel bar that may be thousands of feet from the nearest stream, creek, or river. Alluvial or bench deposits contain untapped potential for finding gold because such areas have never been worked before. The hydraulic giants generally worked alluvial deposits.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Alluvium	A general term for clay, silt, sand, gravel, or similar unconsolidated material deposited during comparatively-recent geologic time by a stream or other body of running water as a sorted or semisorted sediment in the bed of the stream or on its floodplain or delta, or as a cone or fan at the base of a mountain slope.	*Petroleum Engineering*
Alluvium	A deposit of loose gravel between the superficial covering of vegetable mold and subjacent rocks.	*Mining*
All-Wheel Drive	Often confused with Four-Wheel Drive (4WD), this drive system features four, full-time active drive wheels to reduce wheel slippage and provide greater driver control over the vehicle. All-Wheel Drive automatically splits engine torque between the front and rear wheels as needed, improving on-road traction in unfavorable road conditions. Unlike Four-Wheel Drive, All-Wheel Drive is an on-road system and is not designed for off-road use. AWD does not require the driver to actively engage the system. It is operational at all times, and requires no switches, lights or visor instructions for system operation.	*Mechanical Engineering*
Almen EP Lubricant Tester	A journal bearing machine used for determining the load-carrying capacity or Extreme Pressure properties (EP) of gear lubricants.	*Lubrication*
ALO	ALO - See: Lace Operatives of America; Amalgamated (Ind)	*Industrial Relations*
ALOMEGA®	An aluminum nickel alloy used in the negative leg of a type K thermocouple (registered trademark of OMEGA ENGINEERING, INC.).	*Electrical*
alongside	Goods deposited on the dock, or a barge, within reach of a ship's loading equipment.	*Agriculture*
ALPA	ALPA - See: Air Line Pilots' Association; International (AFL-CIO)	*Industrial Relations*
Alpha	See Type I error	*Quality Engineering*
Alpha cellulose	The most abundant of the three forms of cellulose, insoluble in a 17–18% caustic solution, unlike the other two forms, prepared in purified form for use as a filler, especially for ureas.	*Material Process*
Alpha meter	An instrument used to measure positively charged particles emitted by radioactive materials.	*Mining*
Alpha ray	A positively charged particle emitted by certain radioactive materials.	*Mining*
Alpha Risk	See Producer's Risk (in sampling).	*Quality*
Alphanumeric	A character set that contains both letters and digits.	*Electrical*
Alpha-Numeric	A load-based tire sizing system containing the load capacity, type of tire construction, aspect ratio, and the rim diameter in inches.	*Mechanical Engineering*
Alpha-Numeric	A load-based tire sizing system containing the load capacity, type of tire construction, aspect ratio, and the rim diameter in inches.	*Mechanical Engineering*
Alphanumeric Code	"Alpha" means allowing letters of the alphabet, and "numeric" means numbers 0 to 9. Thus an alphanumeric code is one potentially containing letters (A, B, C and/or a, b, c ...) and numbers (1, 2, 3 ...). The number on a UK car number plate is alphanumeric (e.g., R754ORX).	*Quality*
Alps	To bore an oil well 3000 feet deep.	*Civil Engineering*
alt	Altitude	*Civil Engineering*
Alteration	Any physical or chemical change in a rock or mineral subsequent to its formation. Milder and more localized than metamorphism.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Alternate Angle	They lie 'inside' the parallel lines and on opposite sides of the transversal.	*Math*
Alternate energy source for primary heater	The fuel that would be used in place of the usual main heating fuel if the building had to switch fuels. (See Fuel-Switching Capability.)	*Energy*
ALTERNATE HOST	One of two taxonomically different hosts required by a heteroecious rust fungus to complete its cycle; also applies to some insects.	*Forestry*
Alternate Lay	Lay of a wire rope in which the strands are alternately regular and Lang Lay.	*Wire Rope & Cable*
Alternating Current	An electric current that continually reverses its direction giving a definite plus and minus wave form at fixed intervals.	*Electrical*
Alternating current (AC)	Alternating current is a form of electricity in which the current alternates in direction (and the voltage alternates in polarity) at a frequency defined by the generator (usually between 50 and 60 times per second, i.e., 50–60 hertz). AC was adopted for power transmission in the early days of electricity supply because it had two major advantages over direct current (DC)—its voltage could be stepped up or down according to need using transformers (see Transformer), and it could be interrupted more easily than DC. Neither advantage is as relevant today as it once was because power electronics can solve both issues for DC. (See also Direct current and Transmission and distribution.)	*Electrical*
Alternating Current Resistance	The resistance offered by any circuit to the flow of alternating current.	*Electrical*
Alternative fuel	Alternative fuels, for transportation applications, include the following:	*Energy*
Alternative fuel vehicle converter	An organization (including companies, government agencies and utilities), or individual that performs conversions involving alternative fuel vehicles. An AFV converter can convert (1) conventionally fueled vehicles to AFVs, (2) AFVs to conventionally fueled vehicles, or (3) AFVs to use another alternative fuel.	*Energy*
Alternative Investment Market	See AIM meaning (2).	*Quality*
Alternative-fuel vehicle (AFV)	A vehicle designed to operate on an alternative fuel (e.g., compressed natural gas, methane blend, electricity). The vehicle could be either a dedicated vehicle designed to operate exclusively on alternative fuel or a nondedicated vehicle designed to operate on alternative fuel and/or a traditional fuel.	*Energy*
Alternative-rate DSM program assistance	A DSM (demand-side management) program assistance that offers special rate structures or discounts on the consumer's monthly electric bill in exchange for participation in DSM programs aimed at cutting peak demands or changing load shape. These rates are intended to reduce consumer bills and shift hours of operation of equipment from on-peak to off-peak periods through the application of time-differentiated rates. For example, utilities often pay consumers several dollars a month (refund on their monthly electric bill) for participation in a load control program. Large commercial and industrial customers sometimes obtain interruptible rates, which provide a discount in return for the consumer's agreement to cut electric loads upon request from the utility (usually during critical periods, such as summer afternoons when the system demand approaches the utility's generating capability).	*Energy*
Alternator	Alternator—see Generator.	*Electrical*

Term	Definition	*Industry*
Alternator	A component of the electrical system, it converts 12-volt DC (Direct Current) from the	*Mechanical Engineering*
Alternator Current	battery into AC (Alternating Current) at the rate of 13.8 to 14.2 volts. The alternator also provided	*Mechanical Engineering*
ALU	Arithmetic Logic Unit. The part of a CPU where binary data is acted upon with mathematical operations.	*General Engineering*
Alumel	An aluminum nickel alloy used in the negative leg of a Type K thermocouple (Trade name of Hoskins Manufacturing Company). Ambient Compensation: The design of an instrument such that changes in ambient temperature do not affect the readings of the instrument.	*Electrical*
Aluminizing (gas)	High temperature (approx. 900oC) pack or gaseous diffusion of aluminum into the surface of a component to enhance high temperature corrosion and oxidation resistance.	*Paint and Coatings*
Aluminizing (hot dip)	An aluminum coating process based on submersion in liquid metal, usually with a strip steel product being continuously fed through the bath. Provide galvanic corrosion protection.	*Paint and Coatings*
Aluminizing (Thermal Spray Method)	Thermal sprayed coatings of aluminum usually on substrates of steel or nickel chromium alloys which are subsequently heat treated to aluminize the surface.	*Paint and Coatings*
Aluminum chloride (AlCl3)	A white to colorless crystals, very deliquescent with an odor of HCL. A catalyst for the reaction of benzene and ethylene to form ethyl benzene, from which in turn styrene, the monomer of polystyrene, is obtained.	*Material Process*
Aluminum Ion Plating	The deposition of aluminum by a vacuum evaporative process. Provides galvanic corrosion resistance. Normally given a passivation treatment.	*Paint and Coatings*
Aluminum oxide (Al2O3)	A hexagonal, colorless crystals, catalyst for various syntheses, notably the preparation of ethylene from ethyl alcohol, and for various polymerization reactions, especially the of vinyl esters. Aluminum oxide occurring naturally is called bauxite.	*Material Process*
Aluminum sulfate (Al2SO4)	A white powder.	*Material Process*
Aluminum	Aluminum is the most abundant metal in the Earth's crust. For industrial steam purposes, aluminum is remarkable for the metal's low density and for its ability to resist corrosion due to the phenomenon of passivation.	*Industrial*
Aluminum	element found in the galvanizing bath (added to molten zinc through a product commonly called "brightener bar") that gives the hot-dip galvanized coating a shiny appearance	*Materials Process*
Aluminum alloy	Metal alloy composed of predominantly aluminum.	*Material Process*
Aluminum Alloy	White particles which indicate wear of aluminum component such as a casing wall.	*Lubrication*
Aluminum-killed steel	steel treated with aluminum as an oxidizing agent in order to reduce the oxygen content to such a level that no reaction occurs between carbon and oxygen during solidification	*Materials Process*
Always-on	A permanently open connection (a term usually used in relation to the Internet).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
AM	Amplitude Modulation.	*Quality*
Amain	Waggons or tubs are said to run amain if they get by accident over an incline bank head without the rope being attached; or through the rope becoming detached or broken, (N. East).	*Mining*
Amalgam	Gold or silver combined with quicksilver.	*Mining*
Amalgamated Society of Engineers	A former craft trade union in engineering.	*Quality*
Amalgamation	A process by which gold and silver are extracted from an ore by dissolving them in mercury.	*Mining*
amb	Ambient	*Civil Engineering*
Amber	A yellowish clear to opaque fossil resin derived from an extinct conifer, formerly used in the manufacture of some fine varnishes, and for decorative purposes.	*Material Process*
ambient	surrounding; the surrounding environment and conditions.	*Chemical*
Ambient Temperature	The temperature of the surrounding medium, usually used to refer to the temperature of the air in which a structure is situated or a device operates.	*Maintenance and Repair*
Ambient Compensation	The design of an instrument such that changes in ambient temperature do not affect the readings of the instrument.	*General Engineering*
Ambient Conditions	The conditions around the transducer (pressure, temperature, etc.).	*Electrical*
Ambient dew point	The ambient temperature in °F when dew begins to be deposited.	*Facility Engineering*
Ambient environment	The conditions (e.g. temperature and humidity) characterizing the air or other medium that surrounds materiel.	*Reliability Engineering*
Ambient Pressure	Pressure of the air surrounding a transducer.	*Electronic Process*
Ambient Temperature	Temperature of the air surrounding a component.	*Electrical Engineering*
Ambient Temperature	Any all encompassing temperature within a given area.	*Electrical*
Ambient Temperature Sensor	Temperature sensor used to measure the temperature of the air that surrounds a component (the ambient temperature).	*Electrical Engineering*
Ambient wet-bulb temperature	The wet-bulb temperature that is measured in accordance with the definition of ambient. Readings are obtained by means of a mechanically aspirated psychrometer.	*Facility Engineering*
American Brahman	The first beef breed developed in the United States . The American Brahman plays an important role in crossbreeding programs throughout much of the world. The breed was developed from Bos indicus (cattle of India) types imported into the United States between 1854-1926. The breed is noted for its environmental adaptivity, longevity, mothering ability and efficient beef production. The American Brahman Breeders Association was organized in 1924. The breed has a hump on its shoulders and is commonly ridden in rodeo contests.	*Agriculture*
American Indian Coal Lease	A lease granted to a mining company to produce coal from land held in trust by the United States for Native Americans, Native American tribes, and Alaska Natives in exchange for royalties and other revenues.	*Energy*
American Landrace	American Yorkshire, Berkshire, Chester White, Duroc, Hampshire, Hereford, Poland China	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
American Petroleum Institute (API)	The American Petroleum Institute is the primary trade association representing the oil and natural gas industry in the United States.	*Petroleum Drilling*
American Quarter Horse	Adherents claim the American Quarter Horse was the first breed of horse native to the United States . It evolved by mixing bloodlines of horses brought to the New World . Its genetics include Arab, Turk and Barb breeds. Selected stallions and mares were crossed with horses brought to Colonial America from England and Ireland in the early 1600s. Colonists prized the breed for its short-distance racing abilities. It is the horse most associated with Western ranching and rodeo.	*Agriculture*
American Saddlebred	The American Saddle Horse was developed in Colonial America and gained fame as a breed during the Civil War, 1861-1865. General Lee's Traveller, Grant's Cincinnati , and Sherman 's Lexington were crosses between American Saddlebred and Thoroughbred. Stonewall Jackson's Little Sorrell was a cross between American Saddlebred and pacing stock. Most cavalrymen in the Confederate commands of Generals John Hunt Morgan and Nathan Bedford Forrest rode American Saddlebreds, which performed legendary feats of endurance.	*Agriculture*
American Wire Gage (AWG)	The standard system used for designating wire diameter. Also referred to as the Brown and Sharpe (B&S) wire gage.	*Electrical*
American Wire Gauge	A measure of wire thickness (which also dictates cross-sectional area, and for a given material, ampacity). Example: 24 AWG wire has a nominal diameter of 0.0201in or 0.511mm. Also called the Brown and Sharpe Wire Gauge. Note that steel wire is measured by a different gauge. AWG only applies to wire used to conduct electricity.	*Electrical Engineering*
AMH	Automated Materials Handling.	*Quality*
AMI	Advanced Metering Infrastructure is a term denoting electricity meters that measure and record usage data at a minimum, in hourly intervals, and provide usage data to both consumers and energy companies at least once daily.	*Energy*
Amides Compounds	derived from carboxylic acids by replacing the hydroxyls of the -COOH group by the amine group –NH2 .	*Material Process*
Amines	Amines are organic compounds containing nitrogen. Here one or more hydrogen atoms are replaced by alkyl groups or other groups where the nitrogen is bonded to a carbon atom in the group. Amine are used in rubber, dyes, pharmaceuticals, and synthetic resins and fibers and in a host of other applications.	*Chemical*
Amines	Derivatives of ammonia by substitution of one or more hydrogens by an alkyl or aryl group. The primary amines are important in the production of amino aldehyde plastics.	*Material Process*
Amino	Indicating presence of NH2.	*Material Process*
amino acid	Building blocks of proteins. Plants have 22 types of amino acids.	*Agriculture*
Aminoplasts	General term for synthetic resins from amino or amido compounds.	*Material Process*
Ammeter	An instrument used to measure current.	*Electrical*
Ammonia	A water-soluble, colorless, pungent gas with the formula NH3.	*Chemical Engineering*
Ammonia (NH3)	A colorless gas, a source material and a solvent, as the hydroxide, used with carbon dioxide in the production of urea, and with formaldehyde in the production of hexamethylenetetramine.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ammonium	Positive ion with the formula NH4+ that forms when ammonia dissolves in water. It adds non-natural alkalinity to the water.	*Chemical Engineering*
Ammonium cyanate (NH4CNO)	A white crystal, a compound whose solution on standing changes slowly to urea.	*Material Process*
Ammonium oleate (NH4C17H33 COONH4)	A yellowish soapy mass or yellow powder, an emulsifying agent used to allow polymerization of monomers while held in aqueous emulsion.	*Material Process*
Ammonium sulfide (NH 4)S	A colorless, yellow hygroscopic crystals. Substance which reacts with calcium cyanamide to form thiourea.	*Material Process*
Amorphous	Devoid of crystalline structure.	*Material Process*
Amorphous metal	Metal lacking long range crystalline structure.	*Material Process*
Amorphous semiconductor	Semiconductor lacking long range crystalline structure.	*Material Process*
Amorphous silicon	An alloy of silica and hydrogen, with a disordered, noncrystalline internal atomic arrangement, that can be deposited in thin-film layers (a few micrometers in thickness) by a number of deposition methods to produce thin-film photovoltaic cells on glass, metal, or plastic substrates.	*Energy*
Amorphous solid	A noncrystalline solid with no well-defined ordered structure.	*Chemical*
Amorphous	A term applied to rocks or minerals that possess no definite crystal structure or form, such as amorphous carbon.	*Mining*
Amortization	Synonymous with depreciation.	*Quality*
Amortization	The depreciation, depletion, or charge-off to expense of intangible and tangible assets over a period of time. In the extractive industries, the term is most frequently applied to mean either (1) the periodic charge-off to expense of the costs associated with non-producing mineral properties incurred prior to the time when they are developed and entered into production or (2) the systematic charge-off to expense of those costs of productive mineral properties (including tangible and intangible costs of prospecting, acquisition, exploration, and development) that had been initially capitalized (or deferred) prior to the time the properties entered into production, and thereafter are charged off as minerals are produced.	*Energy*
amp	Ampere	*Oil Analysis*
Ampacity	The amount of current a conductor can carry without exceeding its specified temperature, in amperes.	*Electrical Engineering*
Ampacity	(See current: carrying capacity).	*Electrical*
Ampere	The standard unit of electrical current.	*Electrical*
Ampere (amp)	A unit used to define the rate of flow of electricity (current) in a circuit; units are one coulomb (6.28 x 1018 electrons) per second.	*General Engineering*
Ampere (amp)	A unit used to define the rate of flow of electricity (current) in a circuit; units are one coulomb (6.28 x 1018 electronics) per second.	*Electronic Process*
Amphibolite	A gneiss or schist largely made up of amphibole and plagioclase minerals.	*Mining*
Amphoteric	having the characteristics of an acid and a base and capable of reacting chemically either as an acid or a base	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Amplifier	A device which draws power from a source other than the input signal and which produces as an output an enlarged reproduction of the essential features of its input.	*Electrical*
Amplifier	A device for amplifying the error signal sufficiently to cause actuation of the stroke control. Several types of servo amplifiers are used at the present time: electronic (DC, AC, phase sensitive, and magnetic) and mechanical.	*Mechanical, Process, and Operations*
Amplifier Class	Amplifier circuit types are divided into "classes" which describe whether the amplifier operates in a linear or switching mode, and any techniques used to restore linearity of output.	*Electrical Engineering*
Amplifier Electronic	device for increasing current.	*Material Process*
Amplitude	A measurement of the distance from the highest to the lowest excursion of motion, as in the case of mechanical body in oscillation or the peak-to-peak swing of an electrical waveform.	*Electrical*
Amplitude Modulation	A modulation method in which the carrier amplitude changes with the input signal amplitude.	*Electrical Engineering*
Amplitude of sound	The loudness of a sound.	*Mechanical, Process, and Operations*
Amplitude Span	The Y-axis range of a graphic display of data in either the time or frequency domain. Usually a log display (dB) but can also be linear.	*General*
AMPM	AMPM stands for AMSAA maturity prediction model. This is an enhanced reliability growth model that allows the user to predict failure rates in future stages of development. This model allows the user to assess the effectiveness of proposed and implemented fixes in order to determine the future failure rate.	*Reliability Engineering*
AMR	Automated Meter Reading is a term denoting electricity meters that collect data for billing purposes only and transmit this data one way, usually from the customer to the distribution utility.	*Energy*
AMS	Agricultural Marketing Service, an agency of the USDA.	*Agriculture*
AMSAA model	AMSAA stands for Army Material Systems Analysis Activity. This is a reliability growth model that uses a relationship between cumulative test time and cumulative failures to develop a reliability growth model.	*Reliability Engineering*
Amyl benzoate	Plasticizer, ester.	*Material Process*
Amyl borate	Solvent, ester.	*Material Process*
Amyl ether	Solvent, ether.	*Material Process*
Amyl laurate	Solvent ester.	*Material Process*
Amyl oleate	Solvent, ester.	*Material Process*
Amyl phenyl m-amyl ether	Solvent ether.	*Material Process*
an electrical signal that is proportional to the acceleration value of the motion. A	an electrical signal that is proportional to the acceleration value of the motion. A	*Electronic Process*
Anaerobe (facultative)	An organism that can grow under either aerobic or anaerobic conditions.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Anaerobe (strict)	An organism that grows only in the absence of free oxygen (e.g., sulfate reducing bacteria).	*Chemical Engineering*
Anaerobic	anaerobic	*Chemical*
Anaerobic	Not requiring oxygen.	*Agriculture*
Anaerobic Adhesive	An adhesive which hardens in the absence of air, such adhesives are often used as a thread locking medium.	*Maintenance*
Anaerobic decomposition	Decomposition in the absence of oxygen, as in an anaerobic lagoon or digester, which produces CO2 and CH4.	*Energy*
Anaerobic lagoon	A liquid-based organic waste management installation characterized by waste residing in water at a depth of at least 6 feet for periods of 30 to 200 days.	*Energy*
Analog	in chemistry, a structural derivative of a parent compound.	*Chemical*
Analog Computer	A computing device comprised of functional modules such as amplifiers, multipliers, dividers, etc., interconnected in such a way as to facilitate the solution of a set of mathematical expressions or to implement some control strategy. The input to and the output from an analog computer are continuous signals as contrasted with a digital computer which updates an output every scan.	*Electrical Engineering*
Analog Output	A voltage or current signal that is a continuous function of the measured parameter.	*Electrical*
Analog Position Sensor	A type of position sensor whose voltage output varies over a range of values.	*Electrical Engineering*
Analog Position Sensor	A type of position sensor whose voltage output varies over a range of values.	*Mechanical*
Analog Switch	An analog switch (sometimes just called a "switch") is a switching device capable of switching or routing analog signals (meaning signals that can have any level within a specified legal range), based on the level of a digital control signal. Commonly implemented using a "transmission gate," an analog switch performs a function similar to that of a relay. Example:	*Electrical Engineering*
Analog switch	An analog switch can turn an audio signal on or off based on a MUTE signal; or analog switches could send one of two signals to a headphone amplifier. Most commonly implemented using CMOS technology integrated circuits. Maxim makes hundreds of examples. See the Analog Switch and Multiplexer Product Line page.	*Electrical Engineering*
Analog Temperature Sensor	Temperature sensor with a continuous analog voltage or current output that is related, usually linearly, to the measured temperature.	*Electrical Engineering*
Analog-to-Digital Converter (A/D or ADC)	A device or circuit that outputs a binary number corresponding to an analog signal level at the input.	*General Engineering*
Analogue	Analogue devices are those which communicate via a small electric current. For example, food industry flow meters send a current of between 4 mA to 20 mA. The lowest value would represent no flow at all; the largest would indicate maximum flow.	*Control Engineering*
Analogy	A comparison between the similarities of two things	*Management Discussion*
Analysis	(1) A step-by-step process of determining the solution to a problem. (2) The collection, viewing, and examination of data and information. (3) The process of determining the composition of a substance or material using chemical or physical methods.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Analysis of Features	In the design of a new product, "analysis of features" is a formal method, employing a matrix, for analyzing competitive products. See also parametric analysis.	*Quality*
Analysis Of Variance (ANOVA)	This is an acronym for analysis of variance which is a statistical method that is used to identify the source of potential problems in the production process. It is used to identify if variation in measured output values is due to variability between various manufacturing processes or within them.	*Reliability Engineering*
Analysis of variance, ANOVA	A statistical technique by which the observed variance can be divided into components, such as within-run and between-run variance which make up the total variance observed for an analytical method. Commonly used for analysis of the data from a replication study to make estimates of within-run and total imprecision when the data has been carefully collected over a series of runs and days.	*Quality*
Analyte	A substance or chemical constituent being analyzed.	*Petroleum Drilling*
Analytic process, system	Refers to the part of the total testing process that involves measurement and analysis, as opposed to the pre-analytic part that deals with all the steps prior to performing the test and the post-analytic part that deals with all the steps after the test result is once available.	*Quality*
Analytical error	Difference between the estimated value of a quantity and its true value. This difference (positive or negative) may be expressed either in the units in which the quantity is measured, or as a percentage of the true value. Used here to mean the difference between a patient's test result produced by the analytical process and the true or correct value for that sample.	*Quality*
Analytical Ferrography	The magnetic precipitation and subsequent analysis of wear debris from a fluid sample This approach involves passing a volume of fluid over a chemically treated microscope slide which is supported over a magnetic field. Permanent magnets are arranged in such a way as to create a varying field strength over the length of the substrate. This varying strength causes wear debris to precipitate in a distribution with respect to size and mass over the Ferrogram. Once rinsed and fixed to the substrate, this debris deposit serves as an excellent media for optical analysis of the composite wear particulates.	*Lubrication*
Analytical measurement range, AMR	Defined by CAP (College of American Pathologists) as the range of numeric results a method can produce without any special specimen pre-treatment, such as dilution, that is not part of the usual analytic process. Same as reportable range in CLIA terminology.	*Quality*
Analytical quality assurance (AQA)	Used with charts of operating specifications (OPSpecs charts) to indicate the level of assurance for detecting critical sized errors. For example, 90% AQA(SE) means there will be at least a 90% chance of detecting the critical systematic error when operating within the allowed limits for imprecision and inaccuracy for the given control rules and total number of control measurements (N).	*Quality*
Analytical quality requirement	Used here to refer to a quality requirement in the form of an allowable total error (TEa). Often defined on the basis of proficiency testing criteria for acceptable performance, such as the CLIA requirements for regulated analytes.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Analytical run	Generally defined by CLIA as an 8 hour to 24 hour interval during which control materials must be analyzed. According to CLSI C24, a run is "an interval (i.e., a period of time or series of measurements) within which the accuracy and precision of the measuring system is expected to be stable. In laboratory operations, control samples are analyzed during each analytical run to evaluate method performance, therefore the analytical run defines the interval (period of time or number of specimens) between evaluations of control results. Between quality control evaluations, events may occur causing the measurement process to be susceptible to variations that are important to detect."	*Quality*
Analytical sensitivity	The ability of an analytical method to detect small quantities of the measured component. Numerically characterized by determination of detection limit.	*Quality*
Analytical specificity	The ability of an analytical method to measure only the sought-for analyte or measurand. Numerically characterized by determination of interferences and non-specific responses to other analytes or materials.	*Quality*
Ancestor	A material anywhere within a product's bill of material at a lower level. Thus if A and B are used to make material C, A and B are C's ancestors. If D is used to make A, D is also C's ancestor.	*Quality*
Anchor	Any device for securing a suspension or cantilever bridge at either end.	*Civil Engineering*
Anchor	Any device for securing a suspension or cantilever bridge at either end.	*Civil Engineering*
Anchor bolt	A threaded bolt embedded in a concrete basin or fitted to supported members, to which an anchor casting is attached.	*Facility Engineering*
Anchor casting	A device for attaching the tower structure to the foundation; it does not include the anchor bolt. Also known as Column Anchor.	*Facility Engineering*
Anchor pin	A pin welded onto the body of ball valves. This pin aligns the adapter plate and restrains the plate and gear operator from moving while the valve is being operated.	*Mechanical*
Anchor prop	a prop, set at an angle between the roof and floor, on the coalface to act as an anchor for the main and tail ropes, when maneuvering short and longwall cutting machines.	*Mining*
Anchor span	On a suspension or cantilever bridge a span from an anchorage to the nearest pier or tower.	*Civil Engineering*
Anchor station	a device, usually hydraulic, which prevents uncontrolled movement of the delivery or return end units of a conveyor.	*Mining*
Anchorage	In a suspension bridge a massive masonry or concrete construction securing a cable at each end.	*Civil Engineering*
Ancient Riverbed Claims	Gold found in beds of rivers now extinct.	*Mining*
Ancillary services	Services that ensure reliability and support the transmission of electricity from generation sites to customer loads. Such services may include load regulation, spinning reserve, non-spinning reserve, replacement reserve, and voltage support.	*Energy*
Ancillary Services	Services necessary for the transmission of energy from resources to loads.	*Energy*
AND	Combining two signals so that the output is on if both signals are present. This can be accomplished by an AND logic gate (two inputs, one output which is high if both inputs are).	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
AND	Combining two signals so that the output is on if both signals are present. This can be accomplished by an AND logic gate (two inputs, one output which is high if both inputs are).	*Electrical Engineering*
AND 10050	A United States Air Force-Navy Aeronautical Design Standard in which a straight thread port is specified to attach tube fittings to various components. The fitting employs an "O" ring seal compressed in a special cavity in the port.	*Mechanical, Process, and Operations*
AND Logic	An output is produced only when all inputs are present.	*Electrical Engineering*
Anderton shearer-loader	an adaptation of the Anderton longwall cutter in which the jib of the cutter was replaced by a shearer drum which was capable of cutting a web of variable depth. The machine, introduced in 1952, rode on top of an armored conveyor and needed a prop-free-front for working. The first shearers cut coal in only one direction. The machine was then flitted back along the face, loading any loose coals by using a plough deflector. Later models were capable of cutting coal in both directions and became bi-directional, and were known as "bi-di's."	*Mining*
Andon	A visual management tool and component of the lean philosophy. These are lights placed on or adjacent to machines or production lines to indicate operation status.	*Reliability Engineering*
Andon Board	In Just-in-Time and lean manufacture, a large electronic board suspended from the ceiling in the workplace bearing constantly updated figures relating to achieved and target production. The andon is also used to communicate warnings on quality and production flow through a simple colored light system	*Quality*
Andra	A heading driven in a diagonal direction with respect to the cleat, neither "end" nor "bord" (Yorks).	*Mining*
Anecdote	See Case study	*Quality Engineering*
Anemometer	An instrument for measuring and/or indicating the velocity of air flow.	*Electronic Process*
ANFAVEA	Brazil Auto Manufacturer's Association	*Petro-Chemical Abbreviations*
ANFO	Acronym for ammonium nitrate and fuel oil, a mixture used as a blasting agent in many mines.	*Mining*
ANG	ANG - See: Newspaper Guild; American (AFL-CIO)	*Industrial Relations*
Angle	The amount of turning between two rays (half-lines) that start from the same point.	*Math*
Angle Controlled Tightening	A tightening procedure in which a fastener is first tightened by a pre-selected torque (called the snug torque) so that the clamped surfaces are pulled together, and then is further tightened by giving the nut an additional measured rotation. Frequently bolts are tightened beyond their yield point by this method in order to ensure that a precise preload is achieved. Bolts of short length can be elongated too much by this method and the bolt material must be sufficiently ductile to cater for the plastic deformation involved. Because of the bolt being tightened beyond yield, its re-use is limited.	*Maintenance*
Angle of dip	The angle at which strata or mineral deposits are inclined to the horizontal plane.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Angle of draw	In coal mine subsidence, this angle is assumed to bisect the angle between the vertical and the angle of repose of the material and is 20° for flat seams. For dipping seams, the angle of break increases, being 35.8° from the vertical for a 40° dip. The main break occurs over the seam at an angle from the vertical equal to half the dip.	*Mining*
Angle of repose	The maximum angle from horizontal at which a given material will rest on a given surface without sliding or rolling.	*Mining*
Angle Valve	A globe style valve where the inlet and outlet ports are at 90°.	*Industrial Engineering*
Angle valve	A variation of the globe valve, in which the end connections are at right angles to each other, rather than being inline.	*Mechanical*
Angstrom	Ten to the minus tenth (10–10) meters or one millimicron, a unit used to define the wavelength of light. Designated by the symbol Å.	*Electrical*
angular deviation	the components of Technical Hole Deviation that address differences between actual and planned angular well bore properties; includes msID, RCID, msAD, and RCAD.	*Petroleum Drilling*
Angular Frequency	The motion of a body or a point moving circularly, referred to as the circular frequency O which is the frequency in cycles per second (cps) multiplied by the term (2) and expressed in radians per second (2pf).	*General Engineering*
Angular rate sensor	A sensor that measures rotational velocity (degrees or radians per second) around its sensitive axis.	*Reliability Engineering*
Angus	An English breed of beef cattle introduced to the United States from its native Scotland in 1873. Sometimes called Aberdeen Angus. In the United States breed registries are separate for red and black Angus through the Red Angus Association of America and the American Angus Association. The breed is prized for its ease of calving and mothering ability, and for its lean meat. The American Angus Association records more cattle each year than any other beef breed association, making it the largest beef breed registry association in the world.	*Agriculture*
Anhydrous	Free from water, especially free from water of crystallization.	*Material Process*
Anhydride	Any chemical compound obtained, either in practice or in principle, by the elimination of water from another compound.	*Chemical*
Anhydrous	A lubricating grease without water (as determined by ASTM D 128).	*Lubrication*
Anhydrous	Devoid of water.	*Lubrication*
anhydrous ammonia	A common form of nitrogen fertilizer used by wheat growers and other farmers.	*Agriculture*
Aniline (C6H5NH2)	Colorless oily aromatic liquid. A raw material for the production of many dyestuffs and other organic compounds and synthetic resins such as aniline–formaldehyde resins. It is also a solvent and paint or other coating remover.	*Material Process*
Aniline Point	The lowest temperature at which equal volumes of aniline and hydrocarbon fuel or lubricant base stock are completely miscible. A measure of the aromatic content of a hydrocarbon blend, used to predict the solvency of a base stock or the cetane number of a distillate fuel.	*Lubrication*
Aniline Point	The minimum temperature for complete miscibility of equal volumes of aniline and the sample under test ASTM Method D611. A product of high aniline point will be low in aromatics and naphthenes and, therefore, high in paraffins.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	Aniline point is often specified for spray oils, cleaning solvents, and thinners, where effectiveness depends upon aromatic content. In conjunction with API gravity, the aniline point may be used to calculate the net heat of combustion for aviation fuels.	
Aniline resins	Amino aldehyde resins, derived from aniline and formaldehyde.	*Material Process*
Animal & Plant Health Inspection Service, (APHIS)	An agency of the USDA.	*Agriculture*
Animal Groups	Apes: a shrewdness Badgers: a cete Bats: a colony, cloud or camp Bears: a sloth or sleuth Bees: a swarm Buffalo: a gang or obstinacy Camels: a caravan Cats: a clowder or glaring; Kittens: a litter or kindle; Wild cats: a destruction Cobras: a quiver Crocodiles: a bask Crows: a murder Dogs: a pack; Puppies: a litter Donkeys: a drove Eagles: a convocation Elephants: a parade Elk: a gang or a herd Falcons: a cast Ferrets: a business Fish: a school Flamingos: a stand Foxes: a skulk or leash Frogs: an army Geese: a gaggle Giraffes: a tower Gorillas: a band Hippopotami: a bloat Hyenas: a cackle Jaguars: a shadow Jellyfish: a smack Kangaroos: a troop or mob Lemurs: a conspiracy Leopards: a leap Lions: a pride Moles: a labor Monkeys: a barrel or troop Mules: a pack Otters: a family Oxen: a team or yoke Owls: a parliament	*Breakroom*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	Parrots: a pandemonium Pigs: a drift or drove (younger pigs), or a sounder or team (older pigs) Porcupines: a prickle Rabbits: a herd Rats: a colony Ravens: an unkindness Rhinoceroses: a crash Shark: a shiver Skunk: a stench Snakes: a nest Squirrels: a dray or scurry Stingrays: a fever Swans: a bevy or game (if in flight: a wedge) Tigers: an ambush or streak Toads: a knot Turkeys: a gang or rafter Turtles: a bale or nest Weasels: a colony, gang or pack Whales: a pod, school, or gam Wolves: a pack Zebras: a zeal	
Animal resin	A resin of animal origin, shellac, a product of the lac insect.	*Material Process*
Anion	A negatively charged ion.	*Chemical Engineering*
Anion	A negatively charged ion (Cl–, NO3–, S2–, etc.)	*Electronic Process*
Anion Exchange	Ion exchange process in which anions in solution are exchanged for other anions from an ion exchanger.	*Petroleum Engineering*
ANIQ	Mexican equivalent to the CMA	*Petro-Chemical Abbreviations*
Anisotropic	the condition in which hydraulic properties of an aquifer are not equal when measured in all directions.	*Chemical*
Anisotropic	Having properties that very with direction.	*Material Process*
Anisotropy	Variation of a transport property in different directions in a material. Is often obtained from homogenization of regular structures. Example: Monolithic structures in tubular reactors.	*Chemical*
Anisotropy	Variation of a transport property in different directions in a material. Is often obtained from homogenization of regular structures. Example—Monolithic structures in tubular reactors.	*Chemical Engineering*
Ankerite	An iron magnesium carbonate mineral found in some coal cleats.	*Mining*
ANN	An abbreviation sometimes used for artificial neural networks.	*Control Engineering*
Anneal	To subject to heat with subsequent cooling. When annealing copper; the act of softening the metal by means of heat to render it less brittle.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Annealing	Heating a metal to a temperature above a critical temperature and holding above that range for a proper period of time, followed by cooling at a suitable rate to below that range for such purposes as reducing hardness, improving machinability, facilitating cold working, producing a desired microstructure, or obtaining desired mechanical, physical, or other properties.3 (A softening treatment is often carried out just below the critical range which is referred to as a subcritical annealing.)	*Maintenance and Repair*
Annual	A plant that lives or grows for only one year or one growing season.	*Forestry*
Annual Effects	Effects in energy use and peak load resulting from participation in DSM programs in effect during a given period of time.	*Energy*
Annual efficiency	Key figure to assess the energy efficiency of a heating boiler. The annual efficiency shows the percentage relation between the utilizable thermal energy and the energy consumed for a full year. see Standard efficiency	*Thermal Management*
Annual Equivalent	An equal cash flow amount that occurs every year.	*Energy*
Annual Fuel Utilization Efficiency	A measure of heating efficiency, in consistent units, determined by applying the federal test method for furnaces. This value is intended to represent the ratio of heat transferred to the conditioned space by the fuel energy supplies over one year.	*Energy*
Annual Inventory Turns	A measure of asset management that is calculated by dividing the value of annual plant shipments at plant cost (for the most recent full year) by the average total inventory value at plant cost. Total inventory includes raw materials, work in process, and finished goods. Plant cost includes material, labor, and plant overhead.	*Maintenance*
Annual Maintenance Cost	A metric determined by taking the amount of money spent annually to maintain assets divided by the replacement asset value (RAV) of the assets being maintained. It is expressed as a percentage.	*Reliability Engineering*
Annual Maximum Demand	The greatest of all demands of the electrical load which occurred during a prescribed interval in a calendar year.	*Energy*
Annual operating factor	Annual operating factor: divided by the product of design firing rate and hours of operation per year.	*Energy*
Annual report	The formal financial statements and report on operations issued by a corporation to its shareholders after its fiscal year-end.	*Mining*
Annual requirement	The reporting company's best estimate of the annual requirement for natural gas to make direct sales or sales for resale under certificate authorizations and for company use and unaccounted-for gas during the year next following the current report year.	*Energy*
Annual seed mixture	A mixture of soybean, millet, cow pea, sorghum, lespedeza, buckwheat, and other seeds from which single-season plants are grown to serve primarily as food or protective cover for wildlife.	*Forestry*
Annual Stock Check	Stock which is manufactured by a company is regarded from the financial viewpoint as an investment waiting to be sold. Consequently, in order to strike the balance sheet at the end of its financial year, the company must report its stock, valued at cost price, as part of its current assets (*). If the stock records are not reliable and there is no program of cycle counting in place, a major counting	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	exercise must be embarked on to do so, usually over a short period such as a long weekend. The annual stock take is a significant cause of errors in stock records since the counting performed is often not accurately done and discrepancies between the counts recorded and the stock records are not verified or investigated as they should be, due to pressure of time. Other causes of error in annual stock counting are: (1) failure to prepare the stores or warehouse for the counting exercise (e.g., by tidying the environment and making sure everything is correctly labeled); (2) employing inexperienced staff to perform the counting; (3) rushing the counting exercise through the imposition of a completion deadline. If a company has reasonably good records accuracy and a cycle counting program in place, it should definitely not allow annual stock check figures to overwrite the records. For practical notes relating to the annual stock count, visit the free on-line course Stock Records Accuracy, at this site (Section 5.1 and possibly 5.2). (* Current assets are assets which are cash or will soon become cash, as opposed to fixed assets such as land and buildings.)	
Annual total inventory turns	A measure that is calculated by dividing the value of annual plant shipments at plant cost (for the most recent full year) by the total average daily inventory value at plant cost. Total average daily inventory includes raw materials, work in process, and finished goods. Plant cost includes material, labor, and plant overhead.	*Quality*
Annual Usage Value (AUV)	The quantity of a material used per annum, multiplied by its unit cost. The figure is widely used in ABC Classification, since it reflects both a material's commercial and manufacturing importance. See also DGR.	*Quality*
Annuity	A series of equal cash flows over a number of years.	*Energy*
Annular	Refers to the space between the inside diameter of a cased or drilled hole and a secondary string of casing suspended inside this space.	*Petroleum Engineering*
Annular area	A ring shaped area - often refers to the net effective area of the rod side of a cylinder piston, i.e., the piston area minus the cross sectional area of the rod.	*Mechanical, Process, and Operations*
Annular Down-hole Safety Valves (ADHSV)	These provide a subsurface barrier between a platform and the high pressure gas lift inventory in the annular space in a gas lifted well. Because these valves are typically positioned approximately 1000ft below the platform, the inventory of gas above the ADHSV is still significant and, for this reason, the benefits from the valves are minimal in some cases.	*Reliability Engineering*
Annular Space	The open space between the outside of the well casing and the side of a well (the wall of the borehole or outer casing).	*Petroleum Engineering*
Annulus	The space around a pipe in a well bore, also referred to as the annular space.	*Petroleum Drilling*
Annulus	The area between the casing and the tubing or between the wellbore and the casing, etc. Refers to a space between tubulars and other tubulars or the earth that must be calculated when figuring drilling fluid volume, cement jobs, etc.	*Petroleum Drilling*
Annulus	The space between: (1) The casing and the wall of the borehole. (2) Two strings of casing. (3) Tubing and casing.	*Petroleum Drilling*
Anode	A positively charged electrode that, during electrolysis, attracts anions.	*Chemical Engineering*
Anode	The switch contact connected to the positive terminal of the power supply.	*Electrical Engineering*
Anodic	exhibiting the properties of an anode; zinc is anodic to steel	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Anodic area	Area on a metal surface where electrons are given up and metal dissolves (corrosion).	*Chemical Engineering*
Anodic Coating	A coating that becomes the anode in an electrochemical cell with the substrate (cathode). The only metals in common use for thermal spraying which are anodic to iron and steel are zinc and aluminum.	*Paint and Coatings*
Anodic reaction	The oxidation reaction occurring at the anode in an electrochemical cell.	*Material Process*
Anodizing	The production of an oxide layer on aluminum alloys. The process is electrolytic, a typical electrolyte being sulfuric acid. Treatment at room temperature produces thin, decorative layers with some corrosion protection. Treatment at 0oC produces hard, thicker layers (up to 100μ) with wear resistance. They can be post sealed to give improved corrosion resistance.	*Paint and Coatings*
Anodized aluminum	Aluminum alloy with a protective layer Al2O3 (aluminum oxide).	*Material Process*
Anomaly	Something irregular or inconsistent.	*Maintenance*
ANOVA	ANOVA stands for analysis of variance, a method by which the source of variability is identified. This method is widely used in industry to help identify the source of potential problems in the production process, and identify whether variation in measured output values is due to variability between various manufacturing processes, or within them. By varying the factors in a predetermined pattern and analyzing the output, one can use statistical techniques to make an accurate assessment as to the cause of variation in a manufacturing process.	*Reliability Engineering*
ANOVA (Single Factor, analysis of variances)	The conduct of a process or procedure may give rise to certain outputs which are recordable as quantitative data. For example, a job shop produces units of output in the course of a day, and the number of units produced may be recorded, say, as 100 pieces. However, the process can proceed under alternative factor levels (qv), or alternative conditions. The recorded output from the process may then be different depending on the particular, unique factor or condition prevailing. For example, the number of units of output produced by the job shop in the day may be different depending whether the day is Monday, or Tuesday, or Wednesday, or Thursday or Friday. Single factor ANOVA is used to determine whether the differences in output emanating from the alternative levels of a particular factor are statistically significant. For example, it may be used to determine whether the job shop's output is dependent on the day of the week. To begin, the analyst must first calculate the variance of the observed data at each factor level (e.g., the variance in the output figures as observed for each of the days of the week.) Next, two statistical measures are calculated. The first, SST, is known as the Between Treatments(*) Variation, or "sum of the squares for treatment." The SST is a measure of the closeness, or difference between, the variances calculated. The second statistical measure is known as the Within Treatment Variation, or "sum of the squares for error" (SSE). This is a measure of the variation within each set of observed data. Finally, both the SST and SSE are adjusted for statistical averaging purposes to take account of the number of degrees of freedom (qv) permitted, to give the MST (mean square for treatment) and the MSE (mean square error). The last step is to calculate MST/MSE, known as the test statistic F. If F is sufficiently large (greater than 1, but probably much greater), then there is statistical significance as a result of the alternative factor levels (e.g., that the job shop output on Monday is significantly different	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	from the output on Tuesday, from ... Friday). ANOVA is widely used in industry, including at the Analyse phase of Six Sigma. Naturally, the analyst so using it need not be concerned with the statistics ... all he need do is enter the numbers on, say, a MINITAB screen! Note that multifactor ANOVA allows significance to be explored when several factors themselves are present. For example, the output observed between the days of the week, but also qualified by which season of the four seasons of the year is involved - Mondays in Summer, v. Tuesdays in Winter .... (* The term "treatment" used in ANOVA and DOE harks back to the experiments of Sir Ronald Fisher in 1915, using ANOVA and DOE to investigate the yields from potato crops with different types of types of potato and different types of manure.) See also The Null Hypothesis.	
Anoxic	Total deprivation of oxygen.	*Chemical*
ANPRM	Advance notice of proposed rule making (US-EPA)	*Petro-Chemical Abbreviations*
ANS	Advanced Networks and Services.	*Quality*
ANSI	American National Standards Institute	*Electrical Engineering*
ANSI	American National Standards Institute—The principal standards writing organization in the U.S. who sets standards for a wide variety of items, including the design, fabrication, and testing of pressure piping, systems, and components for various pipeline services.	*Mechanical*
ANSI ASC X.121	also known as X.12, a technical standard for the transmission of EDI messages over telecommunications links. The dominant standard in North America, Australia and New Zealand.	*Quality*
ANSI assembly identifier	he serial numbering scheme adopted by the American National Standards Institute (ANSI) to ensure uniqueness of an assembly serial number.	*Energy*
ANSI Class	A strength designation for valves which show the maximum pressures at various temperatures at which a valve can be expected to work safely.	*Industrial Engineering*
ANSI/ISO/ASQC Q9000	The US terminology for ISO 9000 (qv).	*Quality*
Anterior	In front; before; opposite of posterior.	*Forestry*
anther	Male reproductive structure that produces pollen in plants.	*Agriculture*
Anthocyanosis	Presence of abnormal red-purple coloration in foliage.[1]	*Forestry*
Anthracene	A colorless monoclinic crystals. A coal tar crude important as a base material for the production of numerous dyes.	*Material Process*
Anthracite	The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980's, anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Anthraquinone dyes	An important group	*Material Process*
Anthraquinone dyes	Anthraquinone dyes An important group of dyes derived from anthraquinone, insoluble in water but made soluble by reduction in the dye bath and, after becoming attached to the fiber to be dyed, regenerated in insoluble form there on by oxidation.	*Material Process*
Anthropogenic	Made or generated by a human or caused by human activity. The term is used in the context of global climate change to refer to gaseous emissions that are the result of human activities, as well as other potentially climate-altering activities, such as deforestation.	*Energy*
Anti Oxidant	A substance which prevents or slows down oxygen decomposition of a material.	*Electrical*
Anti Ozonant	A substance which prevents or slows down material degradation due to ozone reaction.	*Electrical*
Anti-Aliasing	An anti-aliasing filter is used before A/D conversion. It is a low-pass filter that removes signal components above the Nyquist frequency, thereby eliminating their sampled replicas (aliases) in the baseband.	*Electrical Engineering*
Anti-aliasing filter	A low pass filter designed to stop frequencies higher than some fraction of the sample rate, in order to minimize aliasing.	*Reliability Engineering*
Antibacterial	Counteracting bacteria.	*Chemistry*
Anti-Cavitation Trim	A special trim used in control valves to stage the pressure drop through the valve, which will either prevent cavitation from occurring or direct the bubbles that are formed to the centre of the flow stream, away from the valve body and trim. This is usually accomplished by causing the fluid to travel along a torturous path.	*Industrial Engineering*
Anticipated Delay Report	A printout or VDU display showing which works orders will be completed later than their planned due dates.	*Quality*
Anticipation Stock	Anticipation Stock: see Stock (Anticipation).	*Quality*
Anticline	An arch or fold in layers of rock shaped like the crest of a wave.	*Mining*
Antifoam	An agent that prevents foam from forming or reduces its presence.	*Chemical Engineering*
Anti-Foam Additive	Causes air bubbles to break on the surface, prevents build up of foam. Can also help prevent oxidation, they cannot prevent air entrainment, but function as an aid to quicker release of entrained air.	*Lubrication*
Antifoam Agent	An additive used to suppress the foaming tendency of petroleum products in service. May be a silicone oil to break up surface bubbles or a polymer to decrease the number of small entrained bubbles.	*Lubrication*
Anti-foam Agent	One of two types of additives used to reduce foaming in petroleum products: silicone oil to break up large surface bubbles, and various kinds of polymers that decrease the amount of small bubbles entrained in the oils.	*Lubrication*
Antifreeze	An additive that lowers the freezing point of a liquid	*Mechanical Engineering*
Anti-friction bearing	A rolling contact type bearing in which the rotating or moving member is supported or guided by means of ball or roller elements. Does not mean without friction.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Anti-Friction Coating	AF coatings are dry lubricants consisting of suspensions of solid lubricants, such as graphite, PTFE or molybdenum disulfide of small particle size in a binder. Such coatings can be applied to fastener threads to replace metallic coatings such as zinc and cadmium and offer maintenance free permanent lubrication. By careful selection of the lubricants, AF coatings can be designed to meet specific applications. The coatings are permanently bonded to the metal surface and provide a lubricating film preventing direct metal to metal contact.	*Maintenance*
Anti-Lock Brake System (ABS)	On a vehicle equipped with Anti-Lock Brakes, the wheels are equipped with speed sensors. When a sensor determines that a wheel is decelerating so rapidly that lockup may occur, the electro-Hydraulic Control Unit (EHCU) is activated. The EHCU then modulates the brake pressure in the appropriate brake lines by means of the solenoid-operated valves. This is intended to prevent wheel lockup and help the vehicle maintain directional stability during potentially hazardous braking situations.	*Mechanical Engineering*
Anti-Lock Brakes (ABS)	Helps maintain control in emergency stops. Particularly useful on slick, pavement. While the driver applies steady pressure to the brake pedal, the system automatically "pumps" the brakes many times per second to prevent wheel lock-up.	*Mechanical Engineering*
Anti-Lock Brakes (ABS)	Helps maintain control in emergency stops. Particularly useful on slick.	*Mechanical Engineering*
Antimicrobial	Agent that inhibits or destroys bacteria, fungi, protozoa or viruses that are pathogenic.	*Chemistry*
Anti-Oxidant (oxidation inhibitor)	An additive to retard oxidation. Anti-oxidants are critical to any application that is not sealed from the atmosphere. If you don't have a nitrogen blanket on your expansion tank or reservoir it is crucial that your fluid contain an anti-oxidant. Oxidation leads to sludge formation that left unchecked could cause blockages and lead to complete system failure.	*Lubrication*
Anti-oxidants	Prolong the induction period of a base oil in the presence of oxidizing conditions and catalyst metals at elevated temperatures. The additive is consumed and degradation products increase not only with increasing and sustained temperature, but also with increases in mechanical agitation or turbulence and contamination -- air, water, metallic particles, and dust.	*Oil Analysis*
Antiparallel spin paring	The alignment of atomic magnetic moments in opposite directions in ferrimagnetic materials.	*Material Process*
Anti-Reset Windup	This is a feature in a three-mode PID controller which prevents the integral (auto reset) circuit from functioning when the temperature is outside the proportional band.	*Electrical*
Anti-Roll Bar	A steel bar, linking the left and right side of a suspension. It comes into play during cornering. As the car leans in a turn, the anti-roll bar resists this leaning by transferring more weight to the outside tire. It provides a means to achieve good handling from stiff roll resistance while maintaining a comfortable ride through soft springs.	*Mechanical Engineering*
Anti-Seize Compound	An anti-seize compound is used on the threads of fasteners in some applications. The purpose of the compound depends upon the application. It can prevent galling of mating surfaces - such compounds are frequently used with stainless steel fasteners to prevent this effect from occurring. In some applications it is used to improve corrosion resistance to allow the parts to be subsequently dis-assembled Thirdly, it can provide a barrier to water penetration since the threads are sealed by use of the compound.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Antiseptic	A chemical agent that prevents or inhibits the growth of microorganism microbes, particularly on the skin.	*Chemistry*
Antiskid System	Helps maintain control in fast turns. Works whether or not the brakes are applied. Sensors automatically apply individual brakes to prevent a sideways skid. Some systems also cut back on the throttle, slowing the engine. It's also known as an electronic stability system or stabilization program.	*Mechanical Engineering*
Antistatic Additive	An additive that increases the conductivity of a hydrocarbon fuel to hasten the dissipation of electrostatic charges during high-speed dispensing, thereby reducing the fire/explosion hazard.	*Lubrication*
Antitpopal ventilation	ventilation by a current of air travelling in the opposite direction to that of the flow of the coal out of the mine.	*Mining*
Antiwear additives	Improve the service life of tribological elements operating in the boundary lubrication regime. Antiwear compounds (for example, ZDDP and TCP) start decomposing at 90° to 100°C and even at a lower temperature if water (25 to 50 ppm) is present.	*Oil Analysis*
Antiwear Agents	Additives or their reaction products, which form thin, tenacious films on highly loaded parts to prevent metal-to-metal contact.	*Lubrication*
Antonomasia	Substituting an epithet for a proper name or v.v. (e.g. your lordship or Judas)	*Breakroom*
ANX	Automotive Network Exchange.	*Quality*
AO	antioxidant	*Petro-Chemical Abbreviations*
AOC	Appelation d'origine controllee—"designation of original hallmark," being a status granted by the French government to more than 300 food and drink products, mainly wines and cheeses. An AOC designation is an assurance that the product has come from a specified geographical area.	*Quality*
AOCS	American Oil Chemists' Society	*Petro-Chemical Abbreviations*
AOG	Aircraft on (the) ground - the ultimate horror for stockists of aircraft spares, apparently justifying the abandonment of scientific inventory principles and the storage of gross and wildly excessive levels of stock.	*Quality*
AOI	Automated Optical Inspection.	*Quality*
AOQ	Average Outgoing Quality. The quality level of parts which have been subject to sampling. The level will be affected by the probability that certain lots will be rejected, and that, as a consequence, these lots will be 100% inspected. Since there has been 100% inspection of some of the parts, with rectification of any defects found, the overall outgoing quality will be improved. (If all lots are liable to be rejected by sampling, outgoing quality will be 100%.)	*Quality*
AOQL	The worst possible outgoing quality associated with items that have been subject to a particular sample plan (see AOQ).	*Quality*
APC	Advanced Process Control. This includes continuous applications such as cracking towers and advanced batch control involving activities like blend ratio control or bleaching.	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
APDF-DEC	Advanced Petroleum Based Fuels - Diesel Emission Control	*Petro-Chemical Abbreviations*
APE	Association of Petroleum Engineers	*Petro-Chemical Abbreviations*
Aperture	Most often an external cap (with a small opening) placed over the receiver lens to help detect small objects. It lets even a small object block enough light to be detected. Also, an internal aperture in most receivers reduces the effect of off: axis ambient light.	*Electrical Engineering*
APEX	The top or terminal edge of a vein on the surface or its nearest point to the surface.	*Mining*
APHIS	Animal & Plant Health Inspection Service, an agency of the USDA.	*Agriculture*
API	The American Petroleum Institute, a trade association.	*Energy*
API	An acronym for American Petroleum Institute. A trade association of petroleum producers, refiners, marketers, and transporters, organized for the advancement of the petroleum industry by conducting research, gathering and disseminating information, and maintaining cooperation between government and the industry on all matters of mutual interest.	*Lubrication*
API 16A	(Also ISO 13533) American Petroleum Institute publication specification used as the industry Specification for Drilling Equipment.	*Petroleum Engineering*
API 17D	The American Petroleum Institute specification used for Subsea Wellhead and Christmas Tree Equipment.	*Petroleum Engineering*
API 6A	(Also ISO 10423) The American Petroleum Institute publication specification utilized as the oil industry Specification for Wellheads and Christmas Tree Equipment.	*Petroleum Engineering*
Api County Code	An indicator developed by the American Petroleum Institute (API) to identify areas such as counties and other subdivision areas identified within state boundaries. Defined by API Bulletin D12A, as amended. This code becomes a part of the API Well Number.	*Petroleum Drilling*
Api County Code	An indicator developed by the American Petroleum Institute (API) to identify areas such as counties and other subdivision areas identified within state boundaries. Defined by API Bulletin D12A, as amended. This code becomes a part of the API Well Number.	*Petroleum Drilling*
API Engine Service Categories	Gasoline and diesel engine oil quality levels established jointly by API, SAE, and ASTM, and sometimes called SAE or API/SAE categories; formerly called API Engine Service Classifications.	*Lubrication*
API gravity	American Petroleum Institute measure of specific gravity of crude oil or condensate in degrees. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it is calculated as follows:	*Energy*
API Gravity	A gravity scale established by the American Petroleum Institute and in general use in the petroleum industry, the unit being called "the A.P.I. degree." This unit is defined in terms of specific gravity as follows:	*Lubrication*

Term	Definition	*Industry*
API LC	American Petroleum Institute Lubricants Committee. A group within API that is responsible for establishing Base Oil Interchange and Viscosity-Grade Read Across guidelines.	*Mechanical, Process, and Operations*
API Monogram	The registered trademark of the American Petroleum Institute (API). Qualified licensed manufacturers are authorized to use the API Monogram and their license number, on their documentation and on product labels to signify equipment meets the requirements of API specifications.	*Petroleum Engineering*
API SJ	API motor oil quality level for 2001 and older automotive engines	*Petro-Chemical Abbreviations*
API SL	API motor oil quality level for 2004 and older automotive engines	*Petro-Chemical Abbreviations*
API SM	API motor oil quality level for 2010 and older automotive engines	*Petro-Chemical Abbreviations*
API SN	API motor oil quality level first licensed October 1, 2010	*Petro-Chemical Abbreviations*
API Spec 6D	An API specification dealing with pipeline valves. Most pipeline valves are manufactured to this specification, and, if so, can be identified with the API 6D monogram.	*Mechanical*
API SPEC 6FA	The API specification dealing with the fire testing of pipeline valves. Once a particular size and pressure class valve is tested and passes the API-fire test, like valves can be identified with the above monogram. API-6FA supersedes API-RP-6F.	*Mechanical*
Api State Code	The indicator assigned to a state, as defined in API Bulletin D12A, as amended. This code is a part of the API Well Number	*Petroleum Drilling*
Api State Code	The indicator assigned to a state, as defined in API Bulletin D12A, as amended. This code is a part of the API Well Number (The Api State Code for Colorado is 05).	*Petroleum Drilling*
Api Well Number	A well identifier assigned as defined in API (American Petroleum Institute) Bulletin D12A, as amended. The API Well numbers are assigned by the appropriate state or federal regulatory agency.	*Petroleum Drilling*
Api Well Number	A well identifier assigned as defined in API (American Petroleum Institute) Bulletin D12A, as amended. The API Well Numbers are assigned by the appropriate state or federal regulatory agency.	*Petroleum Drilling*
API	American Petroleum Institute	*Petroleum Drilling*
APICS	The American Production and Inventory Control Society. Visit www.apics.org.	*Quality*
A-Pillar	In the side view, the foremost roof support of a vehicle, located in most instances between the outer edge of the windshield and the leading edge of the front door upper. Also known as an A-Post.	*Mechanical Engineering*
APL	See Applications Parts List	*Plant Engineering*
APO	Advanced Planning & Optimisation.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Appalachian basin	The subterranean geologic formations that roughly follow the Appalachian Mountain range. Drillers have started to use the term to refer to any exploitable formations in this area – shale gas, oil or coal, regardless of whether they are found in the mountains at all. Drillers have claimed the Appalachian basin stretches from New York to Tennessee; others say it extends well into Canada or that it's analogous to the entire eastern seaboard. The United States Department of Energy associates the Appalachian basin with the Marcellus Shale, the Devonian Shale, primarily of Ohio, and the Utica Shale in Virginia [Map (pdf link)].	*Petroleum Drilling*
Appalachian Region	Consists of Alabama, Eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.	*Energy*
Appaloosa	The famous spotted horse of the Nez Perce Indians. It wasn't until 1938 that the Appaloosa was recognized with a breed registry.	*Agriculture*
Apparent consumption, (coal)	Coal production plus imports of coal, coke, and briquets minus exports of coal, coke, and briquets plus or minus stock changes. Note: The sum of "Production" and "Imports" less "Exports" may not equal "Consumption" due to changes in stocks, losses, unaccounted-for coal, and special arrangements such as the United States shipments of anthracite to United States Armed Forces in Europe.	*Energy*
Apparent consumption, natural gas (international)	The total of an individual nation's dry natural gas production plus imports less exports.	*Energy*
Apparent consumption, petroleum (international)	Consumption that includes internal consumption, refinery fuel and loss, and bunkering. For countries in the Organization for Economic Cooperation and Development (OECD), apparent consumption is derived from refined product output plus refined product imports minus refined product exports plus refined product stock changes plus other oil consumption (such as direct use of crude oil). For countries outside the OECD, apparent consumption is either a reported figure or is derived from refined product output plus refined product imports minus refined product exports, with stock levels assumed to remain the same. Apparent consumption also includes, where available, liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.	*Energy*
Apparent Density	The weight of a unit volume of powder or coating	*Paint and Coatings*
Apparent Hardness	The value obtained by testing a coating or sintered material with standard indentation hardness equipment. (See macrohardness) Since the reading reflects a composite of pores and solid material, (which may be particles relatively poorly bonded together) it is usually lower than that of an equivalent solid wrought or cast material. Not to be confused with particle hardness (See microhardness).	*Paint and Coatings*
Apparent power	The product of the voltage (in volts) and the current (in amperes). It comprises both active and reactive power. It is measured in "volt-amperes" and often expressed in "kilovolt-amperes" (kVA) or "megavolt-amperes" (MVA). See Power, Reactive Power, Real Power.	*Energy*
Apparent Viscosity	A measure of the viscosity of a non-Newtonian fluid under specified temperature and shear rate conditions.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Apparent Viscosity	The ratio of shear stress to rate of shear of a non-Newtonian fluid such as lubricating grease, or a multi-grade oil, calculated from Poiseuille's equation and measured in poises. The apparent viscosity changes with changing rates of shear and temperature and must, therefore, be reported as the value at a given shear rate and temperature (ASTM Method D 1092).	*Lubrication*
Appearance	A general term relating to characteristics which are observable only by visual inspection (see Bloom, Bulk Appearance, Color, Luster and Texture).	*Lubrication*
Appellation Controllee	See AOC.	*Quality*
apple knocker	Slang for farm laborers who pick apples.	*Agriculture*
Appliance	A piece of equipment, commonly powered by electricity, used to perform a particular energy-driven function. Examples of common appliances are refrigerators, clothes washers and dishwashers, conventional ranges/ovens and microwave ovens, humidifiers and dehumidifiers, toasters, radios, and televisions. Note: Appliances are ordinarily self-contained with respect to their function. Thus, equipment such as central heating and air conditioning systems and water heaters, which are connected to distribution systems inherent to their purposes, are not considered appliances.	*Energy*
Appliance efficiency index	A relative comparison of trends in new-model efficiencies for major appliances and energy-using equipment. The base year for relative comparisons was 1972(1972=100). Efficiencies for each year were efficiencies of different model types that were weighted by their market shares.	*Energy*
Appliance efficiency standards	The National Appliance Energy Conservation Act of 1987 established minimum efficiency standards for major home appliances, including furnaces, central and room air conditioners, refrigerators, freezers, water heaters, dishwashers, and heat pumps. Most of the standards took effect in 1990.The standards for clothes washers, dishwashers, and ranges took effect in 1988, because they required only minor changes in product design, such as eliminating pilot lights and requiring cold water rinse options. The standards for central air conditioners and furnaces took effect in1992, because it took longer to redesign these products. Appliance efficiency standards for refrigerators took effect in 1993.	*Energy*
Appliance Saturation	The percentage of households or buildings in a service area that have the type of equipment to which the demand-side technology applies. For example, if 50 percent of the residential customers have a central air conditioner, the appliance saturation is 50 percent.	*Energy*
Applicability	See External validity	*Quality Analysis*
Applicability Factor	The percentage of end-use energy and demand used by a technology to which the demand-side management (DSM) measure applies. For example, the high-efficiency fluorescent lighting DSM measure applies to fluorescent lighting but not all lighting. Applicability therefore represents the percent of the lighting end-use attributable to fluorescence for which there could be high-efficiency replacements installed.	*Energy*
Application	The work of applying steam to heat another medium for a specific purpose. Usually industrial, the main uses for steam are generally for heating, drying, humidification, and mechanical applications.	*Industrial*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Application	the act of putting to use; specifically, the use to which galvanized steel will be put	*Materials Process*
Application characteristics	Refer to those properties of a method which determine whether the method can be implemented in the particular laboratory of interest, assuming the method will perform acceptably. Characteristics such as cost, sample size, specimen type, etc.	*Quality*
Application Program	A computer program that accomplishes specific tasks, such as word processing.	*Electrical*
Application program interface	A software layer that allows a system to be programmed via a defined set of commands.	*Electrical Engineering*
Applications Parts List	A List Of All Parts Required To Perform A Specific Maintenance Activity. Typically Set Up As A Standard List Attached To A Standard Job For Routine Tasks. Not To Be Confused With A Bill Of Materials.	*Management*
applications.	applications.	*General Mechanical*
Applied force	See external force.	*Engineering Physics*
Appraisal Well	A well drilled as part of an appraisal drilling program which is carried out to determine the physical extent, reserves and likely production rate of a field.	*Petroleum Drilling*
Appraisal Well	A well drilled as part of an appraisal drilling program which is carried out to determine the physical extent, reserves and likely production rate of a field.	*Petroleum Drilling*
Apprentice	A Tradesperson (Or Craftsperson) In Training	*Management*
Approach	The difference between the cold water temperature in °F and the ambient or inlet wet-bulb temperature in °F.	*Facility Engineering*
Approach Ratio	The ratio of the arc of approach to the arc of action.	*Gears*
Appropriate Dispute Resolution (ADR)	A process for resolving conflicts between parties. It can include direct negotiations, facilitated sessions, mediations, or arbitration.	*Petroleum Engineering*
APQP	Advanced Product Quality Planning.	*Quality*
APRAC	Air Pollution Research Advisory Committee	*Petro-Chemical Abbreviations*
APS (UK - Advanced Planning & Scheduling System; US - Advanced Planning System)	A comprehensive planning and operational control system based on proprietary software and comprising a number of distinct modules, or sub-elements. The sub-systems include MPS, Forecasting, BOM and many others common to MRPII and ERP. However, a notable absentee among the modules is Closed-Loop MRP. The day to day plan control which is effected by Closed-Loop MRP in an MRPII/ERP system is replaced in an APS by a Finite Scheduling "Engine." That is, what is at the heart of an APS is the capability to produce a realistic schedule of work detailing the order of jobs, start and finish times and so on, taking account of practical scheduling and production rules and the desirability of optimizing throughput. Unlike the cumbersome manner of MRP, APS provides for interactive interrogation of the scheduling situation and interactive resolution of problems (e.g., planning difficulties due to plant breakdowns). See also Finite Capacity Scheduling.	*Quality*
AQL	See Acceptable Quality Level.	*Quality*
AQL Sampling Tables	See Sampling Tables (AQL or Military).	*Quality*
Aqueous	relating to, similar to, containing, or dissolved in water; watery	*Materials Process*

Term	Definition	*Industry*
Aqueous corrosion	Dissolution of a metal into a water based environment.	*Material Process*
Aqueous Decontamination	Removal of a chemical or biological hazard with a water-base solution	*Lubrication*
aqueous solubility	the extent to which a compound will dissolve in water. The log of solubility is generally inversely related to molecular weight.	*Chemical*
Aquiclude	An impermeable body of rock that may absorb water slowly, but does not transmit it.	*Petroleum Drilling*
aquifer	a geologic formation capable of transmitting significant quantities of groundwater under normal hydraulic gradients.	*Chemical*
Aquifer (Groundwater Aquifer)	A porous, water-bearing geological formation (e.g. sands, gravels, fractured rock) capable of transmitting water in sufficient quantities to serve as a source of water supply.	*Petroleum Engineering*
Aquifer Stimulation	A type of development done in semiconsolidated and completely consolidated formation to physically alter the formation to improve its hydraulic properties.	*Petroleum Engineering*
Aquifer Test	A test involving the withdrawal of measured quantities of water from, or addition of water to, a well and the measurement of resulting changes in head in the aquifer both during and after the period of discharge or addition.	*Petroleum Engineering*
Aquitard	A geologic formation that may contain groundwater but is not capable of transmitting significant quantities of groundwater under normal hydraulic gradients. In some situations aquitards may function as confining beds.	*Chemical*
AR	AR - See: Absence Rate, Accession Rate	*Industrial Relations*
ARA	Amsterdam-Rotterdam-Antwerp	*Energy*
Arabian	Horse of the Bedouin, developed anciently on the Arabian peninsula .	*Agriculture*
Arastra	A mill, consisting of one or more large stones dragged around on a circular bed, used to grind ore.	*Mining*
ARB	Air Resources Board (California)	*Petro-Chemical Abbreviations*
Arbiter, Funding	See Funding Arbiter	*Quality Engineering*
Arbiter, Publication	See Publication Arbiter	*Quality Engineering*
Arbitrage	The simultaneous purchase and sale of identical or similar assets across two or more markets in order to profit from a temporary price discrepancy.	*Energy*
Arc	One of several kinds of visible electrical discharge between separated contacts of a switch. It is primarily a stream of electrons and is accompanied by incandescent metal vapor.	*Electrical Engineering*
Arc Cutting	A group of cutting processes in which the severing or removing of metals is effected by melting with the heat of an arc between an electrode and the base metal (includes carbon, metal, gas metal, gas tungsten, plasma, and air carbon arc cutting). See also Oxygen Cutting.	*Maintenance and Repair*
Arc flash	An arc flash is caused by current flowing between two conducting surfaces and most commonly occurs in switchgear as a result of faulty equipment or poor work practices. Left unchecked, arc flashes release a tremendous amount of energy in a high-pressure blast of heat and debris, which can result in serious injuries to workers and damage to equipment.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Arc of Action	Arc of the pitch circle through which a tooth travels from the first point of contact with the mating tooth to the point where contact ceases.	*Mechanical Engineering*
Arc of Approach	Arc of the pitch circle through which a tooth travels from the first point of contact with the mating tooth to the pitch point.	*Mechanical Engineering*
Arc of Recess	Arc of the pitch circle through which a tooth travels from its contact with the mating tooth at the pitch point to the point where its contact ceases.	*Mechanical Engineering*
Arc Shearer	a coal cutter that cuts at any required angle, but usually horizontally and/or vertically. (S. Staffs.).	*Mining*
Arc Welding	A group of welding processes in which coalescence is produced by heating with an electric arc or arcs, with or without the application of pressure and with or without the use of filler metal.3,4	*Maintenance and Repair*
Arc welding	A group of welding procedures that fuse metal pieces by melting them together, using heat from an electric arc between an electrode and the work piece. The arc is caused by electrical current flowing though plasma consisting of ionized air molecules and metal ions. Material from the electrode is transferred to the work piece, and the electrode is consumed over time. Arc-welding processes are attractive because of their low capital and running costs.	*Electrical*
Arc Wire Spraying	A thermal spray process where two electrically conducting wires are brought together to form an electric arc. Molten material formed in the arc is projected by a compressed gas stream towards the work piece to form a coating.	*Paint and Coatings*
Arch	A dam construction having the form of a barrel vault running vertically with its convex face toward the impounded water.	*Civil Engineering*
Arch dam	A dam resisting the pressure of impounded water by an arch principle, especially a dam having in plan the form of a single arch abutted by natural rock formations.	*Civil Engineering*
Arch girders or Arches	a length of 'H' rolled steel joist, bent to a semi-circular shape. Two or more sections would be fitted together by using bolts and fishplates to make up an arched shaped roof support for the roadways in a mine. - see also Rings.	*Mining*
Arched Truss	A truss having an archlike form but unlike a true arch in that it is free to move horizontally at its base, as in expanding or contracting because of temperature changes. A mixture of such substances with gravel, crushed rock, or the like, used for paving.	*Civil Engineering*
Arching	Fracture processes around a mine opening, leading to stabilization by an arching effect.	*Mining*
Arc-welding cell	The area of a factory set up to weld metals using electric arcs. ABB provides modular robotic arc-welding cells that are ready to install in a customer's plant.	*Electrical*
AREA	A surface enclosed by a specific boundary.	*Mechanical, Process, and Operations*
Area (of an airway)	Average width multiplied by average height of airway, expressed in square feet.	*Mining*
Area Load	The total amount of electricity being used at a given point in time by all consumers in a utility's service territory.	*Energy*
Area mining	practiced on relatively flat or gently rolling terrain and recovers coal by mining long strips successively; the material excavated from the strip being mined is deposited in the strip pit previously mined.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Area, Metallic	Sum of the cross-sectional areas of all the wires either in a wire rope or in a strand.	*Wire Rope & Cable*
Argentiferous	Bearing or producing silver.	*Mining*
Arginine NH2C(NH) NH(CH2)3CH(NH 2) COOH	Prisms crystallizing from water. A basic amino acid whose reaction with formaldehyde is being studied, especially by X-ray in the investigation of the formation of protein plastics such as casein plastics.	*Material Process*
Argon (Ar)	Monatomic noble gas, atomic number 18, one of the most inert elements. Commonly used as a plasma gas for plasma spraying and providing inert environments for many processes.	*Paint and Coatings*
Arhenius behavior	Having a property that follows the Arhenius equation.	*Material Process*
Arhenius equation	General expression for a thermally activated process.	*Material Process*
ARIMA	A refinement of ARMA, and better known as Box-Jenkins Technique (qv). (Autoregressive Integrated Moving Average)	*Quality*
Arithmetic mean	See Mean	*Quality Engineering*
Arles or Earles	a "golden handshake" or bounty paid to miners on joining to work in a mine in times of short supply of labor, binding the miner to that mine, pre 1844, (N. East).	*Mining*
Arm	A ray of an angle.	*Math*
ARMA (Autoregressive Moving Average)	A causal forecasting technique and the forerunner of ARIMA.	*Quality*
Armor	Mechanical protection usually accomplished by a metallic layer of tape, braid or served wires. Normally found only over the outer sheath.	*Electrical*
Armored Cable	A cable provided with a wrapping of metal, usually steel wires, flat tapes, or interlocked tapes, primarily for the purpose of mechanical protection.	*Electrical*
Armored Rope	Rope with individual strands spirally wrapped with flat steel wire.	*Wire Rope & Cable*
Armored Flexible Conveyor (AFC) or Snaking Conveyor	The A.F.C. was developed in Germany by the Gewerkschaft Eisenhutte Westfalia during W.W.2. A few units were tried out in Britain shortly after the war and by the sixties they were being installed on all the major longwall faces in Britain. Designed to carry a coal cutter, cutter-loader or to guide and hold a plough against the face. The A.F.C. is used on a prop free front and by using horizontal hydraulic rams, attached to powered supports, can be advanced (snaked over) behind the machine as it progresses along the face thereby preparing the face for the machine's immediate return run. The A.F.C. was also used on hand-filled faces. A heavy duty chain-type conveyor, the A.F.C. was nicknamed the 'Panzer' short for Panzerforderer by the miners.	*Mining*
Arms	upright props, also called 'uprights'.	*Mining*
Aroclor	Trade name for chlorinated diphenyls, ranging from oils to resins, and used as lacquer softeners and coating materials.	*Material Process*
aromatic	of or relating to organic compounds that resemble benzene in chemical behavior. These compounds are unsaturated and characterized by containing at least one 6-carbon benzene ring.	*Chemical*
Aromatic	Derived From, or characterized by, the presence of the benzene ring.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Aromatics	Aromatics, so called because of their distinctive perfumed smell, are a group of hydrocarbons including, mainly, benzene, toluene and the xylenes. These are basic chemicals used as starting materials for a wide range of consumer products. Almost all aromatics come from crude oil, although small quantities are made from coal.	*Chemical*
ARP	An acronym for Aeronautical Recommended Practice	*Lubrication*
Arrhenius Model	This is a model developed by the Swedish chemist Svante Arrhenius to show a relationship between absolute temperature and reliability in accelerated life testing.	*Reliability Engineering*
Arrhenius rate equation	Expression that relates the rate constant of a chemical reaction to the exponential of the temperature.	*Chemical*
Arse flap or Arse loop	a loop attached to the winding rope in which a man sat when carrying out repair work in the shaft. If it was fitted with a board to sit on it was known as an "arse flap" (Yorks), (N. East).	*Mining*
Artesian Well	A well deriving its water from a confined aquifer in which the water level stands above the ground surface; synonymous with flowing artesian well.	*Petroleum Engineering*
Articles of Association	Along with the Memorandum of Association (qv), one of the two key founding documents of a company, the Articles setting out internal company rules and regulations as they affect shareholders and directors.	*Quality*
Artifact	a historical object made by humans	*Agriculture*
artificial contaminant	must be added to the fluid to produce a given differential pressure across a filter at specified conditions. Used as an indication of relative service life.	*Mechanical, Process, and Operations*
Artificial Recharge	Recharge at a rate greater than natural, resulting from deliberate actions of man.	*Petroleum Engineering*
Artisan	signals that the product, whether cheese, bread, wine, etc., was hand crafted individually or in small batches. Artisan products frequently utilize traditional or indigenous methods.	*Agriculture*
AS	Ancillary Service	*Energy*
As is	A statement that the supplier of goods will not be responsible for the condition or quality thereof after the buyer receives them. Note importantly, that the statement has no legal effect unless it was agreed between the supplier and buyer beforehand at the time the contract was formed. In other words, "received as is" has no validity if it appears for the first time written on a delivery note.	*Quality*
As Low As Reasonably Practicable (ALARP)	Reasonably practicable involves weighing a risk against the trouble, time and money needed to control it. Thus, ALARP describes the level to which we expect to see workplace risks controlled.	*Reliability Engineering*
As received coal	Coal in the condition as received by the user.	*Energy*
AS/RS	Automated Storage & Retrieval System - a planned combination of materials handling devices and materials storage media forming a single integrated system. Depending on the vendor's specification, an AS/RS type might be a mini-load AS/RS; a unit load AS/RS; an order picking AS/RS; a human-aboard AS/RS; or an end-of-aisle AS/RS. The typical function of an AS/RS might be that a shuttle travels to the picking location to retrieve the items to be picked and delivers them to a station, a dispenser then dropping them into a container or onto a conveyor for eventual removal and dispatch.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
ASAE	American Society of Agricultural Engineers (sets standards for many hydraulic components for agricultural use).	*Mechanical, Process, and Operations*
ASAP	"as soon as possible" - office jargon.	*Quality*
Asbestine	An inert pigment consisting of a fibrous variety of talc, or magnesium silicate.	*Material Process*
Asbestos	A group of naturally occurring minerals that separate into long, thin fibers. Asbestos was used for many years to insulate and fireproof buildings. In the 1989 CBECS, information on asbestos in buildings was collected (Section R of the Buildings Questionnaire) for the U.S. Environmental Protection Agency (EPA). Asbestos treatment methods include removal, encapsulation or sealing, and enclosure behind a permanent barrier.	*Energy*
ASC	Accounting Standards Committee.	*Quality*
Ascensional ventilation or Antitropel ventilation	a system for ventilation in a mine in which the intake air is directed to the lowest point in the mine workings then ascends along the faces to the main return. The uphill flow of the air is assisted by it being heated as it travels along the faces and through the mine workings. This system is advantageous in gassy mines as firedamp also tends to flow upwards.	*Mining*
Ascertained Goods	Ascertained goods are a seller's stockholding of particular goods from which a buyer's order has already been picked or put to one side. That is, the goods have been identified and selected for sale. See also unascertained goods.	*Quality*
Ascertainment bias	See Detection bias	*Quality Engineering*
ASCII	American Standard Code for Information Interchange. A seven or eight bit code used to represent alphanumeric characters. It is the standard code used for communications between data processing systems and associated equipment.	*Electrical*
ASD	Auto spectral density. The measure of acceleration power per Hz of analysis bandwidth. Also known as Power spectral density, PSD. The square root of the area under the ASD curve is defined as the g RMS of acceleration.	*Reliability Engineering*
Aseptic, Aseptic Handling	Aseptic means "not liable to putrify, preventing putrefaction" (OED), hence aseptic handling in stores terminology means handling in a constant state of hygiene; when so handling, there must be a flawless level of air-tight, germ free sanitation. To achieve this, it is usually necessary to employ special plastic IBCs, which have been subject to stringent pre-treatment/cleaning. A popular aseptic vessel used in IBC aseptic handling is the 1000 liter 'Combo' from Schoeller Arca Systems.	*Quality*
Asexual reproduction	Reproduction or propagation that doesn't involve the union of gametes.	*Agriculture*
Asexual stage	Vegetative; without sexual organs or spores.	*Forestry*
Ash	Impurities consisting of silica, iron, alumina, and other noncombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect its burning characteristics Ash content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.	*Energy*
Ash	solid byproduct formed in the galvanizing process, consisting primarily of zinc oxides, that remains on the surface of the kettle; commonly referred to as "skimmings"	*Materials Process*
Ash (Sulfated)	The ash content of an oil, determined by charring the oil, treating the residue with sulfuric acid, and evaporating to dryness. Expressed as % by mass.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ash content	the percentage of incombustible material in coal. That portion of a laboratory sample remaining after heating under standard conditions to a constant weight, i.e. until all combustible matter as been burned away.	*Mining*
Ash inclusions	ash or skimmings carried out of the kettle on parts; ash inclusions remain solidified in the coating	*Materials Process*
Ashby-Style Charts	Heuristics used to provide a quick and simple means of looking at how different classes of materials tend to perform in terms of specific properties.	*Physics*
Ashing	The operation of cutting down a surface by means of a coarse abrasive, usually pumice, applied to a revolving cloth wheel.	*Material Process*
Asian-Pacific Americans	United States citizens whose origins are in Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust Territory of the Pacific Islands, (Republic of Palau), the Northern Mariana Islands, Laos, Kampuchea (Cambodia), Taiwan, Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Republic of the Marshall Islands, the Federated States of Micronesia, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru.	*Procurement*
ASLE	American Society of Lubrication Engineers. Changed now to Society of Tribologist and Lubrication Engineers (STLE).	*Oil Analysis*
ASME	American Society of Mechanical Engineers.	*General*
ASME Boiler and Pressure Vessel Code	which is referenced for many aspects of valve making, although not for the valves themselves.	*Mechanical*
ASN	Advance Shipping Notice, or Advance Shipping Notification. An Advice Note (qv)—a document sent either electronically or by some other means to a customer informing him that actual dispatch of an accepted order has commenced. The data on an ASN will typically include the customer order number and purchase order number, and, for the goods dispatched, SKU/product code numbers and quantities, lot numbers, pallet/container numbers, and carton numbers. A slightly risky means available to the customer for updating his records is to enter data direct from the ASN, and "backflush" the data automatically when the shipment is actually received.	*Quality*
Aspect Ratio	The dimensional relationship between tire section height and section width; section height divided by section width.	*Mechanical Engineering*
Aspect Ratio	The dimensional relationship between tire section height and section width; section	*Mechanical Engineering*
Asperities	Microscopic projections on metal surfaces resulting from normal surface-finishing processes. Interference between opposing asperities in sliding or rolling applications is a source of friction, and can lead to metal welding and scoring. Ideally, the lubricating film between two moving surfaces should be thicker than the combined height of the opposing asperities.	*Oil Analysis*
Asphalt	A dark brown-to-black cement-like material obtained by petroleum processing and containing bitumens as the predominant component; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. Note: The conversion factor for asphalt is 5.5 barrels per short ton.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Asphalt (refined)	See Asphalt.	*Energy*
Asphaltenes	The asphalt compounds soluble in carbon disulfide but insoluble in paraffin naphthas.	*Petroleum Engineering*
ASR	See: Accident Severity Rate	*Industrial Relations*
As-received condition or as-received basis (coal)	Coal in the condition as received by the consumer or the laboratory analyzing the coal.	*Energy*
ass	Small, long-eared mammal and related to the horse; especially those of African origin that are ancestors of the donkey. Sometimes used as a synonym for donkey, but this is not technically accurate.	*Agriculture*
Assay	To test ores or minerals by chemical or other methods for the purpose of determining the amount of valuable metals contained.	*Mining*
Assay foot (meter, inch, centimeter)	The assay value multiplied by the number of feet, meters, inches, centimeters across which the sample is taken.	*Mining*
Assay map	Plan view of an area indicating assay values and locations of all samples taken on the property.	*Mining*
Assayed control material	A control solution or control material for which the manufacturer has measured the values expected for different tests and different methods. These "bottle values" are summarized on assay sheets and are useful for selecting control materials, however, they should not generally be used for setting the control limits because these values usually include a between-laboratory component of variation that makes the control limits too wide for use in an individual laboratory.	*Quality*
Assaying	Finding the percentage of a given metal in ore or bullion.	*Mining*
Assembler	A program that translates assembly language instructions into machine language instructions.	*Electrical*
Assembler	A program that translates assembly language instructions into machine language instructions.	*Electronic Process*
Assemble-to-Order	See two-level master scheduling.	*Quality*
Assemblies	the fitting together of manufactured parts into a complete structure, machine, or unit of a machine; assemblies sometimes require specific design features in order to be optimally galvanized	*Materials Process*
Assembly	The joining together of two or more piping components by bolting, welding, caulking, brazing, soldering, cementing, or threading into their installed location as specified by the engineering design.	*Maintenance and Repair*
Assembly	Building up layers of vencer and glue for plywood construction, especially for low pressure forming.	*Material Process*
Assembly identifier	A unique string of alphanumeric characters that identifies an assembly, bundle, or canister for a specific reactor in which it has been irradiated.	*Energy*
Assembly Language	A machine oriented language in which mnemonics are used to represent each machine language instruction. Each CPU has its own specific assembly language.	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Assembly type	Each assembly is characterized by a fabricator, rod-array size, and model type. An eight-digit assembly type code is assigned to each assembly type based on certain distinguishing characteristics, such as the number of rods per assembly, fuel rod diameter, cladding type, materials used in fabrication, and other design features.	*Energy*
Assessment/Audit	A process that attempts to quantify the actual status of a customer's maintenance system to identify opportunities for improvement.	*Maintenance*
Assessment work	The annual or biennial work performed on a mining claim (or claims), after claim location and before patent, to benefit or develop the claim and to protect it from relocation by third parties.	*Energy*
Assessment	Amount levied on capital stock.	*Mining*
Asset	An entity with monetary value. In maintenance context, an asset is commonly considered to be any component of a plant or its equipment. For example, compressors, gearboxes, etc. A motor is also an asset as it is a component of a larger manufacturing unit.	*Maintenance*
Asset (Current)	Assets which are expected to be turned into cash in due course, or consumed in the course of operations. Current assets are entered in the balance sheet in increasing order of liquidity (i.e., stocks, then debtors, then cash itself).	*Quality*
Asset (Fixed)	Buildings, land and equipment acquired by the company and which have a continuing use in its business. Fixed assets are entered in the balance sheet in descending order of permanence (i.e., land first, then buildings ...). Small items such as typewriters are usually omitted.	*Quality*
Asset (Intangible)	An asset having no physical existence but which is nevertheless identifiable and controllable - four examples of many are the ownership of licenses, patent rights, trademarks and brand names.	*Quality*
Asset (Monetary)	An asset having a stated, unequivocal value (e.g., cash and debts).	*Quality*
Asset (Non Monetary)	An asset which must be sold in the market, and therefore has a value that is not definite (its value depends on what the market will pay!).	*Quality*
Asset (Wasting)	A wasting or sinking asset is a fixed asset that is steadily declining in value, with no hope of recovery in its value. An example is a mine which is being gradually depleted of minerals as mining takes place.	*Quality*
Asset Efficiency Optimization (AEO®)	A key aspect of any world-class asset management program is a proactive, efficient work management process, designed to ensure the effective performance of maintenance on critical assets. To achieve maximum return on investment and maintain the greatest degree of productivity, it is pivotal that organizations have a process that effectively translates asset information to knowledge, and ultimately releases value from that knowledge. To help organizations achieve these goals, SKF offers Asset Efficiency Optimization (AEO), a management process designed to achieve maximum efficiency and effectiveness from work management activities focused on business goals for the facility. The AEO process encompasses four key elements: Strategy, Identification, Control and Execution. Within each of these elements, the coordination and participation of three essential facets within the organization — process, culture, and technology — is paramount to the overall impact of AEO.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Asset Integrity	Asset integrity is the fitness of an asset to be operated as intended, and to perform as intended, with an acceptable risk of failure over its service life.	*Maintenance*
Asset Integrity Management	This is a written scheme outlining the ability of an asset to perform its required function effectively and efficiently while protecting the health, safety and environment and the means of ensuring that the people, systems, processes and resources that deliver this level of integrity are in place, in use and will perform when required throughout the lifecycle of an asset.	*Reliability Engineering*
Asset Knowledge Science (AKS)	This is an SKF process of documenting asset knowledge relevant to monitoring and diagnosing asset anomalies. The process encompasses generic literature, OEM and SKF information, and asset unique details. The goal is to provide a structure to justify which measurements are needed to detect and diagnose failures in an early stadium. The AKS is used to tune an SKF decision-support system called @ptitudeTM.	*Reliability Engineering*
Asset management	Also referred to as industrial and plant asset management. Asset management systems collect and manage data on the condition and availability of major plant equipment in discrete and process manufacturing plants. This enables plant operators to plan maintenance schedules more effectively (condition-based maintenance), avoiding both unnecessary equipment inspections and unexpected breakdowns, which can cause expensive interruptions in production time. Computerized asset management systems gather data in real-time to ensure maximum production uptime and throughput, with a minimum of human interaction.	*Electrical*
Asset Management	A process that oversees the cradle-to-grave status of key plant-floor machinery. It involves the acquisition of such equipment, along with their use, function and ultimate disposal, in order to maximize their potential performance and longevity.	*Reliability Engineering*
Asset Performance Assessment (APA)	The process may be applied at a strategic or detailed level and to various levels of sophistication. An initial 'desk top' assessment may provide a broad first cut summary of asset performance after which the level of analysis may be increased. This permits further investigation of 'hot spots' where significant gaps exist between actual and targeted performance. Similarly, the approach recognizes that the production of asset strategies should provide agencies opportunities to increase the level of analysis depending on their business requirements and current asset management capability. Development of asset strategies for a site or portfolio should therefore include scope for continuous improvement.	*Reliability Engineering*
Asset Register	In maintenance this term usually refers to a formal, structured listing of the plant and machinery at a given location.	*Maintenance*
Asset turnover	A measure of how efficiently assets are used to produce sales. The ratio shows how many dollars of sales were generated by each dollar of assets. Calculate by dividing net sales by average total assets.	*Quality*
Asset turns	A measure of company performance, defined as (sales revenue)/(total assets). Thus with sales of $25m and total assets of $5m, asset turns are 5.0. Also see stock turns. The reasonable contention that the forces which lead buyers in the marketplace to purchase goods are rationally based, although liable to change. The rational behavior of buyers, the assumption of the constancy, stands behind the validity of sales forecasting (and much else).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Asset Utilization	Percentage of time a plant or equipment is operating at maximum demonstrated production rate, with perfect quality and defined yield.	*Maintenance*
Asset Utilization	A metric determined by multiplying Availability x Rate x Quality.	*Reliability Engineering*
Assignment Clause	A source of variation in a process that can be isolated, especially when its significantly larger magnitude or different origin readily distinguishes it from random cause of variation. Synonym - special cause.	*Maintenance*
Assistance for heating in winter	Assistance from the Low-Income Home Energy Assistance Program (LIHEAP). The purpose of LIHEAP is to assist eligible households to meet the costs of home energy, i.e., a source of heating or cooling residential buildings.	*Energy*
Assistance for weatherization of residence	The household received services free, or at a reduced cost, from the Federal, State, or local Government. Any of the following services could have been received: * Insulation in the attic, outside wall, or basement/crawlspace below the floor of the house * Insulation around the hot water heater * Repair of broken windows or doors to keep out the cold or hot weather * Weather stripping or caulking around any windows or doors to the outside * Storm doors or windows added * Repair of broken furnace * Furnace tune-up and/or modifications * Other home energy-saving devices.	*Energy*
Associated natural gas	**Associated natural gas:** See Associated-dissolved natural gas and Natural gas.	*Energy*
Associated-dissolved natural gas	Natural gas that occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved gas). Also see Natural gas.	*Energy*
Association	Statistical dependence between two or more events, characteristics, or other variables. An association may be fortuitous or may be produced by various other circumstances; the presence of an association does not necessarily imply a causal relationship.	*Analysis*
Assurance level	The minimum percentage of pressure containing devices of a verified design that will sustain 10 million applications of its Rated Fatigue Pressure.	*Mechanical, Process, and Operations*
A-stage resins	Uncured, thermosetting resins. They are soluble and fusible. Form of resin used for impregnation.	*Material Process*
Asthenosphere	The layer or shell of the earth below the lithosphere which is weak and in which isostatic adjustment takes place, magmas may be generated, and seismic waves are strongly attenuated.	*Petroleum Engineering*
ASTM	American Society for Testing and Materials.	*Electronic Process*
ASTM	American Society of Testing and Materials	*Materials Process*
ASTM D2670 Pin and V-Block Test	ASTM Test Method D2670 is for measuring the antiwear properties of liquid lubricants. The load is applied to the jaws and maintained by a toothed wheel. The wear is a function of the number of the tooth which needs to be engaged to keep the load constant for a fixed time.	*Lubrication*
ASTM D5302 Sequence VE	ASTM Test Method D 5302, the Sequence VE gasoline engine test, has been correlated with vehicles used in stop-and-go service prior to 1988, particularly with regard to sludge and valve train wear.	*Lubrication*
ASTM D5533 Sequence IIIF	ASTM Test Method D 5533, the Sequence IIIE gasoline engine test, has been correlated with vehicles used in high-temperature service prior to 1988, particularly with regard to oil thickening and valve train wear.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	Industry
Asymmetry Potential	The potential developed across the glass membrane with identical solutions on both sides. Also a term used when comparing glass electrode potential in pH 7 buffer.	*General Engineering*
Asymptote	a line that is considered to be the limit to a curve. As the curve approaches the asymptote, the distance separating the curve and the asymptote continues to decrease, but the curve never actually intersects the asymptote.	*Chemical*
Asynchronous	A communication method where data is sent when it is ready without being referenced to a timing clock, rather than waiting until the receiver signals that it is ready to receive.	*Electrical*
Asynchronous machines	**Asynchronous machines—**See Machines	*Electrical*
at wt	The abbreviation for atomic weight.	*Energy*
AT&T	American Telephone & Telegraph Co. Inc., with headquarters in New Jersey, affectionately known as Ma Bell.	*Quality*
ATA	American Trucking Association	*Petro-Chemical Abbreviations*
Atactic Irregular	Atactic Irregular alteration of side groups along a polymeric molecule.	*Material Process*
ATC	Automatic temperature compensation.	*Electrical*
ATD	Allison Transmission Division of GM	*Petro-Chemical Abbreviations*
ATF	automatic transmission fluid	*Petro-Chemical Abbreviations*
ATI	Average Total Inspection. A term used in quality and acceptance sampling to gauge the financial effectiveness, to the recipient of goods, of a sampling/acceptance procedure. The ATI is defined as the sum of two costs: (1) the cost of the required inspection of the sample taken of the incoming parts, and (2) the cost of the required inspection of incoming lots that have been rejected by the sample plan, even though their quality was at the level of quality agreed as being satisfactory. As far as cost (2) is concerned, the possibility of rejecting incoming lots which prove on later 100% inspection to be satisfactory is inherent in the very activity of sampling. Clearly, however, the lower this possibility, the better the sampling plan and methodology. Cost (2) cannot be completely eliminated except through 100% inspection of incoming parts. However, cost (2) can be reduced in some sampling methodologies if larger samples are taken—i.e., if cost (1) is increased. For superior, effective sampling, a balance should be found such that the total of cost (1) and cost (2) is minimized. Perhaps a more popular measure than ATI is AFI, Average Fraction Inspected. This is defined as ATI/N, where N is the number of the incoming items.	*Quality*
ATIEL	Association Technique de I'Industrie Européenne des Lubrifiants (European Oil Marketers Association)	*Petro-Chemical Abbreviations*
atm	Atmosphere	*Lubrication*
Atmosphere	a surrounding influence or environment that affects the rate of corrosion; frequency and amount of moisture, humidity, chlorides, sulfides, and wind are some of the atmospheric components affecting corrosion rates	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Atmosphere (one)	A pressure measure equal to 14.7 psi.	*Mechanical, Process, and Operations*
Atmosphere, Technical	A unit of pressure used in Germany and equal to 1 Kp/cm2 (kilopound per square centimeter), approximately equal to 14.2 psig.	*Mechanical, Process, and Operations*
Atmospheric crude oil distillation	The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees to 750 degrees Fahrenheit (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.	*Energy*
Atmospheric Pressure	The pressure exerted by the atmosphere.	*Industrial Engineering*
Atmospheric pressure	The external pressure exerted on a body by the atmosphere—14.7 psi (absolute) at sea level.	*Mechanical*
Atmospheric tower	One in which air movement through the tower is dependent upon atmospheric conditions, not induced by mechanical fans.	*Facility Engineering*
ATO	Assemble to Order.	*Quality*
Atom	Atom is the basic building block of chemistry. Atoms, also called chemical elements, can combine with one another to form compound. It is the smallest unit of matter that cannot be decomposed into simpler substances by ordinary chemical processes.	*Chemical*
Atomic absorption spectroscopy	Measures the radiation absorbed by chemically unbound atoms by analyzing the transmitted energy relative to the incident energy at each frequency. The procedure consists of diluting the fluid sample with methyl isobutyl ketone (MIBK) and directly aspirating the solution. The actual process of atomization involves reducing the solution to a fine spray, dissolving it, and finally vaporizing it with a flame. The vaporization of the metal particles depends upon their time in the flame, the flame temperature, and the composition of the flame gas. The spectrum occurs because atoms in the vapor state can absorb radiation at certain well-defined characteristic wave lengths. The wave length bands absorbed are very narrow and differ for each element. In addition, the absorption of radiant energy by electronic transitions from ground to excited state is essentially and absolute measure of the number of atoms in the flame and is, therefore, the concentration of the element in a sample.	*Oil Analysis*
Atomic force microscope (AFM)	A derivative of the scanning tunneling microscope in which a small force, rather than an electrical current, is used to trace out an image of the structure of the surface of the material.	*Material Process*
Atomic Mass	Mass of an individual atom expressed in atomic mass units.	*Material Process*
Atomic mass unit (AMU)	Equal to 1.66×10^{-24} g. Approximately equal to the mass of a proton or neutron.	*Material Process*
Atomic number	A number given to each element representing the number of protons in one atom of that element.	*Chemical Engineering*
Atomic packing factor (APF)	Fraction of unit cell volume occupied by atoms.	*Material Process*
Atomic radius	Distance from atomic nucleus to outermost electron orbital.	*Material Process*
Atomic resolution electron microscope	A refined version of the transmission electron microscope in which the packing arrangements of atoms in a thin sample can be imaged.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Atomic scale architecture	Structural arrangement of atoms in an engineering material.	*Material Process*
Atomic weight	Weight (in grams) of 6.02x1024 atoms of a particular element. The weight of an atom of any element compared with that of oxygen that is considered to be 16.	*Chemical Engineering*
Atomica	Atomica (formerly Guru.net) says, "The extent to which an experiment, test, or measuring procedure yields the same results on repeated trials." This definition is found in a number of dictionaries.	*Reliability Engineering*
Atomization	The dispersion of a molten material into particles by a rapidly moving gas or liquid stream or by mechanical dispersion.	*Paint and Coatings*
Atomized Powder	A powder produced by the dispersion of a molten material into particles by a rapidly moving gas or liquid stream or by mechanical dispersion.	*Paint and Coatings*
Atomization	The conversion of a liquid into a spray of very fine droplets.	*Lubrication*
ATP	See Available to Promise.	*Quality*
ATR	Automated Trouble Reporting.	*Quality*
Attapulgite Clay	A colloidal, viscosity-building clay consisting of hydrous magnesium aluminum silicates and used principally in saltwater drilling fluids.	*Petroleum Engineering*
Attenuate	Reduce	*Reliability Engineering*
Attenuation	The loss or reduction of beam intensity as a result of environmental factors, dust, humidity, steam etc.	*Electrical Engineering*
attenuation	the reduction or lessening in amount (e.g., a reduction in the amount of contaminants in a plume as it migrates away from the source).	*Chemical*
Atterberg limits	the moisture contents which define a soil's liquid limit, plastic limit, and sticky limit.	*Chemical*
Attribute Control Chart	In quality and SPC, an "attribute" is a particular undesirable quality characteristic such as a blemish, spot, hole or crack in a manufactured object. One method of monitoring a manufacturing process with regard to the production of manufactured objects is to take a sample every so-often, and inspect each part for the presence of any undesirable quality attribute. (A sample of 50 parts might be taken.) The number of parts having one or more attributes is then plotted on a graph (the horizontal axis representing time, the vertical axis the percentage of parts with one or more undesirable quality attributes). See also Count Chart.	*Quality*
Attributes	Attributes are the outcomes by which the relative "goodness" of a particular expansion plan is measured e.g. fuel usage. Some attributes, such as fuel usage, are measured in well-defined parameters. Other attributes (e.g. public perception of a technology) are more subjective. Attributes may be grouped in several ways. Categories include financial, economic, performance, fuel usage, environmental, and socio-economic. The attributes chosen must measure issues that directly concern the utility and have an impact on its planning objectives. Limiting the number of attributes reduces the complexity and cost of a study.	*Energy*
Attrition	The loss of participants during the course of a study. (Also called loss to follow up.) Participants that are lost during the study are often call dropouts. Also called: Dropouts, Loss to follow up	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Attrition bias	Systematic differences between comparison groups in withdrawals or exclusions of participants from the results of a study. For example, participants may drop out of a study because of side effects of an intervention, and excluding these participants from the analysis could result in an overestimate of the effectiveness of the intervention, especially when the proportion dropping out varies by treatment group.	*Quality Engineering*
ATU	ATU - See: Telephone Unions; Alliance of Independent (Ind)	*Industrial Relations*
AUA	AUA- See: Associated Unions of America (Ind)	*Industrial Relations*
Auctioneering Device	A device which automatically selects either the highest or the lowest input signal from among two or more input signals.	*Process Control*
Audit	This is a systematic approach to ascertain the actual status of compliance to laid down maintenance strategies to identify areas where improvement is necessary.	*Reliability Engineering*
Audit Trail	See Transaction Trail.	*Quality*
auger	a tool for drilling/boring into unconsolidated earth materials (soil) consisting of a spiral blade wound around a central stem or shaft that is commonly hollow (hollow-stem auger). Augers commonly are available in flights (sections) that are connected together to advance the depth of the borehole.	*Chemical*
Auger electron	Secondary electron with a characteristic energy providing a basis for chemical identification.	*Material Process*
Auger mine	A surface mine in which the coal bed is removed by means of a large diameter drill. Usually operated only when the overburden becomes too thick for economical strip mining.	*Energy*
Auger mining	recovers coal through the use of a large-diameter drill driven into a coal bed in the side of a surface mine pit. It usually follows contour surface mining, particularly when the overburden is too costly to excavate.	*Energy*
Auger	A rotary drill that uses a screw device to penetrate, break, and then transport the drilled material (coal).	*Mining*
Austempering Heat treatment	Heat treatment of a steel involving holding just above the martensitic transformation range long enough to completely form bainite.	*Material Process*
Austenite	Face centered cubic (g) phase of iron or steel.	*Material Process*
Austenitic stainless steel	The common stainless steel, where the primary microstructure is austenite and the composition primarily iron but also includes both chromium and nickel. The steels are designated as 300 series such as 304, 316, CF8M, etc.	*General Mechanical*
Austenitic stainless steel	The common stainless steel, where the primary micro structure is austenite and the composition primarily iron but also includes both chromium and nickel. The steels are designated as 300 series such as 304, 316, CF8M, etc.	*Mechanical*
Autarky	Self sufficiency (see Industrial Autarky).	*Quality*
Author/Reviewer	See Reviewer/Author	*Quality Engineering*
Authorized capital	**Authorized capital** - see capital stock.	*Mining*
Authorized cash distribution to municipality	The authorized cash distributions to the municipality from the earned surplus of the utility department.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Auto Mode	In auto mode the controller calculates the output based its calculation using the error signal (difference between setpoint and PV). See Mode.	*Process Control*
Auto Shutdown	A feature in EIA-232 interface devices which puts the IC into a low-power shut-down mode when no signal is present on the EIA-232 bus.	*Electrical Engineering*
Auto spectrum (power spectrum)	A spectral display of the power (voltage squared) at each frequency. Phase is ignored.	*Reliability Engineering*
Auto Zeroing Technique	A method used to automatically set the null point on a pressure sensor. This is usually done by using a microprocessor to open a solenoid valve at a predeter-mined time interval. This references atmospheric pressure to both sides of the pressure sensor chip. The microprocessor reads the output voltage and makes that the new null point. This method is used to eliminate errors due to null offset and null temperature shift.	*Electrical Engineering*
Autoclave	An apparatus for heating materials under high pressure.	*Material Process*
Autoclaving	The production of a stable, protective oxide on steel parts by treatment in a pressurized, high temperature steam containing atmosphere.	*Paint and Coatings*
Autodiscriminate	Ability for one bar code reader to interpret several different codes.	*Gears*
Autoecious	Completing entire life cycle on one host; especially applied to the rust fungi.	*Forestry*
Autogenous grinding	The process of grinding in a rotating mill which uses as a grinding medium large pieces or pebbles of the ore being ground, instead of conventional steel balls or rods.	*Mining*
Autogenous grinding	The process of grinding ore in a rotating cylinder using large pieces of the ore instead of conventional steel balls or rods.	*Mining*
Auto-guided directional drilling	same as automated directional drilling.	*Petroleum Drilling*
AutoID	Automatic Identification Technology ... bar codes, RFID and contact memory buttons.	*Quality*
Autoignition	Minimum temperature which a substance must be heated without application of flame or spark to cause substance to ignite.	*Lubrication*
Autoignition temperature	the temperature at which a substance will spontaneously ignite. Autoignition temperature is an indicator of thermal stability for petroleum hydrocarbons.	*Chemical*
Autolok Nut	A torque prevailing nut of an all metal construction. Covered by UK patent 1180842 the nut is marketed by GKN Screws and Fasteners Limited.	*Maintenance*
Automated directional drilling	directional drilling with a system possessing a drilling mode whereby "tool settings" are automatically determined by system software, and frequently and automatically changed/controlled by system hardware, while drilling. The system controller software addresses angular deviation AND lineal deviation, and only requires specification of the actual and current planned well path trajectories. Thus, the system controller software temporarily assumes the role of a traditional directional driller. Current systems, like Baker Hughes Inteq's AutoTrak, can only attempt to automatically control angular deviation in "hold mode" and otherwise requires manual "steer mode" to attempt to control lineal deviation. In other words, their system automatically tries to be "on inclination" but not necessarily also "on depth."	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Automated Storage/ Retrieval Systems (AS/RS)	A combination of equipment and controls which handles, stores, and retrieves materials with precision, accuracy, and speed under a defined degree of automation.	*Equipment*
Automatic Climate Control	Heating and air conditioning system that adjusts itself as needed, to maintain a pre-set temperature.	*Mechanical Engineering*
Automatic count	A particle count obtained by an electromechanical or electronic device as opposed to visual microscopic counting technique.	*Mechanical, Process, and Operations*
Automatic Locking Front Hubs	Found in some four-wheel drive vehicles, this allows the driver to engage, or "lock," the front axle hubs without leaving the vehicle.	*Mechanical Engineering*
Automatic Locking Front Hubs	Found in some four-wheel drive vehicles, this allows the driver to engage, or "lock," the front axle hubs without leaving the vehicle.	*Mechanical Engineering*
Automatic Meter Reading	A system installed to read a utility meter remotely.	*Electrical Engineering*
Automatic Power Control	Feature in laser drivers (such as the MAX3669) that uses feedback from the laser to adjust the drive, to keep the laser's output constant.	*Electrical Engineering*
Automatic Reset	1. A feature on a limit controller that automatically resets the controller when the controlled temperature returns to within the limit bandwidth set. 2. The integral function on a PID controller which adjusts the proportional bandwidth with respect to the set point to compensate for droop in the circuit, i.e., adjusts the controlled temperature to a set point after the system stabilizes.	*Electrical*
Automatic set-back or clock thermostat	A thermostat that can be set to turn the heating/cooling system off and on at certain predetermined times.	*Energy*
Automatic Transmission Fluid (ATF)	Fluid for automatic, hydraulic transmissions in motor vehicles.	*Lubrication*
Automatic Transmission With Manual-Shift Capability	Allows manual gear changes, when desired, in an automatic transmission. Functions as a traditional automatic transmission when left in Drive, but includes a slot in which the shift lever can be moved to change gears manually. Sometimes, buttons for shifting manually through the gears are located on the steering wheel. This affords some of the advantages of a manual transmission, such as greater control of engine speed for better throttle response, but eliminates the need for a clutch pedal.	*Mechanical Engineering*
Automatic Welding	Welding with equipment which performs the entire welding operation without constant observation and adjustment of the controls by an operator. The equipment may or may not perform the loading and unloading of the work.	*Maintenance and Repair*
Automobile and truck classifications	Vehicle classifications for automobiles and light duty trucks were obtained from the EPA (Environmental Protection Agency) mileage guide book. Almost every year there are small changes in the classifications, therefore the categories will change accordingly. The EPA mileage guide can be found at any new car dealership.	*Energy*
Autonomous Maintenance	Operators in independent groups carry out routine maintenance and preventive maintenance. These groups, which may include maintenance workers, solve problems without management intervention. The maintenance department is only called on for bigger problems that require more resources, technology, or downtime.	*Maintenance*
Autonomous Maintenance	Maintenance that is performed by the machine operator/operations crew/production department rather than the maintenance staff. It generally includes tasks such as lubricating and tightening machine parts, and changing filters or belts.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Autoranging	The capability of an instrument to switch among ranges automatically. The ranges usually are in decade steps.	*Reliability Engineering*
Autoshutdown Plus	A feature in EIA-232 interface devices which puts the IC into a low-power shutdown mode when no signal is present on the bus or the transmitter inputs.	*Electrical Engineering*
Autotransformer	An autotransformer is a transformer that uses a common winding for both the primary and secondary windings. Essentially an inductor with a center-tap, an autotransformer is often used in power-supply boost-converter applications to achieve a higher output voltage, while limiting the peak flyback voltage seen by the power switch.	*Electrical Engineering*
Autotrophic	designating or typical of organisms that derive carbon for the manufacture of cell mass from inorganic carbon (carbon dioxide).	*Chemical*
Auto-Zero	An automatic internal correction for offsets and/or drift at zero voltage input.	*Electrical*
AUV	Annual usage value, qv. See also DGR.	*Quality*
Auxiliary Actuator	A mechanism, sold separately, to provide basic switches with easier means of operation and adjustment and adapt switches to different operating motions by supplying supplemental overtravel.	*Electrical Engineering*
Auxiliary generator	A generator at the electric plant site that provides power for the operation of the electrical generating equipment itself, including related demands such as plant lighting, during periods when the electric plant is not operating and power is unavailable from the grid. A black start generator used to start main central station generators is considered to be an auxiliary generator.	*Energy*
Auxiliary operations	All activities supportive of but not contributing directly to mining.	*Mining*
Auxiliary ventilation	Portion of main ventilating current directed to face of dead end entry by means of an auxiliary fan and tubing.	*Mining*
Auxiliary fan	A fan used in conjunction with air ducting to increase the ventilation to a section of the mine.	*Mining*
AV	Audio Visual.	*Quality*
AVA	AVA - See: American Vocational Association	*Industrial Relations*
Availability	Availability is the probability that a system or component is performing its required function at a given point in time, or over a stated period of time when operated and maintained in a prescribed manner. In other words, the proportion of total time that an item of equipment is capable of performing its specified functions. By taking different measures for uptime and downtime, different availability measures are obtained.	*Maintenance*
Availability	The ratio of the total time that a functional unit is capable of being used during a given interval.	*Reliability Engineering*
Availability (Achieved)	In the definition of achieved availability, the mean time between maintenance (MTBM) is used as measure of uptime. This mean time between maintenance includes both unplanned and planned maintenance. The mean (expected) system downtime includes unplanned and planned (preventive/predictive) maintenance, but does not include supply or maintenance resources delays. Achieved (equipment) availability fulfills the need to distinguish availability when planned maintenance shutdowns are included, whereby it assumes zero supply and maintenance resources delay times.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Availability (Inherent)	Inherent availability is defined as MTBF / (MTBF + MTTR). Availability increases by increasing reliability (MTBF) and maintainability (1/ MTTR). For example: MTBF = 1000 hours, MTTR = 48 hours. Then the availability is 1000/ 1048 = 95%. The inherent availability is solely based on the failure distribution and repair-time distribution, assuming no supply and maintenance delays, and no planned (preventive / corrective) maintenance. It is considered as an equipment design parameter. Inherent availability fulfills the need to distinguish expected performance between planned shutdowns.	*Reliability Engineering*
Availability (of a Machine)	Usually defined as (loading time - down time) / loading time. Synonymous with uptime.	*Quality*
Availability (Operational)	Similar to achieved availability, but in the operational availability also the supply and maintenance resource delays are included in the mean system downtime. Operational availability is required to isolate the total effectiveness and efficiency of maintenance operations. The mean time between maintenance and the mean system downtime can be measured in both "clock" or "calendar" time. Clock time is scheduled operating time, or "manned hours." When measuring in calendar time, the term generalized operational availability is sometimes used. By definition, inherent availability is higher or equal to achieved availability, and achieved availability is higher or equal to operational availability.	*Maintenance*
Available but not Needed Capability	Capability of generating units that are operable but not necessary to carry load.	*Energy*
Available Hours	The total number of hours that a piece of equipment is capable of performing its specified functions. It is equal to the total hours in any given period minus all the downtime hours.	*Maintenance*
Available-to-Promise	It is essential, if customer orders are to be delivered on the dates promised, that such orders do not exceed the company's commitment to future manufacture (i.e., do not exceed the company's declared master schedule. To ensure that this is so, a portion of the available master schedule effort is allocated to each customer order as it is accepted. That portion of the master schedule effort which has not been so allocated remains "available to promise (to future customers)". See also Capacity Available to Promise, and Capable to Promise.	*Quality*
Avalanche Photo Diode	A photodiode designed to take advantage of avalanche multiplication of photocurrent to provide gain. As the reverse-bias voltage approaches the break-down voltage, hole-electron pairs created by absorbed photons acquire sufficient energy to create additional hole-electron pairs when they collide with ions. Thus a multiplication or signal gain is achieved.	*Electrical Engineering*
Average	Refer to a textbook on electrical engineering. In the exclusive case of a pure sine wave, the average value is zero.	*Reliability Engineering*
Average Absolute msAD	average absolute value of azimuthal deviation associated with real survey stations over the length of drill hole for which a THD log is created. A smaller value usually indicates better directional control performance.	*Petroleum Drilling*
Average Absolute msHD	average absolute value of horizontal deviation associated with real survey stations over the length of drill hole for which a THD log is created. A smaller value usually indicates better directional control performance.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Average Absolute msID	average absolute value of inclinational deviation associated with real survey stations over the length of drill hole for which a THD log is created. A smaller value usually indicates better directional control performance.	*Petroleum Drilling*
Average Absolute msVD	average absolute value of vertical deviation associated with real survey stations over the length of drill hole for which a THD log is created. A smaller value usually indicates better directional control performance.	*Petroleum Drilling*
Average Annual Percent Change (Coal)	The average annual percent change over a period of several years that is calculated by taking the nth root [where n is the number of years in the period of interest] of the result of the current year's value divided by the value of the first year of the period; this result then has 1 (one) subtracted from it and that result is then multiplied by 100.	*Energy*
Average Cost	The revenue requirement of a utility divided by the utility's sales. Average cost typically includes the costs of existing power plants, transmission, and distribution lines, and other facilities used by a utility to serve its customers. It also includes operations and maintenance, tax, and fuel expenses.	*Energy*
Average daily production	The ratio of the total production at a mining operation to the total number of production days worked at the operation.	*Energy*
Average delivered price	The weighted average of all contract price commitments and market price settlements in a delivery year.	*Energy*
Average Demand	The energy demand in a given geographical area over a period of time. For example, the number of kilowatt-hours used in a 24-hour period, divided by 24, tells the average demand for that period.	*Energy*
Average household energy expenditures	A ratio estimate defined as the total household energy expenditures divided by the total number of households.	*Energy*
Average Life	How long, on average, a component lasts before it suffers a failure. Average life is commonly measured by Mean Time Between Failures (MTBF), and is usually expressed in hours.	*Maintenance*
Average mine price	The ratio of the total value of the coal produced at the mine to the total production tonnage.	*Energy*
Average Number of Employees (coal)	The average number of employees working in a specific year at coal mines and preparation plants. Includes maintenance, office, as well as production-related employees.	*Energy*
Average Open Market Sales Price (coal)	The ratio, for a specified time period, of the total value of the open market sales of coal produced at the mine to the value of the total open market sales tonnage.	*Energy*
Average production per miner per day	The product of the average production per miner per hour at a mining operation and the average length of a production shift at the operation.	*Energy*
Average production per miner per hour	The ratio of the total production at a mining operation to the total direct labor hours worked at the operation.	*Energy*
Average Recovery Percentage (coal)	The percentage of coal that can be recovered from known coal reserves at reporting mines, weight averaged for all mines in the reported geographic area.	*Energy*
Average Responding	A measurement proportional to the average of the absolute values of all input waveforms within a specified frequency range.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Average Revenue per Kilowatt hour	The average revenue per kilowatt-hour of electricity sold by sector (residential, commercial, industrial, or other) and geographic area (State, Census division, and national) is calculated by dividing the total monthly revenue by the corresponding total monthly sales for each sector and geographic area.	*Energy*
Average revenue per kilowatt hour	The average revenue per kilowatt hour of electricity sold by sector (residential, commercial, industrial, or other) and geographic area (State, Census division, and national) is calculated by dividing the total monthly revenue by the corresponding total monthly sales for each sector and geographic area.	*Energy*
Average Revenue per Kilowatt-hour	Revenue by sector and geographic area calculated by dividing the monthly revenue by monthly sales.	*Energy*
Average stream flow	feet per second, at which water passes a given point in a stream over a set period of time.	*Energy*
Average Total Inspected	See ATI.	*Quality*
Average vehicle fuel consumption	A ratio estimate defined as total gallons of fuel consumed by all vehicles divided by (1) the total number of vehicles (for average fuel consumption per vehicle) or (2) the total number of households (for average fuel consumption per household).	*Energy*
Average vehicle miles traveled	A ratio estimate defined as total miles traveled by all vehicles, divided by: (1) the total number of vehicles (for average miles traveled per vehicle) or (2) the total number of households (for average miles traveled per household).	*Energy*
Average water conditions	The amount and distribution of precipitation within a drainage basin and the run off conditions present as determined by reviewing the area water supply records over a long period of time.	*Energy*
Averaging	Summing and suitably dividing several like measurements to improve accuracy or to lessen the effect of any asynchronous components.	*Reliability Engineering*
Aviation gasoline (finished)	A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. Note: Data on blending components are not counted in data on finished aviation gasoline.	*Energy*
Aviation gasoline blending components	Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.	*Energy*
Avogadro's number	Equal to the number of atomic mass units per gram of material (= 0.6023 1024).	*Material Process*
Avoided Cost	The cost to the utility if it had generated or otherwise purchased the power. It is a benchmark price for energy services, used to compare resource alternatives. Avoided cost is the marginal long-term or short-term production cost that could be avoided by an alternative supply-side or demand-side resource. In many states, avoided cost rates have been used as the power purchase price offered to independent suppliers (co-generators).	*Energy*

Term	Definition	*Industry*
Avoided Costs	These are costs that a utility avoids by purchasing power from an independent producer rather than generating power themselves, purchasing power from another source or constructing new power plants. A Public Utility Commission calculates avoided costs for each utility, and these costs are the basis upon which independent power producers are paid for the electricity they produce. There are two parts to an avoided cost calculation: the avoided capacity cost of constructing new power plants and the avoided energy cost of fuel and operating and maintaining utility power plants.	*Energy*
AW	anti-wear	*Mechanical*
AWD	all-wheel drive	*Mechanical*
A-weighting	Emphasis given by filtering to sound measurements with the goal of compensating for the non-flat frequency response of human hearing, in order to get numbers approximating human response. See Equal Loudness Curves.	*Reliability Engineering*
AWG	American Wire Gage.	*Electronic Process*
AWG	Abbreviation for American Wire Gage, a standard system used for designating wire diameter. Also referred to as the Brown and Sharpe (B&S) wire gage.	*Electrical*
Awn	a cleavage or cleat in the coal at 45° to the main and butt cleats. The 'long awn' and 'short awn' are intermediate cleat directions, nearer respectively to the 'bord' and 'end' directions, i.e. < and > 45° to the main cleat.	*Mining*
AWS	American Welding Society—A society which sets guidelines and standards for all welds.	*Mechanical*
AWU	AWU - See: Aluminum Workers International Union (AFL-CIO)	*Industrial Relations*
AWWA Ratings	The American Water Works Association (AWWA) publishes standards and specifications, which are used to design and install water pipelines and distribution system piping. The ratings used may be in accordance with the flange ratings of AWWA C207, Steel Pipe Flanges; or the rating could be based upon the rating of the joints used in the piping.	*Maintenance and Repair*
AWWU	AWWU - See: Watch Workers Union; American (Ind)	*Industrial Relations*
Axial	Along the centerline of a shaft.	*Reliability Engineering*
Axial (thrust) position	Change in a rotor's position or displacement along its axis, relative to some nearby fixed point.	*Reliability Engineering*
Axial force	A system of internal forces whose resultant is a force acting along the longitudinal axis of a structural member or assembly.	*Engineering Physics*
Axial Plane	In a pair of gears it is the plane that contains the two axes. In a single gear, it may be any plane containing the axis and a given point.	*Gears*
Axial-load bearing	A bearing in which the load acts in the direction of the axis of rotation.	*Oil Analysis*
Axis of Rotation (Spin Axis)	The axis of rotation (spin axis) is that straight line about which a body rotates.	*General*
Axle	A non-rotating shaft on which wheels or rollers are mounted.	*Mechanical*
Axle Ratio	The ratio between the rotational speed (RPM) of the drive shaft and that of the driven wheel. Gear reduction in final drive is determined by dividing the number of teeth on the ring gear by the number of teeth on the pinion gear.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ayrshire	A breed of dairy cattle that originated in the County of Ayr in Scotland, prior to 1800. They may be any shade of red or white. The first Ayrshires arrived in America about 1822.	*Agriculture*
Ayshire	Brown Swiss, Guernsey , Holstein-Friesian, Jersey	*Agriculture*
az	Azimuth	*Civil Engineering*
AZA	American Zinc Association	*Materials Process*
Azeotrope	A specific mixture of components, which at a given pressure cannot be separated by distillation, i.e. the liquid and vapor phases have the same compositions.	*Chemical*
Azi*	planned well bore azimuth at MD*. (degrees)	*Petroleum Drilling*
Azimuth	A surveying term that references the angle measured clockwise from any meridian (the established line of reference). The bearing is used to designate direction. The bearing of a line is the acute horizontal angle between the meridian and the line.	*Mining*
Azimuthal deviation	the difference in azimuth between actual and planned well paths, typically at a specific measured depth. Same as msAD.	*Petroleum Drilling*
Azipod	The registered trademark of a family of modular electric propulsion systems for ships, the first of which was co-developed by ABB in the 1980s. The Azipod unit is fitted to the ship's hull externally in a pod, or casing, and combines the functions of a propulsion motor, main propeller, rudder and stern thruster. Since these functions are no longer installed as separate units inside the ship, space onboard can be used for other purposes. Azipod units also contribute to improved hydrodynamics, which result in fuel savings of around 15 percent compared to conventional propulsion systems.	*Electrical*
Azo group	Azo group The structural grouping –N=N-. Many compounds characteristic of this group are useful as dyes.	*Material Process*
Azote	Azote, -see Afterdamp.	*Mining*
--B--	--B--	*Petroleum Drilling*
B Bel	Measurement of a signal's power compared to a reference; also, measurement of sound pressure. Example: "decibel," or, "dB."	*Electrical Engineering*
B&S Gage	Brown and Sharpe wire gage used for copper conductor (same as American Wire Gage).	*Electrical*
B. and O. Plan	A well known plan of labor-management co-operation developed in the shops of Baltimore and Ohio Railroad. Otto S. Beyer has been given credit for developing the plan following the 1922 shopman's strike. Under the B. and O. Plan, committees of union representatives and supervisors handled employee grievances and discussed all questions relating to greater efficiency of railroad service. The joint committees operated on local, regional, and system bases. The Machinists Union was the first to agree to this program, the other crafts following.	*Industrial Relations*
B.F.S.L.	A method for defining linearity. A straight line placed on a sensor output curve such that half the data points lie above and half below that line. The method for determining B.F.S.L., is the sum of least squares.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
B.R.V.	Body Relief Valve—A relief valve (optional) installed on ball valves used in liquid service to provide for the relief of excess body pressure caused by thermal expansion.	*Mechanical*
B7, B7M	ASTM specification for bolting, A193 Grade B7, specified in API Spec 6A for standard service flange bolting. B7M is B7 Modified with controlled hardness (charpies tested) in the bolt (and 2HM nut) for sour service (NACE) exposed bolts.	*Petroleum Engineering*
Babbitt	A soft, white, non-ferrous alloy bearing material composed principally of copper, antimony, tin and lead.	*Lubrication*
Baby Wagner Acts	State and territorial labor laws based on the Wagner–Connery Act (National Labor Relations Act). These statutes deal primarily with representation procedures and unfair labor and management practices. See also: National Labor Relations Act	*Industrial Relations*
Back	The ceiling or roof of an underground opening.	*Mining*
Back cleat	Back cleat,-see Cleat.	*Mining*
Back connected	A condition where pipe connections are on normally unexposed surfaces of hydraulic equipment. (Gasket mounted units are back connected.)	*Mechanical, Process, and Operations*
Back dook	the return airway. (Scot).	*Mining*
Back end	In working a board, an excavation or kirving is made in the bottom part of the coal, half of the width of the board, and as far as the hewer was able to make it with his pick. This was followed by a vertical cutting of equal depth, next to the side of the place. A hole is then drilled near the roof, and fast side of the coal undermined, and in it gunpowder was placed, and the coal blown down. This was called the 'sump'. The remaining half of the place is called the 'back-end', and is similarly undermined and shot down, (N. East).	*Mining*
Back Flush	The reverse flow of water through a filtration system, used to dislodge trapped particles.	*Filtration*
Back Order	Items that have been ordered but cannot be shipped, (out of stock or some other reason). This is widely used as a measure of supplier performance and customer service (percent back orders, number of occurrences, number of back order days, etc.).	*Procurement*
Back Pay	Wages or earnings due to an employee because of (a) improper layoff or discharge under the collective bargaining agreement, (b) piece rate adjustments following a grievance under the contract, © violation of the legal minimum wage under federal, state, or territorial law, (d) violation of federal, state, or territorial laws prohibiting unfair labor practices. Back Pay under (a) and (b) general is pursuant to an arbitration award. Back pay under (c) and (d) results from action under the minimum wage or labor-relations laws and is enforced by the courts. Some authors distinguish between back pay and retroactive pay, holding the latter to apply to a delayed wage payment resulting from collective bargaining negotiations where wages are applied retroactively. See also: Fair Labor Standards Acts of 1983, Make Whole	*Industrial Relations*
Back Pay Award	Back Pay Award - See: Back Pay	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Back pressure	A pressure in series. Usually refers to pressure existing on the discharge side of a load. It adds to the pressure required to move the load.	*Mechanical, Process, and Operations*
Back pressure	The resistance which the material offers, owing to its viscosity, to continued flow when the mold is closing.	*Material Process*
Back pressure regulator	Regulator designed to control upstream pressure. See "REGULATOR."	*Mechanical*
Back ripping	ripping other than at the coalface to reopen air-roads closing up with the effects of strata pressure. It involves removing the existing deformed roof supports, excavating to the required dimensions and then re-setting with new supports.	*Mining*
Back road	the return air-road.	*Mining*
Back Room Boys	Employees hired by detective agencies who are assigned to shadowing, sleuthing, or general investigative work which does not require the use of a "cover." The LaFollette Committee investigation of detective agency activities in labor relations reported these and similar activities.	*Industrial Relations*
Back sample	Rock chips collected from the roof or back of an underground opening for the purpose of determining grade.	*Mining*
Back seat	A shoulder on the stem of a gate or globe valve which seals against a mating surface inside the bonnet to prevent leakage of media through the bonnet stuffing box when the valve is fully opened.	*General Mechanical*
Back shaft	the non-drawing shaft, i.e. the one used for other purposes other than drawing coal. This was usually the Upcast Shaft.	*Mining*
Back shear	a vertical cut made in the seam in advance of and parallel to the face line.	*Mining*
Back shift	the second shift of hewers in each day. They usually commenced work four hours after the pit began to draw coal. In later years back-shift became synonymous with the afternoon and night shifts.	*Mining*
Back skin	a large leather covering for the back and shoulders used in sinking and shaft work.	*Mining*
Back slum	tubway connecting the tubways on one side of the shaft to the other for returning the empties.	*Mining*
Backfill	Material used for refilling an excavation.	*Civil Engineering*
Backfill	Waste material used to fill the void created by mining an orebody.	*Mining*
Background	Minor amounts of radioactivity due not to abnormal amounts of radioactive minerals nearby, but to cosmic rays and minor residual radioactivity in the vicinity.	*Mining*
Background Contamination	The total of the extraneous particles which are introduced in the process of obtaining, storing, moving, transferring and analyzing a fluid sample.	*Lubrication*
Background Noise	The total noise floor from all sources of interference in a measurement system, independent of the presence of a data signal.	*General*
Backing Ring	Backing in the form of a ring that can be used in the welding of piping to prevent weld spatter from entering a pipe and to ensure full penetration of the weld to the inside of the pipe wall.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Backing or Backing deals	wooden planks, some 6 ft long, driven down close together behind the cribs if required, in bad ground.	*Mining*
Backing plate	Plate used as a support for the cavity blocks.	*Material Process*
Backlash	The amount by which the width of a tooth space exceeds the thickness of the engaging tooth on the pitch circles. As actually indicated by measuring devices, backlash may be determined variously in the transverse, normal, or axial planes, and wither in the direction of the pitch circles or on the line of action. Such measurements should be converted to corresponding values on transverse pitch circles for general comparison.	*Gears*
Backlog	Work that is not completed by the nominated "required by date." The period each work order is overdue is defined as the difference between the current date and the "required by date." All work that doesn't have a specified required by date is generally included on the backlog. Backlog is often measured in crew-weeks, the total number of labor hours represented by the work on the backlog, divided by the number of labor hours available in an average week. As such, backlog is one of the common key performance indicators in maintenance.	*Maintenance*
Backmarker	A car running near the back of the field.	*NASCAR*
Back-overman	The overman in charge of the backshift.	*Mining*
Backs	another word for "cleats"—see also Back.	*Mining*
Backseat	A Shoulder on the stem of a valve which seals against a mating surface inside the bonnet to permit replacement, under pressure, of stem seals or packing.	*Mechanical*
Backspacing	The measurement from the back of the bolt pad to the back edge of the rim; used to calculate offset and determine where the back of the bolt pad is located in relation to the rim width, sometimes referred to as rear spacing.	*Mechanical Engineering*
Backstay	a drag or trailer fixed to the back of a haulage train or set as a safety device when going uphill, to prevent runaways.	*Mining*
Back-Stay	Guy used to support a boom or mast; or that section of a main cable, as on a suspension bridge, cableway, etc., leading from the tower to the anchorage.	*Wire Rope & Cable*
Backstope	The initial lift or slice when commencing to stope or mine from a drift.	*Mining*
Back-to-back connection	In HVDC terms, links used to connect neighboring grids are often referred to as "back-to-back" connections, indicating that the distance between the two grids is minimal. Such connections are able to link independent power grids, including those operating at different frequencies, and enable power to flow from one grid to another. This means that generators on either grid can be used to secure the supply of electricity across the extended network. The connections can also improve voltage and frequency stability in the linked grids.	*Electrical*
Back-to-Work Movement	Any organized effort to get employees out on strike to return to work. Frequently the action is instituted by employers in order to have the workers abandon the strike. Unions generally regard such efforts as strikebreaking. See also: Rand Formula, Strikebreaker	*Industrial Relations*
Backtracking	Backtracking - See: Bumping	*Industrial Relations*
Backup	A system, device, file or facility that can be used as an alternative in case of a malfunction or loss of data.	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Backup fuel	In a central heat pump system, the fuel used in the furnace that takes over the space heating when the outdoor temperature drops below that which is feasible to operate a heat pump.	*Energy*
Backup generator	A generator that is used only for test purposes, or in the event of an emergency, such as a shortage of power needed to meet customer load requirements.	*Energy*
Backup power	Electric energy supplied by a utility to replace power and energy lost during an unscheduled equipment outage.	*Energy*
Back-up ring (anti-extrusion ring) (junket ring) (bull ring)	A ring which	*Mechanical, Process, and Operations*
Backup Step-Up	Step-up, switching-regulator power supply with a backup battery switchover.	*Electrical Engineering*
Backwardation	A situation when the cash or spot price of a metal stands at a premium over the price of the metal for delivery at a forward date.	*Mining*
Backwash (Water Treatment)	The process in which filter beds are subjected to water flow opposite to the service flow direction to loosen the bed and flush solid materials accumulated on the resin bed to wastes.	*Petroleum Engineering*
Backwash (Well Development)	The surging effect or reversal of water flow in a well. Backwashing removes fine-grained material from the formation surrounding the borehole and, thus, can enhance well yield.	*Petroleum Engineering*
Backwork or Backbye work	Work done outbye of the working face. Also called "oncost work."	*Mining*
Bacteria	Microorganisms that live in the soil and convert nutrients into forms usable by plants	*Agriculture*
Bacteria	Single cell microorganisms not containing chlorophyll. Germs.	*Chemistry*
Bactericide	Additive to inhibit bacterial growth in the aqueous component of fluids, preventing foul odors.	*Lubrication*
Bactericide	A chemical agent that destroys bacteria.	*Chemistry*
Bacteriostat	A chemical agent that prevents bacteria from multiplying and growing (doesn't kill).	*Chemistry*
Baff week	At one time the colliers were paid on a two week basis. The baff week was the second week. (N. East).	*Mining*
Baff-ends	two outer wedges used in setting tubbing, used with a third central wedge called a 'spare'; or generally pieces of wood, 15 or 18 inches long, 5 or 6 inches broad, and from 1 to 2 inches thick, used for driving behind cribs or tubbing to bring them to their proper position in a shaft.	*Mining*
Baffle	The baffle is an integral part of a tubular heat exchanger. It provides support for the tubular bundles and helps guide the flow of heated product for maximum efficiency.	*Industrial*
Baffle	A device to prevent direct fluid flow or impingement on a surface.	*Lubrication*
Bag Flattener	A mounting assembly used to hold one conveyor upside down over another conveyor in order to squeeze or flatten the product.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bag molding	Process of applying pressure by the use of a bag to transmit uniform pressure to all surfaces under molding.	*Material Process*
Bag of gas	a cavity found occasionally in gassey seams of coal containing gas under pressure, (N. East). –see Blower.	*Mining*
Baggasse	The residue left after the justice has been pressed from sugar cane, largely crushed fibers.	*Material Process*
Bagging	a flexible canvas tube used to conduct air from an auxiliary fan to where it was needed at the head of a drivage.	*Mining*
Baghouse	A dust-collection chamber containing numerous permeable fabric filters through which the exhaust gases pass. Finer particulates entrained in the exhaust gas stream are collected in the filters for subsequent treatment/disposal.	*Chemical*
Bag-muck	Dirt parting above the bags. –see Bags, (Yorks.).	*Mining*
Bags	Inferior coal associated with the upper part of the Barnsley Seam (Yorks).	*Mining*
Bagwork	A revetment, consisting of heavy material sewn into bags, for protecting embankments	*Civil Engineering*
Bail	a) U-shaped member of a bucket, or b) U-shaped portion of a socket or other fitting used on wire rope.	*Wire Rope & Cable*
Bailer	A long bucket with a valve on the bottom and a bail on top. It is lowered down into the hole, filled with water, and withdrawn.	*Petroleum Engineering*
Bailey bridge	A temporary bridge formed of prefabricated, interchangeable, steel truss panels bolted together.	*Civil Engineering*
Bailey v. Drexel Furniture Company	A decision of the Supreme Court which held invalid a federal statute which sought to tax the net profits of a company as a device to regulate child labor. The Supreme Court held invalid the right to of Congress to use its taxing power to regulate matters which were within the jurisdiction of the police powers of the state.	*Industrial Relations*
Bainite	Extremely fine needlelike microstructure of ferrite and cementite.	*Material Process*
Bait	food taken underground for the mid-shift meal break. OE "to bite or tear."—see also Snap.	*Mining*
Bait poke	The bag in which the bait is carried.	*Mining*
Baiting, Beating or Beating-up	Removing the floor dirt to improve the height of a roadway—see also Bate, Dint, Denting, Pocking and Pavement brushing.	*Mining*
Bakery and Confectionary Workers' International Union of America (Ind.)	Its monthly publication is the Bakers' and Confectioners' Journal. Its offices are located at 1000 16th Street., N.W., Washington, D.C. It was expelled from the AFL-CIO in December 1957.	*Industrial Relations*
Bakery and Confectionary Workers' International Union; American (AFL-CIO)	One of the national unions of the AFL-CIO. Its monthly publication is the ABC News. Its offices are located at 1120 Connecticut Avenue, N.W., Washington, D.C.	*Industrial Relations*
Balaclava	The fireproof hood drivers wear under their helmets to avoid burns to the face and neck.	*NASCAR*
Balance	A uniform mass distribution of a tire and wheel assembly about its axis of rotation.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Balance brow	a self acting inclined plane in steep seams. Driven on the full rise of the mine, down which full tubs of coal were lowered and the empties elevated up on a kind of carriage or platform on wheels actuated by a rope or chain haulage from above. (N. Staffs.).	*Mining*
Balance platforms	systems designed to load and unload automatically multiple decked winding cages at the shaft bottom. Also called 'hydraulic decking plant'.	*Mining*
Balance rope	a rope hung under the cage in the shaft as a counter-balance.	*Mining*
Balance sheet	A formal statement of the financial position of a company on a particular day, normally presented to shareholders once a year.	*Mining*
Balance weight	a replacement for one cage in a small shaft.	*Mining*
Balanced Scorecard	A "top–down" method of translating an organization's mission and strategy into tangible linkages, interrelationships, specific activities, and measures necessary for success. Reliability and maintenance issues are integrated into an overall business scorecard or identified in a stand-alone scorecard.	*Maintenance*
Balanced Trim	A trim arrangement that tends to equalize the pressure above and below the valve plug to minimize the net static and dynamic fluid flow forces.	*Industrial Engineering*
Balancing	(mechanical) Adjusting the distribution of mass in a rotating element, to reduce vibratory forces generated by rotation.	*Reliability Engineering*
Balancing authority (electric)	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time. NERC definition	*Energy*
Balancing item	Represents differences between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions off low data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems that vary in scope, format, definitions, and type of respondents.	*Energy*
Balk	Balk, -see Baulk.	*Mining*
Ball	The spherical closure element of a ball valve.	*Mechanical*
Ball Joint	A component which permits universal rotational movement in a piping system.	*Maintenance and Repair*
Ball Bearing	An antifriction rolling type bearing containing rolling elements in the form of balls.	*Lubrication*
Ball check	A fitting with a small ball that seals against a seat preventing flow in one direction and allowing flow in the other direction.	*Mechanical*
Ball Joint	A ball-and-socket connection that lets a steering knuckle move in several directions at the same time.	*Mechanical Engineering*
Ball mill	A piece of milling equipment used to grind ore into small particles. It is a cylindrical shaped steel container filled with steel balls into which crushed ore is fed. The ball mill is rotated causing the balls themselves to cascade, which in turn grinds the ore.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ball mill	A cylindrical mill with steel malls within the revolving cylindrical supplying the grinding action and reducing the size of particles present.	*Material Process*
Ball Table	A group of ball transfers over which flat surface objects may be moved in any direction.	*Manufacturing*
Ball The	closure element of a ball valve.	*General Mechanical*
Ball Transfer	A device in which a larger ball is mounted and retained on a hemispherical face of small balls.	*Manufacturing*
Ball valve	a valve regulated by the position of a free-floating ball that moves in response to fluid or mechanical pressure.	*Chemical*
Ball valve	A valve using a spherical closure element which is rotated through 90° to open and close the valve.	*General Mechanical*
Ball-Burton-Hatch Bill	A bill designed to replace the National Labor Relations Act through the use of fact finding, mediation, and voluntary arbitration. It was opposed by labor as designed to remove many protections enjoyed by unions under the protection of the Wagner Act.	*Industrial Relations*
Balleisen Contracts	A form of individual contract, basically designed to eliminate the role of unions in collective bargaining. In its origin a variation of the yellow dog contract, the employee agrees as a condition of employment not to demand any form of union security, or a written collective bargaining agreement, but to handle his own grievances and to avoid the use of any labor organization while employed with the company.	*Industrial Relations*
Balls or Ball Ironstone	nodular concretions of clayband ironstone.	*Mining*
Ballstones	an early term for ironstone (N. Staffs.).	*Mining*
Bally seating	Underclay with nodular concretions (Lancs.).	*Mining*
Baln stone	The roof rock or roof stone, (N. East).	*Mining*
Balsams	Natural vegetable exudations consisting of resins mixed with volatile oil. The name is also applied to products having the physical characteristics of the natural balsams but produced by reactions that normally lead to resinous materials.	*Material Process*
Baltimore and Ohio Railroad Company v. Interstate Commerce Commission	a decision of the Supreme Court which upheld the right of Congress to regulate the hours of work as a safety measure within the scope of the commerce clause.	*Industrial Relations*
Banana oil	A solvent containing chiefly amyl acetate, with an odor of ripe bananas.	*Material Process*
Banburying	A mixing of material in plastic condition under pressure in a Banbury mixer.	*Material Process*
Band	Any widespread thin rock deposit; or a winding rope or chain; or a bed or seam of coal; or a thin layer of shale in the coal.	*Mining*
Band-Aid	A known temporary fix to a problem that may have to be performed one or more times until a permanent fix can be performed. (A permanent fix may consist of scheduled down time requirements, re-engineering, new procedural developments, etc.)	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Banded coal	coal seam made up of layers of various types of coal from hard bright coal to dull coal, or mineral charcoal.	*Mining*
Banded iron formation	A bedded deposit of iron minerals.	*Mining*
Banding	A foliar symptom characterized by a limited zone of necrotic or discolored tissue traversing the leaf, e.g., the band of tissue on a pine needle injured by SO2 or 03.[1]	*Forestry*
Bandsman	the man who loaded the cage at the pit bottom (S. Staffs.)—see also Onsetter.	*Mining*
Bandwidth	A symmetrical region around the set point in which proportional control occurs.	*Electrical*
Bandwidth	1. In computing, bandwidth is often a synonym for the rate of information transmitted by a network connection or interface. For example, a modem's bandwidth might be described as 56K, which means it is capable of transmitting 56,000 "bits" of information per second. A bit is the smallest unit of computerized data, comprising a single binary digit (i.e., 1 or 0). 2. Bandwidth in electronic communication is the difference between the highest- and the lowest-frequency signal in a given transmission medium. It is measured in hertz (Hz).	*Electrical*
Banicking	holing in the roof immediately above the coal seam and breaking down the coal off the face with crowbars. (Cannock).	*Mining*
Banjack	compressed air drill.	*Mining*
Banjo	A large type of collier's shovel, usually pear shaped, also known as a "pan shovel," "oscar" (S. Staffs.) or "pit pan," or an old type of miner's water bottle (S. Mids.).	*Mining*
Bank or Benk	the colliery surface near the shaft and at the level from which the cages are loaded and unloaded; or a general term for the surface; or to cover the fire in a boiler or domestic fire grate with slack or small coal to make the fire burn slowly through the night. Pronounced 'Bonk' in N. Staffs.	*Mining*
Bank plates	cast iron sheets with which the heapstead or pit bank was laid out or floored to help in the manipulation of tubs.	*Mining*
Bank to Bank	the time occupied by a collier between leaving the bank, i.e. pit top, and returning to the same, i.e., a shift.	*Mining*
Banker	Banker,—see Banksman.	*Mining*
Bank-head	The top of an incline.	*Mining*
Banking	On oval tracks, the corners are often tilted inward to provide faster speeds. On some road courses, certain turns may actually be banked outward, a very difficult type of corner known as "off-camber."	*NASCAR*
Banking wagon	a moveable security cover over the shaft top during sinking, also called a 'running bridge'. A moveable platform of wood, usually, mounted on a frame with wheels. Rails are laid on this platform on which the tip wagons run.	*Mining*
Banking-out	the operation of changing the tubs in the cage at the surface.	*Mining*

Term	Definition	*Industry*
Bankman or Banksman	The manager of a small mine employing less than a dozen colliers was known by many different names but the most common in the Midlands and Durham was Bankman or Banksman (16th Century). He usually stood at the head of the shaft to direct operations, and was responsible for the everyday running of the mine and for the sale of the coal; also the person in charge of the shaft and cage or skip at the surface of the colliery, i.e. the person at the surface who operates the signals from the cage or skip to the winding engineman and Onsetter, controls the loading of the cage and collects the checks or tallies from the men as they enter the cage. He may also search men for contraband. Sometimes called the "banker" or "lander."	*Mining*
Bankswoman	A female employed on the bank to pick dirt and stones from the coal, before the introduction of the screening plant. (S.& N. Wales, Scot., Lancs.)—see also Pit brow lassies.	*Mining*
Bannock	To overcut the coal by hand (S. Staffs.); or a brownish grey clay used for making firebricks. (Shrops.).	*Mining*
Bannocking	Dirt, soft, slippery shale or musdstone forming the roof of a coal seam.	*Mining*
Banquette	An embankment for buttressing the base of a levee and forming a berm.	*Civil Engineering*
Bant	An old Lancashire dialect word for string and could be from the earlier 'band', a rope or chain. Later it was used to refer to a certain number of men, usually three or four. Before the introduction of cages and conductors the men would ride up and down in the pit shaft sitting in short loose pieces of chain attached to the hemp rope in a cluster, with their knees facing inwards toward the centre of the shaft. There were usually two bants, the lower or bottom bant, composed of men, and the upper or foaley bant, made up of a cluster of lads fastened a few feet above the heads of the men. In later years the word was used in the sense of 'to catch the last bant' or the last journey into or out of the pit on the underground haulage.	*Mining*
Bar	A metric unit of pressure. One bar equals 14.5 psi.	*Mechanical*
Bar Claims	Gold found in low collections of sand, or gravel, in rivers, exposed at low water.	*Mining*
bar.	Barometer	*Civil Engineering*
Baraque	A boring tower erected on the surface over a shaft being bored, e.g., as in the Kind–Chaudron method.	*Mining*
Barbers and Beauty Culturists Union of America (AFL-CIO)	A union active in barber shops and beauty parlors. Its offices are located at 316 Flatbush Ave., Brooklyn, New York. Its official publication is The Beacon. It merged with the Journeymen Barbers, Hairdressers, Cosmetologist & Proprietors' International Union of America (AFL-CIO) during July 1956.	*Industrial Relations*
Barbers, Hairdressers, Cosmetologists, & Proprietors' International Union of America; Journeymen (AFL-CIO)	the organization publishes an official monthly journal. The offices are located at 1141 North Delware St, Indianapolis, Indiana.	*Industrial Relations*
Bare	to strip or cut by the side of a fault or boundary.	*Mining*
Bare (Minimum) Subsistence Level	A standard of living just sufficient to provide food, clothing, and shelter with no provision for insurance, medicine, recreation, and other incidental expenditures. It is sometimes referred to as the absolute minimum level sufficient to permit physical survival of the family.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bare Pulley	A pulley which does not have the surface of its face covered (or lagged).	*Manufacturing*
Bargaining	Bargaining—See: Collective Bargaining	*Industrial Relations*
Bargaining Agent	The union certified by national, state, or territorial labor agency to represent a majority of the employees in an appropriate bargaining unit and to be the exclusive bargaining agent for those employees.	*Industrial Relations*
Bargaining Agent , for Members Only	a form of union security in which the employer recognizes the union for its members only.	*Industrial Relations*
Bargaining Collective	Bargaining Collective - See: Collective Bargaining	*Industrial Relations*
Bargaining History	One of the criteria relied on by the National Labor Relations Board in determining the unit appropriate for collective bargaining purposes. It may also have a bearing on the charges of unfair labor practices where there is a claim of refusal to bargain.	*Industrial Relations*
Bargaining Rights	The legal authority of the union certified as the duly authorized bargaining agent to negotiate the terms and conditions of the employment and to act as the agent of the employees to protect those rights in the administration, enforcement, and renegotiation of the collective bargaining contract.	*Industrial Relations*
Bargaining Strength	The relative power positions of management and labor during the negotiating process.	*Industrial Relations*
Bargaining Theory of Wages	An attempt to explain wage payments on the basis of supply and demand for labor. Labor is considered as a commodity whose price fluctuates in the market place on the basis of the bargaining power of employers and workers.	*Industrial Relations*
Bargaining Unit	The group of employees held by, National, State, or Territorial Labor Boards to constitute the unit appropriate for bargaining purposes. Where no official designation or certification is made, it is the unit accepted by the employer for bargaining purposes.	*Industrial Relations*
Bargaining, Area-Wide	Bargaining, Area-Wide—See: Collective Bargaining	*Industrial Relations*
Bargaining, Industry-Wide	Bargaining, Industry-Wide - See: Collective Bargaining, Industry-wide	*Industrial Relations*
Barge	In the oil and gas industry, a barge is an unpowered multipurpose marine vessel. Barges are used as cargo tankers, equipment and supply carriers, crane platforms and support and accommodation bases in offshore drilling, and as submarine pipe-laying vessels.	*Electrical*
Bar-hook	a fork-like trailing bar attached to the back of the last tub on an incline to arrest the journey in the event of a detached or broken coupling, chain or rope. Also called a 'trigger' or a 'devil'.	*Mining*
Baring dirt	Baring dirt—see "Bannocking dirt."	*Mining*
Barite	Natural finely-ground barium sulfate used for increasing the density of drilling fluids.	*Petroleum Engineering*
Barium peroxide (BaO2)	White gray powder. An oxidizing catalyst for various syntheses and polymerization reactions.	*Material Process*
Bariumsulfate or Baryte (BaSO4)	Rhombic white crystals. It is naturally occurring form, used as an inorganic filler.	*Material Process*

Term	Definition	*Industry*
Barrage	Civil Engineering, an artificial obstruction in a watercourse to increase the depth of the water, facilitate irrigation, etc	*Civil Engineering*
Barrel	A unit of volume equal to 42 U.S. gallons.	*Energy*
Barrel	A unit of liquid volume of petroleum oils equal to 42 U.S. gallons or approximately 35 Imperial gallons.	*Lubrication*
Barrel	A unit of volume measurement used for petroleum and its products (7.3 barrels = 1 ton: 6.29 barrels = 1 cubic meter).	*Petroleum Drilling*
Barrels per calendar day	The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see Barrels per Stream Day) to account for the following limitations that may delay, interrupt, or slow down production. 1. the capability of downstream processing units to absorb the output of crude oil processing facilities of a given refinery. No reduction is necessary for intermediate streams that are distributed to other than downstream facilities as part of a refinery's normal operation; 2. the types and grades of inputs to be processed; 3. the types and grades of products expected to be manufactured; 4. the environmental constraints associated with refinery operations; 5. the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and 6. the reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.	*Energy*
Barrels per stream day	The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.	*Energy*
Barren	Said of rock or vein material containing no minerals of value, and of strata without coal, or containing coal in seams too thin to be workable.	*Mining*
Barren Contract	A contract vein, or a place in the contract vein, which has no mineral.	*Mining*
Barren ground	When a seam of coal becomes too thin to work it is said "to become barren ground." (Gloucs. and Bristol.). In other areas it was also known as 'dead ground', or an area that lacks coal or any other valuable mineral.	*Mining*
Barren measures	strata with unproductive seams of coal, e.g. of an unworkable thickness.	*Mining*
Barricading	Enclosing part of a mine to prevent inflow of noxious gasses from a mine fire or an explosion.	*Mining*
Barrier	Blocks airborne sound from entering passenger compartment via an aperture. Example, a piece of sticky elastomer that is pressed on so as to cover a hole.	*Reliability Engineering*
Barrier protection	the protection provided by inhibiting oxidation (rust) by an insoluble topcoating such as zinc, which isolates steel from any electrolytes that would assist the corrosion process	*Materials Process*
Barrier	Something that bars or keeps out. Barrier pillars are solid blocks of coal left between two mines or sections of a mine to prevent accidents due to inrushes of water, gas, or from explosions or a mine fire.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Barrier, Barrier coal, Barrier pillar or Pillar	An area or tract of coal left unworked to separate the workings of one colliery from those of another. The barrier was also left in place to protect a working colliery from the build-up of gas and water in old and abandoned workings. A barrier would often be left in between working districts in collieries for the same purpose.	*Mining*
Barring	a method of securing the sides of rectangular shafts in Scotland where the strata is very strong. Lining was inserted only where the sides of the shaft were not strong enough to stand without support.	*Mining*
Barrings	a set of timber bars and props supporting underground roadways or shafts.	*Mining*
Barrow	the next development in vehicles for transporting coal underground after the sledge. Gang planks were often laid on the floor where it was soft, forming a "barroway."	*Mining*
Barrow way	The underground road along which the barrowmen worked (Newcastle).	*Mining*
barrow	A male hog castrated before sexual maturity.	*Agriculture*
Barrowmen or Hurriers	men who transported coal from the workings to the shaft bottom or some intermediate transfer point underground. The name originates from the time when barrows were used for transporting coal. (Newcastle). –see also Putter.	*Mining*
Barry system	a system of coal face transport in which empty tubs enter by one gate, pass along the face where they are filled and return along the next gate, on a multi entry face. (Mids.).	*Mining*
Bars	these may be of wood or steel and are generally from 4 feet 6 inches to 7 feet in length. They are set as shown with two or more props to hold them to the roof. Compared with props and lids they are more stable, they support greater areas of roof and are in consequence more suitable for supporting broken roof. Wood bars are generally made by sawing props lengthwise so that the bars are half round, but bars of rectangular section are sometimes used. Their widths and thicknesses vary but the average wood bar is 5 inches wide and 2½ inches thick. Steel bars have a corrugated section, so that their resistance to bending is greater than that of flat bars. They are not as easily damaged as wood bars; if bent they can be straightened and reset several times. Steel bars of 'H' section or channel |¯| section may also be used, especially if the bars have to be long. Long bars such as this are frequently used at road heads and at other special places	*Mining*
Barth Premium Plan	A method of wage payment which averages both the piece-rate and time rate in order to arrive at the wages paid. It seeks to compensate both for the amount of production and the time spent on the job.	*Industrial Relations*
Barytes	A filler material prepared from naturally occurring barium sulfate.	*Material Process*
Basal area	The cross-sectional area in square feet of a tree trunk measured at 4.5 feet above the ground.	*Forestry*
Basal till	Unsorted glacial debris at the base of the soil column where it comes into contact with the bedrock below.	*Mining*
Basalt	An extrusive volcanic rock composed primarily of plagioclase, pyroxene and some olivine.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bascule	A device operating like a balance or see saw, esp. an arrangement of a movable bridge by which the rising floor or section is counterbalanced by a weight.	*Civil Engineering*
Base	A material which neutralizes acids. An oil additive containing colloidally dispersed metal carbonate, used to reduce corrosive wear.	*Lubrication*
Base Bill	The base bill is calculated by multiplying the rate from the electric rate by the level of consumption.	*Energy*
Base Bullion	Precious metals contained in lead.	*Mining*
Base camp	Centre of operations from which exploration activity is conducted.	*Mining*
Base Circle	The circle from which an involute tooth curve is generated or developed.	*Gears*
Base gas	The quantity of natural gas needed to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas usually is not withdrawn and remains in the reservoir. All natural gas native to a depleted reservoir is included in the base gas volume.	*Energy*
Base Helix Angle	The angle, at the base cylinder of an involute gear, that the tooth makes with the gear axis.	*Mechanical Engineering*
Base Load	The minimum load experienced by an electric utility system over a given period of time.	*Energy*
Base load capacity	The generating equipment normally operated to serve loads on an around-the-clock basis.	*Energy*
Base load plant	A plant, usually housing high-efficiency steam-electric units, which is normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially constant rate and runs continuously. These units are operated to maximize system mechanical and thermal efficiency and minimize system operating costs.	*Energy*
Base Load Unit	A generating unit that normally operates at a constant output to take all or part of the base load of a system.	*Energy*
Base Metal	The metal to be welded, brazed, soldered, or cut. It is also referred to as parent metal.	*Maintenance and Repair*
Base Number	The amount of acid (perchloric or hydrochloric) needed to neutralize all or part of a lubricant's basicity, expressed as KOH equivalents.	*Lubrication*
Base Number	The amount of acid, expressed in terms of the equivalent number of milligrams of potassium hydroxide, required to neutralize all basic constituents present in 1 g of sample	*Lubrication*
Base Oil	A base oil is a base stock or blend of base stocks used in an API-licensed engine oil.	*Lubrication*
Base Oil Credit	In lubricant cost calculations, the value of the base fluid displaced by the additive package.	*Lubrication*
Base oil interchange	Practice of testing in one base oil and extending the performance level achieved to additional base oils. Guidelines are established by API LC.	*Mechanical, Process, and Operations*
Base Pay	Base Pay - See: Base Rate	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Base period	The period of time for which data used as the base of an index number, or other ratio, have been collected. This period is frequently one of a year but it may be as short as one day or as long as the average of a group of years. The length of the base period is governed by the nature of the material under review, the purpose for which the index number (or ratio) is being compiled, and the desire to use a period as free as possible from abnormal influences in order to avoid bias.	*Energy*
Base Period	the period during which an employee fulfills the employment requirement in order to receive the benefits of the system. This is designed to limit the benefits of those in the labor force.	*Industrial Relations*
Base Pitch	In an involute gear it is the pitch on the base circle or along the line of action. Corresponding sides of involute teeth are parallel curves, and the base pitch is the constant and fundamental distance between them along a common normal in a plane of rotation. The Normal Base Pitch is the base pitch in the normal plane, and the Axial Base Pitch is the base pitch in the axial plane.	*Gears*
Base Rate	The portion of the total electric or gas rate covering the general costs of doing business unrelated to fuel expenses.	*Energy*
Base Rate of Pay	Same as the basic hourly rate. The "regular rate" of pay on which overtime (time one and a half) is computed under the Fair Labor Standards Act and the Walsh-Healey Public Contracts Act.	*Industrial Relations*
Base Station	A base station (or base station) is a wireless transceiver at a fixed location (e.g., atop a telephone pole) which is part of a wireless communications network, e.g., the cell phone network. Typically, the base station connects to any cell phones in its area and relays the calls to the wired network.	*Electrical Engineering*
Base Stock	The base fluid, usually a refined petroleum fraction or a selected synthetic material, into which additives are blended to produce finished lubricants.	*Lubrication*
Base Transceiver Station	The stationary component of a cellphone system includes transmit-receive units and one or more antennae. The combined systems (often including multiple co-located systems and ganged directional antennae) is called a cell-site, a base station, or a base transceiver station (BTS).	*Electrical Engineering*
Base valve mounting	The valve is mounted to plate which has top and/or side ports.	*Mechanical, Process, and Operations*
Base Year	The first year of the period of analysis. The base year does not have to be the current year.	*Energy*
Baseboard heater	As a type of heating equipment, a system in which either electric resistance coils or finned tubes carrying steam or hot water are mounted behind shallow panels along baseboards. Baseboards rely on passive convection to distribute heated air in the space. Electric baseboards are an example of an "Individual Space Heater."	*Energy*
BASEEFA	British Approvals Service for Electrical Equipment in Flammable Atmospheres. A certification body for electrical and electronic equipment for use in hazardous areas. In 1987 it was brought together with the Mining Equipment Certification Service to form the Electrical Equipment Certification Service (EECS).	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Baseflow	When groundwater flows to surface water.	*Petroleum Engineering*
Baseline	The electrical signal from a sensor when no measured variable is present. Often referred to the output at no-load condition.	*Electrical Engineering*
Baseline characteristics	Values of demographic, clinical and other variables collected for each participant at the beginning of a trial, before the intervention is administered.	*Quality Engineering*
Baseline Forecast	A prediction of future energy needs which does not take into account the likely effects of new conservation programs that have not yet been started.	*Energy*
Baseline Measurements	A set of measurements (or metrics) that seeks to establish the current or starting level of performance of a process, function, product, firm, etc. Baseline measurements are usually established before implementing improvement activities and programs.	*Maintenance*
Baseline spectrum	A vibration spectrum taken when a machine is in good working condition (new or just overhauled), used as reference for future monitoring or analysis.	*Reliability Engineering*
Baseload Capacity	Generating equipment operated to serve loads 24-hours per day.	*Energy*
Base-load power plant	To maintain power supplies as efficiently as possible, some power stations run near to full capacity all the time, while others are brought online or increase production temporarily to meet transient peaks in demand for electricity. The plants that maintain constant levels of production tend to be those that rely on lower-cost fuels and are known as "base-load" power plants.	*Electrical*
Basement rocks	The underlying or older rock mass. Often refers to rocks of Precambrian age which may be covered by younger rocks.	*Mining*
Bases	Compounds that react with acids to form salts plus water. Alkalis are water-soluble bases, used in petroleum refining to remove acidic impurities. Oil soluble bases are included in lubricating oil additives to neutralize acids formed during the combustion of fuel or oxidation of the lubricant.	*Lubrication*
Bashing	to build airtight stoppings using colliery waste. - see Stoppings, or the complete stowing of roadways or old workings.	*Mining*
Basic	A high-level programming language designed at Dartmouth College as a learning tool. Acronym for Beginner's All-purpose Symbolic Instruction Code.	*Electrical*
Basic rocks	Igneous rocks that are relatively low in silica and composed mostly of dark-colored minerals.|	*Mining*
Basic Service	The four charges for generation, transmission, distribution and transition that all customers must pay in order to retail their electric service.	*Energy*
Basic Services	Services that are necessary for the physical delivery of service, including generation, transmission and distribution.	*Energy*
Basic Spacing between Centers	Is a term that appears on IC package drawings in reference to dimensions between pins.	*Electrical Engineering*
Basic Switch	A self contained switching unit. It can be used alone, gang: mounted, built into assemblies or enclosed in metal housings.	*Electrical Engineering*
Basic Thread Profile	This is the theoretical profile of external and internal threads with no manufacturing tolerance applied.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Basic Transportation Reference	The basic transportation section of the U.S. Government Test Specification MIL-STD-810D, Method 514.3, Paragraph I-3.2.1, Page 514.3-5. Basic transportation defines the test profiles that have been defined for equipment that is shipped as secured cargo; by land, by sea or by air. The test levels are based upon land transport stress levels because these are higher than stresses imposed by air or sea transportation environments.	*General Engineering*
Basic Workday	the number of hours set out in the collective bargaining agreements or statutory overtime provisions, in excess of which premium payments are made. The 8-hour day is widely accepted as the standard or basic work-day.	*Industrial Relations*
Basic Workweek	most collective bargaining agreements specify eight hours as the basic workday and 40 hours as the basic workweek. Overtime or premium pay is provided for hours worked in excess of those specified.	*Industrial Relations*
Basidial stage (basidium)	A spore stage of the rust fungi; a specialized structure in the Basidiomycetes bearing basidiospores.	*Forestry*
Basidiocarps	Sexual fruiting structure in the Basidiomycetes; conks, sporophore, mushrooms, etc.	*Forestry*
Basin	(See Cold Water Basin and Distribution Basin).	*Facility Engineering*
Basin curb	The top level of the retaining wall of the cold water basin; usually the datum point from which tower elevation points are measured.	*Facility Engineering*
Basin sump	(See Sump).	*Facility Engineering*
Basket	A shallow pan into which smalls were raked by the fillers for loading into the tubs (S. Staffs.), or before the introduction of the cage, baskets were used for winding—see Corfe and Corve.	*Mining*
Basket (measure)	A common measure in Lancashire in the 17th and the 18th centuries. Similar to a "corf" or "corve." It contained approximately 1.1 cwt of coal. There were eight baskets to the load and ten loads equaled one rook, i.e., 88 cwt or 4.4 tons.	*Mining*
Basket Of Socket	The conical portion of a socket into which a broomed-rope-end is inserted and then secured.	*Wire Rope & Cable*
Basket ventilation	a system of ventilating a mine using the principle of hot air rising. This was achieved by hanging an iron basket containing burning coals in one of the two shafts or in a section of a bratticed shaft. The hot air rising in the shaft caused an updraft which drew the foul air out of the mine which was replaced by clean air descending the other shaft or section. The first recorded use of this system was in a colliery at Cheadle, North Staffs in about the 1650's.	*Mining*
Bass Boost	Circuitry that boosts the bass response of the amplifier, improving audio reproduction, especially when using inexpensive headphones.	*Electrical Engineering*
Bass or Bast	Black carbonaceous shale. (Yorks., Lancs. and Staffs.); or a thin band of cannel in a seam. (S. Wales.).	*Mining*
Basset or Basset edge	the point where a coal seam comes to the surface or 'outcrops'.	*Mining*
Bast	Bast—see Bass.	*Mining*
Bastard	Inferior coal, which burns to a white powdery slate (Yorks., Lancs., and Staffs.); or dirt in coal. (Yorks., Lancs., and Staffs.); or meaning 'impure'.	*Mining*

Term	Definition	*Industry*
Bastard fireclay	Underclay or seatearth of a coal seam which is unsuitable for manufacturing firebricks.	*Mining*
Bastard Whin	Very hard sandstone, but not so flinty as to be called "whin," (N. East).	*Mining*
Bat, or Bats, Batt or Battice	Carbonaceous shale or stone in coal. (Mids); or alternative term for 'Bass'.	*Mining*
Batch	Any quantity of material handled or considered as a "unit" in processing. i.e., any sample taken from the same 'batch' will have the same properties and/or qualities.	*Lubrication*
Batch reactor	Reactor characterized by its operation, which means that the reactor does reaches steady state.	*Chemical*
Bate	to excavate the floor material of a roadway to re-grade it after floor lift (S. Staffs.)—see Dint.	*Mining*
Batholith	A large mass of igneous rock extending to great depth with its upper portion dome-like in shape. Similar, smaller masses of igneous rocks are known as bosses or plugs.	*Mining*
Battery Backup	A feature of microprocessor supervisory circuits and some power supplies to switch between a main power source and a battery.	*Electrical Engineering*
Battery Freshness Seal	A feature in microprocessor supervisory circuits which disconnects a backup battery from any down-stream circuitry until VCC is applied the first time. This keeps a backup battery from discharging until the first time a board is plugged in and used, and thus preserves the battery life.	*Electrical Engineering*
Battery Fuel Gauge	A feature or device that measures the accumulated energy added to and removed from a battery, allowing accurate estimates of battery charge level.	*Electrical Engineering*
Battery Monitor	A feature that monitors the voltage on a battery and indicates when the battery is low. It is usually implemented using a comparator to compare the battery voltage to a specified level. May also include functions such as charging, remaining capacity estimation, safety monitoring, unique ID, temperature measurement, and nonvolatile (NV) parametric storage.	*Electrical Engineering*
Battery Switchover	A circuit that switches between the higher of a main supply and a backup battery.	*Electrical Engineering*
Battery Tests	A series or combination of examinations to measure a person's ability in a particular in a particular area or his potential to perform certain work.	*Industrial Relations*
Batt-picking	an old term for picking out stone by hand in the screening process. -see also Crow-picking.	*Mining*
Baud	A unit of data transmission speed equal to the number of bits (or signal events) per second; 300 baud = 300 bits per second.	*Electrical*
Baud Rate	The number of bits or discrete pieces of information transmitted per second.	*Electrical Engineering*
Baulk	a partial washout in the top part of a coal seam, often filled with sandstone; also a strong timber beam; or an interruption of the coal seam. (N. East).	*Mining*
Baum pots	calcareous concretions in the coal or in the roof. (Lancs.).	*Mining*
Baum washer or Baum jig	a system for cleaning run of mine coal invented by Baum in 1892. A well known type of coal jig washer in which the water pulsation is obtained by admitting compressed air above the water level at one side of the washer box instead of the operation of plungers as in other jig washers.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bauxite	A rock made up of hydrous aluminum oxides; the most common aluminum ore.	*Mining*
Bay	The volume between adjacent columns.	*Facility Engineering*
Bay Ridge Case	Supreme Court Case involving overtime payments under the Fair Labor Standards Act. The court held that premium payments under the collective bargaining agreements were to be considered in computing the basic rate of pay ("regular rate") for over-time computation.	*Industrial Relations*
Bayes' theorem	A probability theorem used to update the probability of an event in the light of a piece of new evidence. A common application is in diagnosis, where the prior probability of disease, obtained from population data, is updated to a posterior probability in the light of a positive or negative result from a diagnostic test.	*Quality Engineering*
Bayesian statistics	An approach to statistics based on application of Bayes' theorem that can be used in single studies or meta-analysis. A Bayesian analysis uses Bayes' theorem to transform a prior distribution for an unknown quantity (e.g. an odds ratio) into a posterior distribution for the same quantity, in light of the results of a study or studies. The prior distribution may be based on external evidence, common sense or subjective opinion. Statistical inferences are made by extracting information from the posterior distribution, and may be presented as point estimates, and credible intervals (the Bayesian equivalent of confidence intervals).	*Quality Engineering*
BBF	BBF - See: Boilermakers, Iron Shipbuilders, Blacksmiths, Forgers and Helpers; International Brotherhood of (AFL-CIO)	*Industrial Relations*
bbl	The abbreviation for barrel(s).	*Energy*
bbl	Abbreviation used for barrel of oil, which is equal to 42 US gallons or 159 Liters of liquid.	*Petroleum Drilling*
bbl	One barrel of oil; 1 barrel = 35 Imperial gallons (approx.), or 159 liters (approx.); 7.5 barrels = 1 ton (approx.); 6.29 barrels = 1 cubic meter.	*Petroleum Drilling*
bbl/d	The abbreviation for barrel(s) per day.	*Energy*
bbl/sd	The abbreviation for barrel(s) per stream day.	*Energy*
BCD, Buffered	Binary-coded decimal output with output drivers, to increase line-drive capability.	*Electrical*
BCD, Parallel	A digital data output format where every decimal digit is represented by binary signals on four lines and all digits are presented in parallel. The total number of lines is 4 times the number of decimal digits.	*Electrical*
BCD, Serial	A digital data output format where every decimal digit is represented by binary signals on four lines and up to five decimal digits are presented sequentially. The total number of lines is four data lines plus one strobe line per digit.	*Electrical*
BCD, Three-State	An implementation of parallel BCD, which has 0, 1 and high-impedance output states. The high-impedance state is used when the BCD output is not addressed in parallel connect applications.	*Electrical*
bcf	The abbreviation for billion cubic feet.	*Energy*
bcf	Billion cubic feet; 1 bcf = 0.83 million tons of oil equivalent.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
bcm	Billion cubic meters (1 cubic meter = 35.31 cubic feet).	*Petroleum Drilling*
BCW	BCW—See: Bakery and Confectionary Workers' international Union of America (Ind)	*Industrial Relations*
BDM	See Breakdown Maintenance.	*Maintenance*
BDV	Blow Down Valve—A small ball valve that is installed on the aboveground end of an extended drain line. This valve also serves to vent body cavity pressure in the "block and bleed" mode. See "Block and Bleed;" "Extended BDV."	*Mechanical*
Beach Mark	When studying the surface of a fracture, many times there are a series of concentric half-moon shaped lines; they can also be nearly straight and parallel. These lines indicate where the crack front actually stopped in its progress. The crack does not start again until the load, which initiated the crack in the first place, is applied again. If the load is removed then the crack stops and a new mark is made. The term came from the observation one can see on an ocean beach as the tide goes out and the level of the ocean lowers, any debris is left at the last previous high level. All of this debris being placed at the same ocean level creates a line of debris, or to coin the phrase "beach mark." The beach mark is always oriented perpendicular to the direction of the stress, so a failure analyst can tell exactly how the failed part was loaded and where the crack started. Another way to look at how crack growth works versus the beach marks left, is to imagine the circular ripple formed in a calm bucket of water when a small pebble is dropped into it. The pebble creates a circular wave which emanates outward from the epicenter. All of this information is very useful in failure analysis.	*Reliability Engineering*
Beachleaf marl	finely laminated brown marls, possibly of glacial origin. (Lancs.).	*Mining*
Bead	The area of the mounted tire which seats against the wheel.	*Mechanical Engineering*
Bead Seat	The position where the tire rests and seals on the inside of the rim.	*Mechanical Engineering*
Beam	(See Joist).	*Facility Engineering*
Beam building	Beam building - The creation of a strong, inflexible beam by bolting or otherwise fastening together several weaker layers. In coal mining this is the intended basis for roof bolting.	*Mining*
Beans	descriptive name for very small coals, the size of a bean.	*Mining*
Bear market	Term used to describe market conditions when share prices are declining.	*Mining*
Bearers	in early coal mining, these were boys, girls or women who transported coal underground in baskets on their backs, i.e. the 'bearing system'.	*Mining*
Bearing	A machine part in or on which a journal, shaft, axle, pin, or other part rotates, oscillates, or slides.	*Equipment*
Bearing	A support or guide by means of which a moving part such as a shaft or axle is positioned with respect to the other parts of a mechanism.	*Lubrication*
Bearing copper-based alloys	Often called "yellow brasses", when in contact with sea water or fresh water that is high in oxygen and carbon dioxide. (ASTM B61 and B62 are "red brasses" and not susceptible to dezincification.)	*Mechanical*
Bearing plate	A plate used to distribute a given load. In roof bolting, the plate used between the bolt head and the roof.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bearing Stress	The surface pressure acting on a joint face directly as a result of the force applied by a fastener.	*Maintenance*
Bearing System	Bearing System, -see Bearers.	*Mining*
Beat Frequency	Beat frequencies are periodic vibrations that result from the addition and subtraction of two or more sinusoids. For example, in the case of two turbine aircraft engines that are rotating at nearly the same frequency but not precisely at the same frequency; Four frequencies are generated - (f1) the rotational frequency of turbine one, (f2) the rotational frequency of turbine two, (f1 + f2) the sum of turbine rotational frequencies one and two, and (f1 - f2) which is the difference or "beat" frequency of turbines one and two. The difference of the two frequencies is the lower frequency and is the one that is "felt" as a beat or "wow" in this case.	*Electronic Process*
Beater	an iron rod used for stemming or tamping a shot hole prior to blasting.	*Mining*
Beating or beating up	Beating or beating up, - see baiting.	*Mining*
Beche	an instrument having some resemblance to the extinguisher of a candle, it was used for the purpose of extracting the bottom portion of a broken set of rods from a borehole or shothole.	*Mining*
Becket	An end attachment to facilitate wire rope installation.	*Wire Rope & Cable*
Becket Loop	A loop of small rope or strand fastened to the end of a larger wire rope. Its function is to facilitate wire rope installation.	*Wire Rope & Cable*
Bed	A foundation surface of earth or rock supporting a track, pavement, or the like. Example: a gravel bed for the roadway.	*Civil Engineering*
Bed Length	Length of bed sections only required to make up conveyor excluding pulleys, etc., that may be assembled at ends.	*Manufacturing*
Bed Width	Refers to the overall width of the bed section.	*Manufacturing*
Bedding	The arrangement of sedimentary rocks in layers.	*Mining*
Bedding Plane	In sedimentary or stratified rocks, the division planes that separate the individual layers, beds, or strata.	*Petroleum Engineering*
Bedeaux Wage Plan	a wage incentive plan popular in the 1920's, named after its sponsor, Charles Bedeaux, French engineer and industrialist. The plan gave emphasis to the movement to increase production through use of standards and techniques of measurement.	*Industrial Relations*
Bedford Cut Stone Co. v. Journeymen Stone Cutters' Association	A decision of the Supreme Court in 1927 holding the Journeymen Stone Cutters union in violation of the Sherman Antitrust Act. In issue was a union which provided that no member should work on stone cut by non-union labor.	*Industrial Relations*
Bedload	The part of the total stream load that is moved on, or immediately above, the stream bed, such as the larger or heavier particles (boulders, pebbles, gravel) transported by traction or saltation along the bottom; the part of the load not continuously in suspension or solution.	*Petroleum Engineering*
Bedrock	Solid rock forming the earth's crust, frequently covered by overburden or water.	*Mining*
Beef cattle	breeds commonly raised in the United States -	*Agriculture*

Term	Definition	*Industry*
Beefmaster	A breed developed by systematic crossing of Hereford, Shorthorn and Brahman cattle with traits especially valuable in the harsh environment of South Texas. Genetically, Beefmasters are half English (25% each of Hereford and Shorthorn) and half Brahman. Beefmasters were recognized by the U.S. Department of Agriculture as a pure breed in 1954. The registry is maintained by Beefmaster Breeders United.	*Agriculture*
Beehive pit	Beehive pit, -see Bell pit.	*Mining*
Beeswax	An important natural wax obtained from bees honey combs, m.p. near 140°C (284°F).	*Material Process*
Beethoven	a dynamo-condenser type of shot firing device.	*Mining*
Beetle	a small locomotive engine driven by compressed air, the invention of Messrs. Lishman and Young, (N. East).	*Mining*
Beetle Trade	name for urea-formaldehyde molding plastics.	*Material Process*
Beginner's Rate	the scheduled pay for an inexperienced employee. More generally set up as a trainee rate. The regular rate for the job is received as soon as the minimum training period is completed.	*Industrial Relations*
Belgian Draft Horse	By far the most common draft horse in America . There are more Belgians than all other draft breeds combined. They are the direct descendants of the "Great Horse" of medieval times, which carried armored knights into battle. They were known in Europe in the time of Caesar. According to the Guinness Book of World Records, the largest horse in the world was a Belgian stallion. It stood 19.2 hands (6'6") at his withers and weighed over 3,200 pounds.	*Agriculture*
Bell mould	Bell mould, -see Caldron bottom.	*Mining*
Bell nipple	An enlarged pipe at the top of a casing string that serves as a funnel to guide drilling tools into the top of the well.	*Petroleum Drilling*
Bell pit	One of the earliest methods for working coal that was lying very near to the surface. It consisted of short shafts from the surface to the coal seam, belled out at the bottom as far as possible until it became unsafe. When it became too dangerous to work the miners would abandon it and sink another nearby. The refuse from the new shaft would often be thrown into the old one. Also called a 'beehive pit'.	*Mining*
Bell wires	two bare wires that covered the length of a haulage system, which, when held together made a bell ring as a signal to the haulage driver.	*Mining*
Belleville spring	A spring resembling a dished washer, used in some ball valves to push the seats against the ball.	*Mechanical*
Bell-Horses	Bell-Horses - See: Pacers	*Industrial Relations*
Bellite	a 'third class' explosive which could only be exploded by a special detonator composed of fulminate of mercury. This explosive comprised 80% ammonium nitrate and 20% dinitrobenzol and obviated the risks from explosion by heat or sparks or by any ordinary shock. The invention of Carl Lamm, said to act like the best slow powders and was very useful for coal-mining.	*Mining*
Bellmen	men who worked on the conveyor belts or rope haulage signaling system.	*Mining*
Bellows Seal	A type of mechanical seal which utilizes bellows for providing secondary sealing and spring-type loading.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bellows Seal Bonnet	A bonnet which uses a bellows for sealing against leakage around the valve plug stem.	*Industrial Engineering*
Bell-Welded Pipe	Furnace-welded pipe produced in individual lengths from cut-length skelp, having its longitudinal butt joint forge-welded by the mechanical pressure developed in drawing the furnace-heating skelp through a cone-shaped die (commonly known as a welding bell), which serves as a combined forming and welding die.	*Maintenance and Repair*
Belo Wage Plan	a wage plan held by the Supreme Court to meet the overtime provisions of the Fair Labor Standards Act. The individual or collective bargaining contract provides a constant guaranteed weekly wage for fluctuation work weeks.	*Industrial Relations*
Belt	A broad, flexible strip of rubber, canvas, wood, etc., moved along the surface of a fresh concrete pavement to put a finish on it after it has been floated.	*Civil Engineering*
Belt clamp	a device constructed from lengths of timber which were clamped to the conveyor belt either side of a damaged joint. The clamps were then drawn together by using two "Sylvesters" thereby taking the tension out of the conveyor belt between the clamps. The belt-man would then cut out the damaged joint and remake a new one.	*Mining*
Belt Conveyor	An endless fabric, rubber, plastic, leather, or metal belt operating over suitable drive, tail end and bend terminals and over belt idlers or slider bed for handling bulk materials, packages, or objects placed directly upon the belt.	*Equipment*
Belt extension	adding lengths of structure to a conveyor belt to make it longer as the coal face or roadway advances.	*Mining*
Belt fastener	A conveyor belt consists of a number of lengths of belting joined together so that it is endless. The joints must be as strong as they can be made, and several types of commercial coupling or belt fastener were used, such as Bristol, Hayden Nilos and Comet.	*Mining*
Belt idler	A roller, usually of cylindrical shape, which is supported on a frame and which, in turn, supports or guides a conveyor belt. Idlers are not powered but turn by contact with the moving belt.	*Mining*
Belt or Belt conveyor	a conveyor belt, a moving endless belt. A series of conveyors, in tandem, would be used to carry coal from the face to the shaft or in some cases up a drift to the surface. It was driven by a drum to which it returns after passing around a tail pulley. Belt conveyors could vary in length from a few yards to over a mile. –see Cable Belt Conveyor. Conveyor belting was made of layers, or plies, of woven cotton (called cotton duck) which had been impregnated with rubber. These layers are enclosed in a rubber cover. It is the cotton duck that enables the belt to withstand tension. The rubber protects the cotton from damage.	*Mining*
Belt Scraper	A blade or brush caused to bear against the moving conveyor belt for the purpose of removing material sticking to the conveyor belt.	*Manufacturing*
Belt Speed	The length of belt, which passes a fixed point within a given time. It is usually expressed in terms of "feet per minute".	*Manufacturing*
Belt take-up	A belt pulley, generally under a conveyor belt and in by the drive pulley, kept under strong tension parallel to the belt line. Its purpose is to automatically compensate for any slack in the belting created by start-up, etc.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Belt-cleaner	a man employed to clear up the spillage alongside and below the conveyor system. A necessary job to prevent fires caused by friction, or a device fixed to a conveyor belt to scrape dirt from the surface of the belt as it passes.	*Mining*
Belted Bias Tire	A bias tire with additional reinforcing belt(s) between the casing plies and the tread	*Mechanical Engineering*
Belted Galloway	A beef breed notable for its unique appearance of a broad white belt, or sheet, around the middle. The rest of the animal may be black, red or dun color. Breeders often refer to the breed as "Belties." These polled (hornless) cattle developed during the 16th Century in the former Galloway district of Scotland. The breed is known for its exceptionally lean and flavorful meat and a double coat of hair that allows it to survive in very harsh climates.	*Agriculture*
Belt-men	the maintenance team responsible for the underground conveyor system.	*Mining*
Belts	an underground conveyor system.	*Mining*
Ben or Benn	a queue of men waiting to ride the cage. (Scot.).	*Mining*
Bench	One of two or more divisions of a coal seam separated by slate or formed by the process of cutting the coal.	*Mining*
Bench Claims	Minerals found in narrow tableland on hill-side, above a river.	*Mining*
Bench sample	a face or channel sample taken of just that contiguous portion of a coalbed that is considered practical to mine, also known as a "bench;" For example, bench samples may be taken of minable coal where impure coal that makes up part of the geologic coalbed is likely to be left in the mine, or where thick partings split the coal into two or more distinct minable seams, or where extremely thick coalbeds cannot be recovered by normal mining equipment, so that the coal is mined in multiple passes, or benches, usually defined along natural bedding planes.	*Energy*
Bench Set	The proper definition for bench set is the inherent diaphragm pressure range, which defines the high and low values for pressure applied to the diaphragm to produce rated valve plug travel with atmospheric pressure in the valve body. This test is often performed on a work bench in the instrument shop prior to placing the valve into service and is thus known as Bench Set.	*Industrial Engineering*
Benching	Breaking up the bottom coals using wedges when the holing has been made in the middle of the seam.	*Mining*
Benchmarking	The Process Of Comparing Performance With Other Organizations, Identifying Comparatively High Performance Organizations, And Learning What It Is They Do That Allows Them To Achieve That High Level Of Performance.	*Plant Engineering*
Benchmarking	A continuous process where a company measures and compares its functions, systems and practices against those of another entity. In doing so, it can identify gaps in its performance, quality, throughput, etc., and develop game plans to close the gaps.	*Reliability Engineering*
Benchmarking (Competitive)	The process of consistently researching new ideas, methods, practices, and processes, and adapting, adopting, and implementing their best features. It is the continuous procedure of measuring one's products, services, and practices against competitive "best in class" companies or organizations for the purpose of seeking improvement.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Benchmarking (External)	The process of consistently researching new ideas, methods, practices, and processes, and adapting, adopting, and implementing their best features. It is the continuous procedure of measuring one's products, services, and practices against external companies or organizations for the purpose of seeking improvement. See Key Performance Indicators.	*Maintenance*
Benchmarking (Generic)	The process of consistently researching new ideas, methods, practices, and processes, and adapting, adopting, and implementing their best features. It is the continuous procedure of measuring one's products, services, and practices against companies or organizations that carry out the same or similar functions (e.g. warehousing) for the purpose of seeking improvement. See Key Performance Indicators.	*Maintenance*
Benchmarking (Internal)	The process of consistently researching new ideas, methods, practices, and processes, and adapting, adopting, and implementing their best features. It is the continuous procedure of measuring one's products, services, and practices within the company for the purpose of seeking improvement. See Key Performance Indicators.	*Maintenance*
Bend	A bend is a pipe fitting much like an elbow, but with a longer radius.	*Industrial*
Bend-away	the order given by the person in charge for the cage to be drawn to bank, (N. East).	*Mining*
Bending moment	A system of internal forces whose resultant is a moment. This term is most commonly used to refer to internal forces in beams.	*Engineering Physics*
Bending Stress	Stress that is imposed on the wires of a strand or rope by a bending or curving action.	*Wire Rope & Cable*
Bend-up	an order given by the person in charge to raise the cage slowly, so that it may be instantly stopped on the order "Hold!" being given, (N. East).	*Mining*
Beneficiate	To concentrate or enrich; often applied to the preparation of iron ore for smelting.	*Mining*
Beneficiation	The treatment of mined material, making it more concentrated or richer.	*Mining*
Benefit Plans	Programs developed by many unions to protect their members from special hardships, due to unemployment, sickness, accidents, disability, and other risks of workers in modern society.	*Industrial Relations*
Benefit Year	the period of time set in unemployment compensation laws to permit a person covered by the law to meet one of the qualifications for benefit payments.	*Industrial Relations*
Bent	Civil Engineering, a transverse frame as of a bridge or an aqueduct designed to support either vertical or horizontal loads.	*Civil Engineering*
Bentonite	a colloidal clay, largely made up of the mineral sodium montmorillonite, a hydrated aluminum silicate. Because of its expansive property, bentonite is commonly used to provide a tight seal around a well casing.	*Chemical*
Benzanilide (C6H5CONHC6H5)	Colorless leaflets from alcohol.	*Material Process*
Benzene	An unsaturated, six-carbon ring, basic aromatic compound.	*Petroleum Engineering*
Benzene (C_6H_6)	A inflammable liquid. A solvent especially for varnishes and lacquers and starting point in the synthesis of many materials used in plastics, notably aniline, chlorobenzene for phenol, and benzene disulfonic acid for resorcinol.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Benzene (C_6H_6)	An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent in the manufacture of detergents, synthetic fibers, petrochemicals, and as a component of high-octane gasoline.	*Energy*
Benzine	A solvent mixture of paraffin hydrocarbons less volatile than gasoline but more so than kerosene. Obtained by the fractional distillation of petroleum, to be distinguished from benzene, an aromatic hydrocarbon.	*Material Process*
Benzophenone (C6H5)2CO	A. Stable, colorless monoclinic prisms. A useful plasticizer.	*Material Process*
Benzoyl peroxide (C6H5CO)2O2	Colorless rhombic crystals from ether. An oxidant and catalyst for polymerization reactions of several important synthetic resins, notably acrylic and vinyl resins.	*Material Process*
Benzoyl acetone (C6H5COCH2COCH3)	A colorless liquid, plasticizer.	*Material Process*
Benzyl cellulose	The benzyl ester of cellulose, adaptable for use as a plastic and in coatings.	*Material Process*
Bergoff Technique	technique ascribed or credited to Pearl L. Bergoff, one of the most notorious strike-breakers in American history. He provided professional services to assist employers in preventing unionism and where it had obtained a foothold to dispose of it.	*Industrial Relations*
Berkshire	A breed of hogs that originated in Berks, England . It was introduced to the United States in 1823. The American Berkshire Association registers the breed.	*Agriculture*
Berm	a sloped wall or embankment (typically constructed of earth, hay bales, or timber framing) used to prevent inflow or outflow of material into/from an area.	*Chemical*
Bernal model	Representation of the atomic structure of an amorphous metal as a connected set of polyhedra.	*Material Process*
Bernouilli's Theory	If no work is done on or by a flowing, frictionless liquid, its energy, due to pressure and velocity, remains constant at all points along the streamline.	*Lubrication*
Beryllia	BeO (Beryllium Oxide), a high-temperature mineral insulation material; toxic when in powder form.	*Electrical*
Beryllia—BeO (Beryllium Oxide)	A high-temperature mineral insulation material; toxic when in powder form.	*Electronic Process*
Bessemer	An iron ore with a very low phosphorus content.	*Mining*
Best	A line midway between two parallel straight lines enclosing all output vs. pressure values.	*General Engineering*
Best Bu	A term used to imply that a purchase represents an overall combination of quality, price, and various elements of required service that in total are optimal relative to the firm's needs.	*Procurement*
Best Practice	A process, technique or innovative use of resources that has a proven record of success in providing significant improvement in cost, schedule, quality, performance, safety, environment or other measurable factors that impact the health of an organization.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Best practices	Management practices or techniques recognized to be the most effective and practical means to develop the resource, while minimizing adverse environmental and other effects.	*Petroleum Engineering*
Beta	The ratio of the diameter of a pipeline constriction to the unconstricted pipe diameter.	*General Engineering*
Beta Rating	The method of comparing filter performance based on efficiency. This is done using the Multi-Pass Test which counts the number of particles of a given size before and after fluid passes through a filter.	*Lubrication*
Beta-Ratio	The ratio of the number of particles greater than a given size in the influent fluid to the number of particles greater than the same size in the effluent fluid, under specified test conditions (see "Multi-Pass Test").	*Lubrication*
Between Rail Width	(BR) referred to as the distance between the conveyor frame rails on a roller bed, live roller or gravity type conveyor. Also referred to as (BF) Between Frame.	*Manufacturing*
Bevel	A type of edge or end preparation.	*Maintenance and Repair*
Bevel Angle	The angle formed between the prepared edge of a member and a plane perpendicular to the surface of the member.	*Maintenance and Repair*
Bevel Cutting	cutting at an angle other than a right angle between two lines or surfaces	*Petroleum Drilling*
Bevel Gear	A straight-toothed gear with the teeth cut on sloping faces and the gear shafts at an angle (normally a right angle)	*Lubrication*
Bevel gear operator	Device facilitating operation of a gate or globe valve by means of a set of bevel gears having the axis of the pinion gear at right angles to that of the larger ring gear. The reduction ratio of this gear set determines the multiplication of torque achieved.	*General Mechanical*
Bevel washer	A metal fitting used to accommodate through-bolts to angular position of a diagonal member, usually connecting to columns or other framework members.	*Facility Engineering*
Bevin Boys	During WW2, the shortage of manpower in the mines resulted in the Ministry of Labour, (Minister: Ernest Bevin), inaugurating a policy of drafting men of military age into the mines. From July 1943, the draftees for the mines were chosen by ballot and a number of men already serving with the forces were given, and took the option of working in the mines.	*Mining*
Bevin Shift	a colloquialism for idle shifts which, with the help of too easily obtained medical certificates, qualified the miner for the guaranteed weekly wage.	*Mining*
Beyond-the-Rails	A feature of amplifiers that allows input or output voltages to exceed the supply rails.	*Electrical Engineering*
BFCSD	BFCSD - See: Brewery, Flour, Cereal, Soft drink and Distillery Workers of America; International Union of United (AFL-CIO)	*Industrial Relations*
BHC	BHC - See: Barbers, Hairdressers, Cosmetologists and Proprietors' International Union of America; Journeymen (AFL-CIO)	*Industrial Relations*
BHN	Abbreviation for Brinell Hardness Number. (New abbreviation is now:- HBW).	*Petroleum Engineering*
BHP	(Abbr) (See Brake Horsepower).	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
bhp-hr	brake horsepower hour	*Petro-Chemical Abbreviations*
BIA	Boating Industry Association (now NMMA)	*Petro-Chemical Abbreviations*
BIAS	A very low-level DC current generated by the panel meter and superimposed on the signal. This current may introduce a measurable offset across a very high source impedance.	*General*
Bias (Syn systematic error)	Deviation of results or inferences from the truth, or processes leading to such deviation. See also Referral Bias, Selection Bias.	*Analysis*
BIAS Current	A very low-level DC current generated by a panel meter and superimposed on a signal. This current may introduce a measurable offset across a very high source impedance.	*Electrical*
Bias prevention	Aspects of the design or conduct of a study designed to prevent bias. For controlled trials, such aspects include randomization, blinding and concealment of allocation. See also: Concealment of allocation, Internal validity, Quality score Also called: Methodological quality	*Quality Engineering*
Bias Tire	A tire built with two or more casing plies, which cross each other in the crown at an angle of 30 to 45 degrees to the tread centerline.	*Mechanical Engineering*
Biasmeas	Used here to represent the bias of a measurement procedure relative to a comparative method or a comparative group in proficiency testing.	*Quality*
Bibbley Rock	a conglomerate (N. Staffs.).	*Mining*
Bicarbonate alkalinity	In a water solution, the presence of ions resulting from the hydrolysis of carbonates when these salts react with water. A strong base and a weak acid are produced and the solution is alkaline. Its formula is HCO3-, but its concentration is usually denoted as ppm as CaCO3.	*Chemical Engineering*
Bid	In purchasing, a bid can be an offer to sell or an offer to buy. "Submittal response", "bid response", "proposal" are used interchangeably and refer to seller's documents and attachments in response to a bid request (i.e., Request for Proposal or Request for Quote).	*Procurement*
Bidding	a procedure for permitting employees of a company to make known their interest in a vacant position.	*Industrial Relations*
Bi-Di's	bi-directional shearers, capable of cutting the coal in both directions along the coal face.	*Mining*
Bidirectional	The device accommodates signals traveling either direction though a single channel.	*Electrical Engineering*
Bidirectional Differential Pressure Sensor	A differential pressure sensor allowing the greater input pressure to be applied to either pressure port.	*Electrical Engineering*
Biennial	Plants that require two growing seasons to complete their life cycle.	*Agriculture*
BIFACIAL NECROSIS	Death of plant tissues, extending from the upper to the lower leaf surface.[1]	*Forestry*
Bi-fuel vehicle	A motor vehicle that operates on two different fuels, but not on a mixture of the fuels. Each fuel is stored in a separate tank.	*Energy*
Bifunctional Polymer	with two reaction sites for each mer, resulting in a linear molecular structure.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bifurcated Contact	A movable or stationary contact which is forked or divided to provide two pairs of mating contact surfaces connected in parallel, instead of a single pair of mating surfaces.	*Electrical Engineering*
Big bear	A big bear is a hitch (see hitch) that lasts a minimum of 50 straight days.	*Petroleum Drilling*
Big Four	the major non-affiliated railroad brotherhoods which dominate the railroad industry. The big four include: The Brotherhood of Locomotive Engineers, The Brotherhood of Locomotive Firemen and Enginemen, The Brotherhood of Railway Trainmen, and The order of the Railway Conductors and Brakemen.	*Industrial Relations*
Big Steel	U.S. Steel Cooperation- the major steel producer in the United States.	*Industrial Relations*
Biggin	a pack built to support the roof.	*Mining*
Bihexagon Head	A bolt or screw whose cross section of its head is in the shape of a 12 pointed star.	*Maintenance*
Bilateral Action	distinguished from "unilateral" action, where the employer (usually) take action without discussion or agreement with the bargaining agent. Bilateral action involves the joint action of the parties to collective bargaining before the final action is taken.	*Industrial Relations*
Bilateral agreement	A written statement signed by two parties that specifies the terms for exchanging energy.	*Energy*
Bilateral Contract	A contract agreement between two willing parties. In a competitive electric market, bilateral contracts would be agreements between suppliers and customers that specify the terms and conditions for pricing and delivery of electric service. A contractual system between a buyer and a seller to obtain generation and/or ancillary services of a given type, duration, timing and reliability over a contractual term.	*Energy*
Bilateral Contract	A direct contract between the power producer and user or broker outside of a centralized power pool.	*Energy*
Bilateral energy transaction	A transaction between two willing parties who enter into a physical or financial agreement to trade energy commodities. Bilateral transactions entail reciprocal obligations and can involve direct negotiations or deals made through brokers.	*Energy*
Bill Of Lading (B/L)	A carrier's contract and receipt for goods it agrees to transport from one place to another and to deliver to a designated person.	*Procurement*
Bill of Materials	A List Of All The Parts And Components That Make Up A Particular Asset. Not To Be Confused With An Applications Parts List.	*Plant Engineering*
Bill Posters	Billers and Distributors of the United States and Canada; International Alliance of (AFL-CIO) - one of the national former AFL unions.	*Industrial Relations*
Billet	A plastic cake, usually cylindrical, placed in pressing chamber of hydraulic extrusion press.	*Material Process*
Billing period	The time between meter readings. It does not refer to the time when the bill was sent or when the payment was to have been received. In some cases, the billing period is the same as the billing cycle that corresponds closely (within several days) to meter-reading dates. For fuel oil and LPG, the billing period is the number of days between fuel deliveries.	*Energy*
Billy	a box for holding ironstone when ironstone was mined along with the coal (Forest of Dean).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Billy Coal	a thin unworkable coal seam, occurring above or below a workable seam. (N. Staffs.).	*Mining*
Bin	A container for storing material.	*Equipment*
Bin or Binn	the parting of black bass in the Bin Mine. (Lancs.).	*Mining*
Binary	The representation of a decimal number (base 10, 0 through 9) by means of a 4 bit binary nibble.	*General Engineering*
Binary Coded Decimal (BCD)	The representation of a decimal number (base 10, 0 through 9) by means of a 4-bit binary nibble.	*Electrical*
Binary data	See Dichotomous data	*Quality Engineering*
Binary diagram	Two component phase diagram.	*Material Process*
Binary-coded decimal	Representation of a number in which each decimal digit (0-9) is encoded in binary, with four bits per decimal digit.	*Electrical Engineering*
Binching	The stone 'seatearth', or 'fireclay' on which the coal seam rests. (Som.).	*Mining*
Bind or binds	Indurated shale or mudstone; or clay frequently containing clay ironstone; or sandstone or hard shale. (N. East). A term often applied by miners to any fine grained rock.	*Mining*
Binder	The resin of cementing constituent of a plastics compound. All plastics have a binder and some consist of filler components in addition.	*Material Process*
Binder	A helically applied tape or thread used for holding assembled cable components in place until additional manufacturing operations are performed.	*Electrical*
Binding coal	another term for bituminous coal, (N. East).	*Mining*
Bindle Stiffs	Bindle Stiffs - See: Bundle Stiffs	*Industrial Relations*
Bing	a colliery waste heap. (Scot.).	*Mining*
Binomial distribution	A statistical distribution with known properties describing the number of occurrences of an event in a series of observations. Thus, the number of deaths in the control arm of a controlled trial follows a binomial distribution. The distribution forms the basis for analyses of dichotomous data.	*Quality Engineering*
Bio fuel	A fuel made from plant materials or refuse as opposed to petroleum.	*Mechanical, Process, and Operations*
Bioassay	a method used to determine the toxicity of specific chemical contaminants. A number of individuals of a sensitive species are placed in water containing specific concentrations of the contaminant for a specified period of time.	*Chemical*
Bioaugmentation	the introduction of cultured microorganisms into the subsurface environment for the purpose of enhancing bioremediation of organic contaminants. Generally the microorganisms are selected for their ability to degrade the organic compounds present at the remediation site. The culture can be either an isolated genus or a mix of more than one genera. Nutrients are usually also blended with the aqueous solution containing the microbes to serve as a carrier and dispersant. The liquid is introduced into the subsurface under natural conditions (gravity fed) or injected under pressure.	*Chemical*
Bioavailability	the availability of a compound for biodegradation, influenced by the compound's location relative to microorganisms and its ability to dissolve in water.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Biocide	Biocides are formulations of one or more active substances which can kill or control viruses, bacteria, algae, moulds or yeasts.	*Chemical*
Biocides	Additive designed to inhibit the growth of microorganisms in liquids	*Lubrication*
Biodegradability (or biodegradation potential)	the relative ease with which petroleum hydrocarbons will degrade as the result of biological metabolism. Although virtually all petroleum hydrocarbons are biodegradable, biodegradability is highly variable and dependent somewhat on the type of hydrocarbon. In general, biodegradability increases with increasing solubility; solubility is inversely proportional to molecular weight.	*Chemical*
Biodegradable	Capability of organic matter to be decomposed by biological processes.	*Chemistry*
Biodegradation	a process by which microbial organisms transform or alter (through metabolic or enzymatic action) the structure of chemicals introduced into the environment.	*Chemical*
Biodegradation	The chemical breakdown of materials by living organisms in the environment. The process depends on certain microorganisms, such as bacteria, yeast, and fungi, which break down molecules for sustenance. Certain chemical structures are more susceptible to microbial breakdown than others; vegetable oils, for example, will biodegrade more rapidly than petroleum oils. Most petroleum products typically will completely biodegrade in the environment within two months to two years.	*Lubrication*
Biodiesel	A fuel typically made from soybean, canola, or other vegetable oils; animal fats; and recycled grease. It can serve as a substitute for petroleum-derived diesel or distillate fuel. For EIA reporting, it is a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM (American Society for Testing materials) D 6751.	*Energy*
Biodiversity	a measure of the variety of living organisms on a farm, in an ecosystem, or making up a community.	*Agriculture*
Biodynamic	a method of farming developed by Rudolf Steiner, an Austrian scientist and philosopher. This approach regards a farm as a self-contained, living organism and emphasizes the vitality of soil maintenance and composting. Biodynamic growers work to balance and consider both the physical and non-physical aspects and cycles of a farm in their production.	*Agriculture*
Biofuel	Fuel derived from biomass, i.e., (recently) living organisms. This does not include fossil fuels such as coal and oil, which are derived from ancient organisms. Bioethanol, a fuel derived from sugar cane, corn and similar materials is an example of a biofuel. (See also Carbon cycle.)	*Electrical*
Biofuels	Liquid fuels and blending components produced from biomass feedstocks, used primarily for transportation.	*Energy*
Biogenic	Produced by biological processes of living organisms. Note: EIA uses the term "biogenic" to refer only to organic nonfossil material of biological origin.	*Energy*
Biogenic emissions	Emissions that are naturally occurring and are not significantly affected by human actions or activity.	*Energy*
Bioindicator species	Species, varieties, or cultivars sufficiently sensitive to a specific pollutant to be useful as indicators for the presence of that pollutant.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bio-leaching	A process for recovering metals from low-grade ores by dissolving them in solution, the dissolution being aided by bacterial action.	*Mining*
Biological deposit	Water-formed deposits of organisms or their waste products (example: slimes, barnacles, etc.).	*Chemical Engineering*
Biological limit of detection, BLD	An older term that was commonly used to refer to an estimate of detection limit calculated from replicate measurements of a blank sample and replicate measurements of a low concentration sample. Typically the estimate is given as the mean of the blank sample plus 2 SD of the variation observed for the blank sample plus 2 SD of the variation observed for a low concentration sample. In effect, BLD equals LLD (the lower limit of detection) plus 2 SD of the variation observed for the low concentration sample.	*Quality*
Biological material	A naturally occurring structural material such as bone.	*Material Process*
Biomass	the amount of living matter in a given area or volume.	*Chemical*
Biomass gas	A medium Btu gas containing methane and carbon dioxide, resulting from the action of microorganisms on organic materials such as a landfill.	*Energy*
Biomass waste	Organic non-fossil material of biological origin that is a byproduct or a discarded product. Biomass waste includes municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural crop byproducts, straw, and other biomass solids, liquids, and gases; but excludes wood and wood-derived fuels (including black liquor), biofuels feedstock, biodiesel, and fuel ethanol. **Note:** EIA biomass waste data also include energy crops grown specifically for energy production, which would not normally constitute waste.	*Energy*
Biomass-based diesel fuel	Biodiesel and other renewable diesel fuel or diesel fuel blending components derived from biomass, but excluding renewable diesel fuel coprocessed with petroleum feedstocks.	*Energy*
Biomaterial	An engineered material created for a biological or medical application.	*Material Process*
Biomaterials	materials designed specifically for use in biological applications, such as artificial limbs and membranes for dialysis, as well as aiding in the repair of bones and muscle	*Physics*
Biomimetic processing	A ceramic fabrication technique which imitates natural processes, such as sea shell formation.	*Material Process*
BIOS	Acronym for basic input/output system. The commands used to tell a CPU how it will communicate with the rest of the computer.	*General Engineering*
Biostat	A chemical that is designed to control the population of troublesome microbes by inhibiting their reproduction and subsequent increase in population.	*Chemical Engineering*
Biotechnology	Generally, the use of recombinant DNA to take genes from one organism and insert them into the DNA of another organism. Although the term, first coined in 1917, originally described large-scale production of pigs fed on sugar beets, the term has evolved to describe genetic engineering. Usage isn't uniform, but scientists commonly use the terms genetic engineering, bioengineering, genetic modification, genetic engineering and biotechnology interchangeably. The technology is used in plants, animals, viruses, and bacteria.	*Agriculture*
Biotic pathogen	A living organism capable of inciting disease, e.g., fungi, bacteria, viruses, etc.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Biotite	A platy magnesium-iron mica, common in igneous rocks.	*Mining*
Bi-Partite Board	sometimes referred to as a joint board where it is used as a step in the grievance machinery, at the step prior to arbitration.	*Industrial Relations*
Bipolar	The ability of a panel meter to display both positive and negative readings.	*Electrical*
Bipolar Inputs	An input which accommodates signals both above and below ground.	*Electrical Engineering*
Bipolar Junction Transistor	A Bipolar Junction Transistor, or BJT, is a solid-state device in which the current flow between two terminals (the collector and the emitter) is controlled by the amount of current that flows through a third terminal (the base).	*Electrical Engineering*
Bipolar junction transistor (BJT)	A sandwich configuration such as p-n-p transistor.	*Material Process*
Bipolar plate	Electrically conducting plate connected to the anode on one side and to the cathode on the other side in an electrochemical cell.	*Chemical*
Birdbath	The storage area for the bottom end of a stand of tubulars when they are stored vertically in the derrick. The birdbath also captures the drilling fluid that drains out of the stand of tubulars.	*Petroleum Drilling*
Birdcage	A colloquialism descriptive of the appearance of a wire rope forced into compression. The outer strands form a cage and, at times, displace the core.	*Wire Rope & Cable*
Biscuit	a piece of wood about 1½ inches thick and 4 inches square, placed between the top of a prop and the roof bar. Used with a wooden prop the biscuit would absorb the roof pressure and in most cases save the prop for further use. When used with steel supports it helped to stop the slip of steel on steel when erecting a prop and bar. - see also Bonnet, Cap, Lids and Wedges.	*Mining*
Bistable	Of or pertaining to the general class of fluidic devices which maintain either of two position operating states in the presence or absence of the setting input.	*Mechanical, Process, and Operations*
Bit	Acronym for binary digit. The smallest unit of computer information, it is either 0 or 1.	*Electrical*
Bit Adaptor	the threaded driving head of the bit.	*Petroleum Drilling*
Bit Banging	A technique which uses the general-purpose ports of a microcontroller to emulate a serial interface standard (I2C, SPI, etc).	*Electrical Engineering*
Bit Error Rate	A measure of the number of erroneous bits which can be expected in a specified number of bits in a serial stream.	*Electrical Engineering*
Bit Error Rate (BER) Tester	A piece of test equipment which determines the bit error rate for a device under test (DUT).	*Electrical Engineering*
Bit Error Ratio	The number of erroneous bits divided by the total number of bits transmitted, received, or processed over some stipulated period.	*Electrical Engineering*
Bit Extensions	used for drilling deeper holes. Extensions are threaded together and attached between the bit and the motor output shaft.	*Petroleum Drilling*
Bitting	the name of, and the action of, small pieces of stone falling from the roof.	*Mining*
Bitumen	A naturally occurring viscous mixture, mainly of hydrocarbons heavier than pentane, that may contain sulfur compounds and that, in its natural occurring viscous state, is not recoverable at a commercial rate through a well.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bitumen	Also called asphalt or tar, bitumen is the brown or black viscous residue from the vacuum distillation of crude petroleum. It also occurs in nature as asphalt "lakes" and "tar sands." It consists of high molecular weight hydrocarbons and minor amounts of sulfur and nitrogen compounds.	*Lubrication*
Bituminous coal	A dense coal, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).	*Energy*
Bituminous Coal Act of 1937	a federal law to regulate the sale and distribution of bituminous coal in interstate commerce, to protect the coal resources of the country, to regulate prices, and to eliminate unfair methods of competition.	*Industrial Relations*
Black air	Black air, -see Blackdamp.	*Mining*
Black Angus	Black Angus - See Angus.	*Agriculture*
Black Bolts and Nuts	The word black refers to the comparatively wider tolerances employed and not necessarily to the color of the surface finish of the fastener.	*Maintenance*
Black damp	A term generally applied to carbon dioxide. Strictly speaking, it is a mixture of carbon dioxide and nitrogen. It is also applied to an atmosphere depleted of oxygen, rather than having an excess of carbon dioxide.	*Mining*
Black Death	a pestilence which reached Europe in the middle of the 14th century (1348) and killed more than one third of the population. Wage and price regulations which began with the emergency carried through during the next two centuries and did much to change the manorial system and also limit the rights of individuals to determine their wages, hours, and conditions of employment. The conspiracy doctrine which was applied against individuals and combinations which sought to organize remained an effective weapon unit the middle of the 19th century.	*Industrial Relations*
Black flag	This flag is waved by the starter to signal a driver that he or she must immediately report to the pits for consultation related to a dangerous mechanical condition or a driving infraction. Failure to heed the flag can result in exclusion from the final results of the event. This flag may also be displayed in a "furled" (rolled-up) manner as a warning. Corner workers may also display a black flag if the session has been halted by the display of a red flag by the starter.	*NASCAR*
Black leg	The British equivalent for the term scab.	*Industrial Relations*
Black liquor	A by product of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.	*Energy*
Black list	A band composed of thin layers of bright coal and fusain in the hards of the Barnsley Seam (Yorks.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Black lung benefits	In the content of the coal operation statement of income, this term refers to all payments, including taxes, made by the company attributable to Black Lung.	*Energy*
Black Oils	Lubricants containing asphaltic materials, which impart extra adhesiveness, that are used for open gears and steel cables.	*Lubrication*
Black smoker	Volcanic vent found in areas of active ocean floor spreading, through which sulfide-laden fluids escape.	*Mining*
Black spit	pneumoconiosis, a disease of the lungs, caused by the inhaling of coal dust, causing the spitting of black phlegm.	*Mining*
Black white face	A crossbred beef animal that is mostly black, but has white on its face. It is most commonly obtained by breeding Black Angus and Hereford cattle.	*Agriculture*
Blackband ironstone	a carbonaceous sideritic ironstone occurring in beds, usually associated with coal seams and containing sufficient included carbonaceous matter to enable it to be calcined without the addition of further fuel, also known as 'hard binds' in Scotland. Exploited commercially during the latter half of the 1800s in the Ayrshire and North Staffordshire coalfields.	*Mining*
Black-batt	black, carbonaceous shale.	*Mining*
Blackberry dirt	a crumbly carbonaceous shale forming a band 2 or 3 inches thick in the Bullhurst Seam. (N. Staffs.).	*Mining*
Blackbody	A theoretical object that radiates the maximum amount of energy at a given temperature, and absorbs all the energy incident upon it. A blackbody is not necessarily black. (The name blackbody was chosen because the color black is defined as the total absorption of light energy.)	*General Engineering*
Black-Connery Bill	Black-Connery Bill - See: Fair Labor Standards Act of 1938	*Industrial Relations*
Blackdamp or Chokedamp	a mixture of nitrogen and carbon dioxide present in mines. The gas will not support a flame or life. Usually found in old mine workings where ventilation is poor. Also known in Yorkshire as 'Black air'.	*Mining*
Blackjack	A miner's term for sphalerite (zinc sulfide).	*Mining*
Blacklist	a procedure whereby employers or employers' associations circulated the name or names of "undesirable" employees, mostly those who were active union men.	*Industrial Relations*
Blacklisting	the practice and procedure of using the Blacklist.	*Industrial Relations*
Blackout	A complete loss of power resulting from damage or equipment failure in a power station, power lines or other parts of the power system. A blackout may also be referred to as a power outage or power failure. (See High-current transients, Reactive power, Wide-Area Monitoring Systems.)	*Electrical*
Blacks	coaly blaes. (Scot.), or black shale (Yorks.).	*Mining*
Black-start capability	The ability of a power system (a generator or grid subsection) to restart after a blackout, independently of the larger grid, by using local generators. For example, HVDC Light transmission systems can be fitted with small diesel generators to provide auxiliary power that can be operational almost immediately in the event of a blackout. This power enables voltage control to be established and normal operations to be resumed quickly.	*Electrical*
Blacktop	Pertaining to or surfaced with blacktop. Example: a blacktop driveway.	*Civil Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Blade Server	A blade server is a computer system on a motherboard, which includes processor(s), memory, a network connection, and sometimes storage. The blade idea is intended to address the needs of large-scale computing centers to reduce space requirements for application servers and lower costs.	*Electrical Engineering*
Blade-passing frequency	A potential vibration frequency on any bladed machine (turbine, fan, etc.), the number of blades x shaft speed.	*Reliability Engineering*
Blaes	shale or mudstone, laminated, but typically soft and fissile. (Scot.).	*Mining*
Bland-Altman plot	The display of paired-data from a comparison of methods experiment by plotting the differences between the test and comparative results on the y-axis versus the average of the test and comparative results on the x-axis. Similar to a traditional "difference plot", except that the average of the test and comparative results provides the x-value rather than the value of the comparative result alone.	*Quality*
Blank Flange	A flange that is not drilled but is otherwise complete.	*Maintenance and Repair*
Blanket Agreement	a collective bargaining agreement whose terms cover an entire industry or large geographic area within an industry.	*Industrial Relations*
Blanket Injunction	a court order issued during a strike or to prevent a strike which is so broad in its sweep of restraints that it encompasses activities which have little relation to the dispute within the blanket.	*Industrial Relations*
Blanket Order	A term commitment (usually one year or more) to a supplier for certain goods or services over a predetermined period of time at predetermined prices, most-favored customer prices, or prices to be revised due to market or other conditions. This practice is aimed at reducing the number of small orders by utilizing short-term releases to satisfy demand requirements.	*Procurement*
Blast coal	Blast coal, -see Lignite.	*Mining*
Blast furnace	A furnace in which solid fuel (coke) is burned with an air blast to smelt ore.	*Energy*
Blast hole	A hole drilled for purposes of blasting rather than for exploration or geological information.	*Mining*
Blast packing	Blast packing, -see Pneumatic packing.	*Mining*
Blast piece	part of an old reciprocating pump.	*Mining*
Blaster	A mine employee responsible for loading, priming and detonating blastholes.	*Mining*
Blast-furnace gas	The waste combustible gas generated in a blast furnace when iron ore is being reduced with coke to metallic iron. It is commonly used as a fuel within steel works.	*Energy*
Blasthole	A drill hole in a mine that is filled with explosives in order to blast loose a quantity of rock.	*Mining*
Blasting	A pressurized stream of particulates (ceramic, plastic, metal, , etc.) applied on a surface to clean, peen or abrade.	*Paint and Coatings*
Blasting agent	Any material consisting of a mixture of a fuel and an oxidizer.	*Mining*
Blasting cap	A detonator containing a charge of detonating compound, which is ignited by electric current or the spark of a fuse. Used for detonating explosives.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Blasting circuit	Electric circuits used to fire electric detonators or to ignite an igniter cord by means of an electric starter.	*Mining*
BLE	BLE - See: Locomotive Engineers; Brotherhood of (Ind)	*Industrial Relations*
Bleach	A product that cleans, whitens, removes stains and brightens fabrics.	*Chemistry*
Bleaching	Loss of normal color, tending toward white, cream, or tan coloration.[1] Fin. Swe.	*Forestry*
Bleed	The process by which air is removed from a hydraulic system.	*Mechanical, Process, and Operations*
Bleeder or bleeder entries	Special air courses developed and maintained as part of the mine ventilation system and designed to continuously move air-methane mixtures emitted by the gob or at the active face away from the active workings and into mine-return air courses. Alt: Exhaust ventilation lateral.	*Mining*
Bleeder valve	A small-flow valve connected to a fluid process vessel or line for the purpose of bleeding off small quantities of contained fluid. It is installed with a block valve to determine if the block valve is closed tightly.	*Petroleum Engineering*
Bleeding	Separation of liquid lubricant from a grease.	*Lubrication*
Bleeding	The separation of some of the liquid phase from a grease	*Lubrication*
Bleed-off	To divert a specific controllable portion of pump delivery directly to reservoir.	*Mechanical, Process, and Operations*
Blemish Tire	A tire with a cosmetic or minor uniformity imperfection but whose safety and performance are unaffected.	*Mechanical Engineering*
Blend Molecular	scale polymeric mixture.	*Material Process*
Blende	An ore of zinc, consisting of zinc and sulfur.	*Mining*
Blended Powder	A powder consisting of two or more different powder materials thoroughly mixed.	*Paint and Coatings*
Blender	The equipment used to prepare the slurries and gels commonly used in stimulation treatments. Modern blenders are computer controlled, enabling the flow of chemicals and ingredients to be efficiently metered and requiring a relatively small residence volume to achieve good control over the blend quality and delivery rate.	*Petroleum Drilling*
Blending	Mixing of ingredients of a molding composition of molding powders. Usually several batches of one type are blended to ensure uniformity of molding conditions.	*Material Process*
Blending	The process of mixing lubricants or components for the purpose of obtaining the desired physical and/or chemical properties (see compounding)	*Lubrication*
Blending (see Compounding)	Blending is the process of mixing fluid lubricant components for the purpose of obtaining desired physical properties.	*Lubrication*
Blending components	See Motor gasoline blending components.	*Energy*
Blending plant	A facility that has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.	*Energy*

Term	Definition	*Industry*
BLF	British Lubricants Federation	*Petro-Chemical Abbreviations*
Blight	A common term for several different diseases; usually applied to those where leaf damage is sudden and severe.	*Forestry*
Blind Flange	A flange used to close the end of a pipe. It produces a blind end which is also known as a dead end.	*Maintenance and Repair*
Blind Alley Jobs	jobs accepted by workers which offer little if any opportunity for advancement. Such jobs lead nowhere either in terms of wages, prestige, or satisfaction.	*Industrial Relations*
Blind Coal	a coal that has lost part of its volatile constituents, and so burns with little or no smoke. (Scot.).	*Mining*
Blind drift	a pilot heading that has been driven in search of coal and then abandoned. Often used for storing equipment.	*Mining*
Blind heading	a heading or roadway with only one way in or out.	*Mining*
Blind Lode	A lode having no outcrop.	*Mining*
Blind pit or Blind shaft	Blind pit or Blind shaft, -see Staple pit.	*Mining*
Blind(ed) study (Syn masked study)	A study in which observer(s) and/or subjects are kept ignorant of the group to which the subjects are assigned, as in an experimental study, or of the population from which the subjects come, as in a nonexperimental or observational study. Where both observer and subjects are kept ignorant, the study is termed a double-blind study. If the statistical analysis is also done in ignorance of the group to which subjects belong, the study is sometimes described as triple blind. The purpose of "blinding" is to eliminate sources of bias.	*Analysis*
Blinding	A layer of sand or fine gravel for filling the gaps in the surfaces of a road or pavement, as one of crushed and compacted stone.	*Civil Engineering*
Blink Control	Controls the display segment blink rate.	*Electrical Engineering*
Blister	Undesired, rounded elevation of the surface of a plastic, whose boundaries may be either more or less sharply defined, somewhat resembling in shape a blister on the human skin. A blister may become flattened.	*Material Process*
Blister copper	A crude form of copper (assaying about 99%) produced in a smelter, which requires further refining before being used for industrial purposes.	*Mining*
Bloch wall	Narrow region of magnetic moment orientation change separating adjacent domains.	*Material Process*
Block	A term applied to a wire rope sheave (pulley) enclosed in side plates and fitted with some attachment such as a hook or shackle.	*Wire Rope & Cable*
Block and bleed	The capability of obtaining a seal across the upstream and downstream seat rings of a valve when the body pressure is bled off to atmosphere thru blow down valves or vent plugs. Useful in testing for integrity of seat seals and in accomplishing minor repairs under pressure. See "Double Block and Bleed."	*Mechanical*
Block caving	An inexpensive method of mining in which large blocks of ore are undercut, causing the ore to break or cave under its own weight.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Block caving	A cheap method of mining in which large blocks of ore are under cut, the ore breaking and caving under its own weight.	*Mining*
Block copolymer	Combination of polymeric component in blocks along a single molecular chain.	*Material Process*
Block diagram	A diagram that represents how the components, represented by "blocks," are arranged and related reliability-wise in a larger system. This is often but not necessarily the same as the way that the components are physically related. This is also called a Reliability Block Diagram or RBD.	*Reliability Engineering*
Block Heater	An accessory which uses electric power to keep an engine that's been turned off from becoming too cold, which makes it hard to start in extremely cold climates.	*Mechanical Engineering*
Block randomisation	See Random permuted blocks	*Quality Engineering*
Block valve	A valve used to isolate equipment.	*Petroleum Engineering*
Block	An acreage sub-division measuring approximately 10 x 20 km, forming part of a quadrant. e.g. Block 9/13 is the 13th block in Quadrant 9.	*Petroleum Drilling*
Block-Diagram	This is a diagram that represents how components which are usually represented by 'blocks' are arranged and related reliability-wise in a larger system. This is often but not necessarily the same as the way that the components are physically related. This is also called a Reliability Block Diagram or RBD.	*Reliability Engineering*
Blocking out	driving roadways all the way around a piece of coal it is proposed to work to ensure that it is free from faults or other features that may hinder its exploitation.	*Mining*
Blocking-up	Blocking-up, -see Dinting.	*Mining*
Block-rate structure	An electric rates schedule with a provision for charging a different unit cost for various increasing blocks of demand for energy. A reduced rate may be charged on succeeding blocks.	*Energy*
Blocks or Stops	small wooden blocks, mounted between the rails, to stop loaded tubs running away down an incline.	*Mining*
Blood albumin	A natural albuminous product obtained from blood, used in dye preparations and in the manufacture of some adhesives and protein plastics.	*Material Process*
Bloom	The typical blue or green surface color of a grease when viewed by reflected daylight.	*Lubrication*
Blossom Rock	Float ore, found upon the surface or near where lodes or ledges outcrop, and from which they have become detached.	*Mining*
Blow	floor lift due to gas or strata pressure.	*Mining*
Blow molding	Processing technique for	*Material Process*
Blow out	Water that is blown or pulled out of the air inlet by wind.	*Facility Engineering*
Blow-by	Passage of unburned fuel and combustion gases past the piston rings of internal combustion engines, resulting in fuel dilution and contamination of the crankcase oil.	*Lubrication*
Blowdown	Water discharged from the system to control concentration of salts or other impurities in the circulating water.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Blow-down	Condensate and gas is produced simultaneously from the outset of production.	*Petroleum Drilling*
Blowdown	The removal of hydrocarbons from a process unit, vessel, or line on a scheduled or emergency basis by the use of pressure through special piping and drums provided for this purpose.	*Petroleum Engineering*
Blow-down	Condensate and gas is produced simultaneously from the outset of production.	*Petroleum Drilling*
Blower	A squirrel-cage type of air moving device usually applied for operation at higher than normal static pressures or for sound control reasons.	*Facility Engineering*
Blower	Equipment for moving large volumes of gas against low-pressure heads.	*Petroleum Engineering*
Blowing mold	A mold in which a hallow article is blown (as from celluloid), made in two metal parts often hinged.	*Material Process*
Blowout	A sudden, uncontrolled release of underground pressure from the well.	*Petroleum Drilling*
Blow-out	When well pressure exceeds the ability of the wellhead valves to control it. Oil and gas "blow wild" at the surface.	*Petroleum Drilling*
Blow-Out Preventer	A heavy casing head control, filled with special gates or rams, which can be closed around the drill pipe, or which completely closes the top of the casing.	*Petroleum Drilling*
Blowout preventer (BOP)	Equipment installed on the wellhead to prevent the escape of fluids under pressure from the wellbore during drilling, completion, or workover operations. The BOP stack incorporates different sets of hydraulic rams enabling the well to be sealed with or without pipe in the hole, pumping of fluids into the well under pressure, and controlled release of fluids from the well.	*Petroleum Engineering*
Blow-out Preventers (BOP's)	High pressure wellhead valves that are designed to shut off the uncontrolled flow of hydrocarbons.	*Petroleum Drilling*
Blow-out preventers (BOPs)	Are high pressure wellhead valves, designed to shut off the uncontrolled flow of hydrocarbons.	*Petroleum Drilling*
Blow-out	When well pressure exceeds the ability of the wellhead valves to control it. Oil and gas "blow wild" at the surface.	*Petroleum Drilling*
BLS	Bureau of Labor Statistics within the U.S. Department of Labor	*Energy*
BLS Index	BLS Index - See: Bureau of Labor Statistics Index.	*Industrial Relations*
Blue Eagle	The insignia of the N.I.R.A.	*Industrial Relations*
Blue flag	This flag is displayed by corner workers around the track to signal to a driver that a faster car is either approaching (steady flag) or attempting a pass (waved flag). The driver being flagged has no obligation to do anything other than be alert, maintain the racing line and avoid intentionally obstructing the faster car.	*NASCAR*
Blue metal	Blue metal, – see shale.	*Mining*
Blue Sky Bargaining	unrealistic and unreasonable demands in negotiations by either or both labor and management, where neither concedes anything and demands the impossible, is sometimes referred to as blue-sky bargaining.	*Industrial Relations*
Blue-cap	the characteristic blue haze over the flame of a safety lamp when firedamp or methane, is present in the atmosphere.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bluetooth	A technology that allows voice and data connections between a wide range of mobile and stationary devices through short-range digital two-way radio. For instance, it specifies how mobile phones, Wireless Information Devices (WIDs), computers and PDAs interconnect with each other, with computers, and with office or home phones.	*Electrical Engineering*
Bluetooth Capability	The ability of a radio system to work with Bluetooth wireless connectivity, to function in concert with a cellular phone.	*Mechanical Engineering*
Blush	The clouding or whitening of a plastics wet with solvent or containing solvent, or of a lacquer film because of too rapid drying or high humidity. Also applied to the whitening or certain plastics, e.g., pyroxylin, by hot water or steam, or to whitening from any cause. Term not recommended for use.	*Material Process*
BMP	BMP—See: Bricklayers, Masons and Plasterers' International Union of America (AFL-CIO)	*Industrial Relations*
BMS	Building Management System	*Control Engineering*
BMWE	BMWE—See: Maintenance of Way Employees; Brotherhood of (AFL-CIO)	*Industrial Relations*
BNA	BNA - See: Bureau of National Affairs, Inc.	*Industrial Relations*
BNC	A quick disconnect electrical connector used to inter-connect and/or terminate coaxial cables.	*General Engineering*
BNP	Bureau de Normalisation des Pétroles (France)	*Petro-Chemical Abbreviations*
Boar	Mature male swine.	*Agriculture*
Board foot	A unit of wood measuring 1-inch in thickness by 12-inch in width by 12 inches in length.	*Forestry*
Board lot	One hundred shares.	*Mining*
Board of Inquiry	a board generally set up to investigate the facts involved in a labor dispute.	*Industrial Relations*
Board of Jurisdictional Awards, National	an agency created in 1919 for the purpose of resolving jurisdictional disputes between A.F. of L. craft unions.	*Industrial Relations*
Boardway's course	the direction at right angles to the line of cleavage or cleat of the coal.	*Mining*
Boardways	headings driven across the cleat, or 'on the bord'.	*Mining*
Bob-a locker	the man who stood by the side of the road pushing lockers between the spokes of the tubs to slow down their progress (N. Staffs.).	*Mining*
Bobbin	Formed core upon which the coil of a magnet is wound.	*Material Process*
BOCLE	ball on cylinder lubricity evaluator	*Petro-Chemical Abbreviations*
Bode Diagram	A plot of log amplitude ratio and phase angle values on a log frequency base for a transfer function.	*Process Control*
Bode plot	The magnitude of vibration at 1x shaft speed, also its phase relative to shaft position, both plotted against running speed.	*Reliability Engineering*
Body	The principle pressure containing part of a valve in which the closure element and seats are located.	*General Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Body centered cubic	Common atomic arrangement for metals.	*Material Process*
Body force	An external force acting throughout the mass of a body. Gravity is a body force. An inertial force is a body force.	*Engineering Physics*
Bodywork	The exterior of the car. The bodywork is generally made from carbon fiber. The panels lift off in sections so mechanics can get to mechanical components easily and quickly. Bodywork is carefully sculpted to maximize aerodynamic efficiency.	*NASCAR*
BOE	Barrels of Oil Equivalent (used internationally)	*Energy*
Bogey	efforts by employees to restrict output by setting up an informal standard (bogey) beyond which the employees do not go.	*Industrial Relations*
Bogey or Bogie	a flat-bottomed truck for manriding or transporting materials—see Flat Danny or Horned Danny.	*Mining*
Boghead coal or Torbanite	closely allied to some varieties of oil shale and consists essentially of oil-bearing algae mixed with small quantities of sediment.	*Mining*
Bogus (Type) Work	Refers to the "make work" practice in composing rooms by typesetters, who reset type which is not necessarily in order to print the article or advertisement.	*Industrial Relations*
Bohr magneton	Unit of magnetic moment	*Material Process*
Bohr magneton Unit	Unit of magnetic moment (= 9.27 10-24 Ampere m2)	*Material Process*
Bohr Model	Classical representation of atomic structure in which electrons orbit the positively charged nucleus in distinct energy levels	*Physics*
BOI	Business Operation Income (after taxes).	*Maintenance*
BOI	Base Oil Interchange	*Mechanical, Process, and Operations*
Boil	An unwanted flow of water and solid matter into an excavation, due to excessive outside water pressure.	*Civil Engineering*
Boiler	A device for generating steam for power, processing, or heating purposes; or hot water for heating purposes or hot water supply. Heat from an external combustion source is transmitted to a fluid contained within the tubes found in the boiler shell. This fluid is delivered to an end-use at a desired pressure, temperature, and quality.	*Energy*
Boiler fuel	An energy source to produce heat that is transferred to the boiler vessel in order to generate steam or hot water. Fossil fuel is the primary energy source used to produce heat for boilers.	*Energy*
Boiling point	the temperature at which a component's vapor pressure equals atmospheric pressure. Boiling point is a relative indicator of volatility and generally increases with increasing molecular weight.	*Chemical*
Boiling Point	The temperature at which a substance boils, or is converted into vapor by bubbles forming within the liquid; it varies with pressure	*Lubrication*
Boiling Range	For a mixture of substances, such as a petroleum fraction, the temperature interval between the initial and final boiling points.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Boiling-water reactor (BWR)	A light-water reactor in which water, used as both coolant and moderator, is allowed to boil in the core. The resulting steam can be used directly to drive a turbine.	*Energy*
Boilum	hard calcareous or siliceous nodules of irregular shape found in the shales and under-clays of the Coal Measures. (N. Staffs.)	*Mining*
Boll or Bowl (measure)	a measure of capacity used in the North of England and Scotland for grain, coal and other dry goods. The coal boll was probably derived from the corn boll, i.e. the amount a man could carry. The boll or bowl was a wooden tub or wheelbarrow used to load coals into the keels on the Tyne. At Gateshead in the mid 16th century the boll contained eight gallons. In the first part of the 17th century, in a lease of mines from the Prior of Tynemouth, the "chaldron" was defined as six bolls. The size of the boll was fixed by statute in 1678 and contained 22 gallons and a "pottle." By 1704 at Town Moor Colliery (N. East.) the boll had risen to 36 gallons. In evidence before a Select Committee of the House of Lords, in 1829 the boll contained 9676•8 cubic inches, or 34•899 imperial gallons. It would appear that the boll never attained a uniform measure.	*Mining*
Bolster	A structural member on which one end of a bridge truss rests.	*Civil Engineering*
Bolt	A bolt is the term used for a threaded fastener, with a head, designed to be used in conjunction with a nut.	*Maintenance*
Bolt	A fastener having a square or hex head and threaded on the opposite end to receive a nut sometimes used to make up a flanged connection.	*Mechanical*
Bolt Circle	Often referred to as the wheel bolt pattern; the diameter of an imaginary circle drawn through the center of each lug hole.	*Mechanical Engineering*
Bolt torque	The turning force in foot-pounds applied to a roof bolt to achieve an installed tension.	*Mining*
Bolted bonnet	A bonnet which is connected to a valve body with bolts or studs and nuts.	*General Mechanical*
Bolted construction	Describes a valve construction in which the pressure shell elements (such as body and closures of a trunnion ball valve) are bolted together and so can be taken apart and repaired in the field.	*General Mechanical*
Bolting sets	Bolts, or studs, and nuts sometimes supplied with flanged valves to install the valve between line flanges.	*Mechanical*
Bolting Tension	The energy resulting from applying Torque to nuts onto bolts/studs providing the required compressive force to hold connections in contact under pressure or load.	*Petroleum Engineering*
Bolting Torque	The rotational force applied to nuts onto stud bolts required to tighten and apply tension to the bolts in order to hold flanges or other connections.	*Petroleum Engineering*
BOM	See Bill Of Materials.	*Plant Engineering*
Bomb Oxidation	A test for the oxidation stability of a product obtained by sealing it in a closed container with oxygen under pressure. The drop in pressure of the oxygen is a measure of the amount of oxidation that has occurred.	*Lubrication*
Bonanza	Very rich ore, or situation.	*Mining*

Term	Definition	*Industry*
Bonanza	Fair weather; a mine said to en bonanza when it is yielding a profit. It is a Spanish term meaning good-luck.	*Mining*
Bond	The junction of the weld metal and the base metal, or the junction of the base metal parts when weld metal is not present.	*Maintenance and Repair*
Bond	The state of adhesion between the coating and the substrate. It's strength will depend on the details of the spraying process and the materials used. Bonding mechanisms may be mechanical, physical, chemical or metallurgical or a combination of these.	*Paint and Coatings*
Bond angle	Angle formed by three adjacent, directionally bonded atoms.	*Material Process*
Bond Coat	A coating applied as an intermediary between the main or top coating and the substrate in order to improve the bond strength and/or to provide a corrosion or oxidation barrier.	*Paint and Coatings*
Bond energy	Net energy of attraction (or repulsion) as a function of separation distance between two atoms or ions.	*Material Process*
Bond force	Net force attraction (or repulsion) as a function of separation distance between two atoms or ions.	*Material Process*
Bond length	Center- to- center separation distance between two adjacent, bonded atoms or ions.	*Material Process*
Bond strength	the strength with which two or more items are joined; the resistance that must be overcome in order to separate the joined materials, e.g. steel and zinc-iron alloy layers of the galvanized coating, or galvanized reinforcing steel and concrete	*Materials Process*
Bond Strength	The strength of the adhesion between the coating and the substrate. A number of test methods are in use to measure the bond strength of coatings.	*Paint and Coatings*
Bonded petroleum imports	Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.	*Energy*
Bonding strength	A measure of the force required to separate the layers of a laminated product or particles of filler, usually fibrous, in a plastics compound.	*Material Process*
Bone	a hard cannel coal. (Lancs.).	*Mining*
Bone coal	Coal with a high ash content; it is dull in appearance, hard, and compact.	*Energy*
Bonnet	The bonnet is that portion of the valve pressure retaining boundary that may guide the stem and contains the packing box and stem seal. The bonnet may be integral to the valve body or bolted or screwed. The bonnet, if it is detachable, will generally provide the opening to the valve body cavity for removal and replacement of the internal trim. The bonnet is generally the means by which the actuator is connected to the valve body.	*Industrial Engineering*
Boobey	A type of box which held 6 to 8 cwt. of coal in which dirt or rubbish was sent to the bank or surface. (Som.).	*Mining*
Book	The portion of the carrying value (other than the portion associated with tangible assets) prorated in each accounting period, for financial reporting purposes, to the extracted portion of an economic interest in wasting natural resource.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Book value	The portion of the carrying value (other than the portion associated with tangible assets) prorated in each accounting period, for financial reporting purposes, to the extracted portion of an economic interest in a wasting natural resource.	*Energy*
Booked costs	Costs allocated or assigned to inter-departmental or intra company transactions, such as on-system or synthetic natural gas (SNG) production and company-owned gas used in gas operations and recorded in company books or records for accounting and/or regulatory purposes.	*Energy*
Boolean set	a mathematical concept whereby the degree to which an element belongs to a particular notion about some domain of definition is classified as completely true OR completely false. For example, consider the domain of all room temperatures; 76.2 degrees Fahrenheit either is or is not a member of the set of "comfortable room temperatures", depending on where the Boolean set boundary is defined.	*Petroleum Drilling*
Boom Hoist Line	Wire rope that operates the boom hoist system of derricks, cranes, draglines, shovels, etc.	*Wire Rope & Cable*
Boom Pendants	A non-operating rope or strand with end termination to support the boom.	*Wire Rope & Cable*
Boom ripper	a machine for cutting down a ripping by means of a rotating cutting head on a fixed or telescopic hydraulic boom.	*Mining*
Boom	A telescoping, hydraulically powered steel arm on which drifters, manbaskets and hydraulic hammers are mounted.	*Mining*
Boost Converter	A power supply that steps an input voltage up (boosts it) to a higher, regulated voltage.	*Electrical Engineering*
Booster	A pneumatic relay that is used to reduce the time lag in pneumatic circuits by reproducing pneumatic signals with high-volume and/or high-pressure output. These units may act as volume boosters or as amplifiers. A 1:2 booster will take a 3-15 psig input signal and output a 6-30 psig signal.	*Industrial Engineering*
Booster	A device that amplifies the amount of air (gas) going to a pneumatic actuator, producing a faster response. Having a separate air supply than the positioner, a booster typically is used with larger actuators that have larger volumes to fill.	*Mechanical*
Booster Conveyor	Any type of powered conveyor used to regain elevation lost in gravity roller or wheel conveyor lines.	*Manufacturing*
Booster or Booster fan	an underground ventilation fan used to increase the ventilation of a district or seam.	*Mining*
Boot	A protective covering over any portion of a cable or conductor in addition to its jacket or insulation.	*Electrical*
Boother	A boulder in the "Glacial Drift"; blue "Boothers" were much prized for road-making on farms. (N. Staffs.).	*Mining*
Bootstrap	Often refers to using the output of a step-up converter to drive the main power FET switch, providing more gate drive than the input can supply alone. Also refers to using a switched capacitor to boost the voltage of a node.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
BOP	The Blowout Preventer is a series of heavy valves and rams which can be engaged to prevent a blowout from occurring. There are typically several different rams and shears utilized in a BOP stack. These can either squeeze off the annulus, or space between the drill pipe and casing, or even shear off the drill pipe itself to close the hole. Drilling companies frequently conduct BOP drills which familiarize the crew with how to quickly close BOP valves to prevent a blowout.	*Petroleum Drilling*
BOP	See blow-out preventers	*Petroleum Drilling*
Bord and pillar	Bord and pillar, -see Pillar and stall.	*Mining*
Bord cleat	Bord cleat, -see Cleat.	*Mining*
Bord face	a coal face advancing in a direction at right angles to the line of main cleat.	*Mining*
Bord or Board and Pillar	a system of working coal by partial extraction which is similar to 'pillar and stall' in which between 30 and 60 per cent of the coal would be removed depending on the condition and the weight of the roof. Sometimes the pillars would be worked out at a later date by using the retreat system. Also known as 'board and wall', 'post and stall' 'square work' and 'stoop and room'. The bord is a roadway driven in the seam, usually at right angles to the cleat; or the principal working place with one or two hewers (N. East).	*Mining*
Bord, or Board	the main cleavage or cleat in coal seams. The direction of the cleat; or a roadway at right angles to the main cleat, or a roadway with solid coal sides. 'Board' or 'board' was also the principal working place some four to five yards wide, where one or two miners worked, hewing the coal.	*Mining*
Borderline customer	A customer located in the service area of one utility, but supplied by a neighboring utility through an arrangement between the utilities.	*Energy*
Bore	To form, make, or construct (a tunnel, mine, well, passage, etc.) by hollowing out, cutting through, or removing a core of material: Example: to bore a tunnel through the Alps; to bore an oil well 3000 feet deep.	*Civil Engineering*
Bore (or port)	The inside diameter of the smallest opening through a valve, e.g., inside diameter of a seat ring, diameter of hole through ball in a ball valve.	*General Mechanical*
Bore (or port)	The inside diameter of the smallest opening through a valve, e. g., inside diameter of a seat ring, diameter of hole through ball in a ball valve.	*Mechanical*
Borehole	Any deep or long drill-hole, usually associated with a diamond drill.	*Mining*
Borehole	The hole drilled by the drill bit	*Petroleum Drilling*
Borehole	The hole as drilled by the drill bit.	*Petroleum Drilling*
Borer	a long iron bar with a hardened chisel shaped tip used to bore shot holes in coal. Also known as a 'puncher' it was used without the aid of a hammer. The miner used a jab and twist action to bore the hole. - see Boring bar, Driller and Jumper; or a person whose business it was to search for minerals by boring	*Mining*
Boring	to pierce or gouge out with an auger or drill.	*Petroleum Drilling*
Boronizing	The diffusion of boron into the surface of a component (usually steel) by a high temperature (approx. 900oC) gas or pack process. Produces hard phases within the surface (Typically 100μm deep).	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Borosilicate glass	High durability, commercial glassware composed of primarily silica, with a significant component of B2O3.	*Material Process*
Borrow pit	A pit from which construction material, as sand or gravel, is taken for use as fill at another location.	*Civil Engineering*
Borrow pit	A pit from which construction material, as sand or gravel, is taken for use as fill at	*Civil Engineering*
Bosh or water bosh	a tank or tub out of which the horses drank underground (S. Wales.).	*Mining*
Boss	Any member of the managerial ranks who is directly in charge of miners (e.g., "shift-boss," "face-boss," "fire-boss," etc.).	*Mining*
Bossing	the holing or undercutting of a coal seam. (Scot.).	*Mining*
BOTD	ball on three disks	*Petro-Chemical Abbreviations*
BOTS	ball on three seats	*Petro-Chemical Abbreviations*
Bottle-coal	coal containing a high percentage of volatile hydrocarbons, suitable for gas making. (Scot.).	*Mining*
Bottled gas	Bottled gas: See Liquefied petroleum gases.	*Energy*
Bottled gas, LPG, or propane	Any fuel gas supplied to a building in liquid form, such as liquefied petroleum gas, propane, or butane. It is usually delivered by tank truck and stored near the building in a tank or cylinder until used.	*Energy*
Bottleneck	Any point at which production is slowed because demand placed on a resource is equal to or more than capacity. Bottlenecks identify machines that are critical to large sections of the production cycle.	*Maintenance*
Bottom	Floor or underlying surface of an underground excavation.	*Mining*
Bottom ash	Residue mainly from the coal burning process that falls to the bottom of the boiler for removal and disposal.	*Energy*
Bottom gate	on an inclined face the lower of the two or more gate roads serving the face.	*Mining*
Bottom hole pressure	The pressure in a well at the bottom of the hole, usually measured in pounds per square inch (psi).	*Petroleum Engineering*
Bottomhole	The lowest or deepest part of a well.	*Petroleum Drilling*
Bottom-hole contribution	A payment (either in cash or in acreage) that is required by agreement when a test well is drilled to a specified depth regardless of the outcome of the well and that is made in exchange for well and evaluation data.	*Energy*
Bottoming cycle	A waste-heat recovery boiler recaptures the unused energy and uses it to produce steam to drive a steam turbine generator to produce electricity.	*Energy*
Bottoms	Tower bottoms are residue remaining in a distillation unit after the highest boiling-point material to be distilled has been removed. Tank bottoms are the heavy materials that accumulate in the bottom of storage tanks, usually comprised of oil, water, and foreign matter.	*Petroleum Engineering*
Bottoms or Bottom coal	the lowest section of a coal seam that may or may not be extracted.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bouldering	Pavement made with small boulders.	*Civil Engineering*
Bounce Test	A shaking of unrestrained (loose) cargo. The cargo is repeatedly thrown a short distance into the air and then falls onto the vibrating platform.	*Reliability Engineering*
Boundary fault	a large fault usually forming the boundary to the mine or a section of the mine.	*Mining*
Boundary layer	Region in a fluid close to a solid surface. This region is characterized by large gradients in velocity and is often treated with approximative methods, because it is difficult to geometrically resolve the large gradients found there.	*Chemical*
Boundary Lubrication	Lubrication between two rubbing surfaces without the development of a full fluid lubricating film. It occurs under high loads and requires the use of anti-wear or extreme-pressure (EP) additives to prevent metal-to-metal contact.	*Lubrication*
Bovine	cattle	*Agriculture*
Bovine spongiform encephalopathy, (BSE)	mad-cow disease.	*Agriculture*
Bow	An undesirable shaft condition (rotating machinery) in which the shaft centerline is not straight.	*Reliability Engineering*
Bowk	originally a small wooden box used for lifting refuse out of a sinking pit. Later it was one of the many names given to a large barrel or bucket-shaped tub used when sinking shafts. - see also Kibble and Hoppit. Also the term used to describe in the North East for a report made by the cracking of the strata owing to the extraction of the coal beneath, or the noise made by the escape of gas under pressure.	*Mining*
Box bottoms	the small coal or slack that fell to the bottom of the tubs or boxes. It was produced by breakage in transit. (Leics.).	*Mining*
Box hole	A short raise or opening driven above a drift for the purpose of drawing ore from a stope, or to permit access.	*Mining*
Box scraper	a method of loading coal on a longwall face adapted from the main-and-tail haulage system and a forerunner of the coal plough. The simplest type consisted of a double-drum haulage engine that pulled a bottomless scraper box, skip or scoop backwards and forwards along the face by means of a main-and-tail rope. The system was first introduced in 1929—see also Slusher.	*Mining*
Box-end	The tension end of a conveyor belt.	*Mining*
Box-type magazine	A small, portable magazine used to store limited quantities of explosives or detonators for short periods of time at locations in the mine which are convenient to the blasting sites at which they will be used.	*Mining*
Boyle's Law	The absolute pressure of a fixed mass of gas varies inversely as the volume, provided the temperature remains constant.	*Mechanical, Process, and Operations*
Boyle's Law	A law stating that the pressure of a given mass of an ideal gas is inversely proportional to its volume at a constant temperature.	*Chemistry*
Boyle's Law	A law of physics stating that when gas is subject to compression and kept at a constant temperature, the product of the pressure and volume is a constant quantity, i.e., the volume is inversely proportional to the pressure.	*Petroleum Drilling*
bp	The abbreviation for boiling point.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
BPBD	BPBD—See: Bill Posters, Billers and Distributors of the United States and Canada; International Alliance of (AFL-CIO)	*Industrial Relations*
BPDP	BPDP - See: Painters, Decorators and Paperhangers of America; Brotherhood of (AFL-CIO)	*Industrial Relations*
B-Pillar	The roof support between a vehicle's front door window and rear side window, if there is one.	*Mechanical Engineering*
BPS	Bits per second.	*General Engineering*
Brace	(See Diagonal).	*Facility Engineering*
Braced arch	An arch of steel, timber, etc., having a trusslike framework maintaining rigidity under a variety of eccentric loads: a true arch because it is fixed or tied at both sides of the base.	*Civil Engineering*
Braced arch	An arch of steel, timber, etc., having a trusslike framework maintaining rigidity under a variety of eccentric loads—a true arch because it is fixed or tied at both sides of the base.	*Civil Engineering*
Bracehead	a piece of tough ash or oak, about 3ft long, passed through an eye in a short piece of iron, at the other end of which is a male screw to connect with boring rods. Using this men could manually turn the boring rods to form the borehole.	*Mining*
Bracing	metal that is attached to a fabrication prior to galvanizing in order to provide support so that the steel does not change shape during heating and cooling; can be temporary or permanent	*Materials Process*
Brackish	A level of salinity between fresh water and seawater – generally 0.5 to 30 grams of salt per liter.	*Filtration*
Braddish	Braddish, - see Brattice.	*Mining*
Braden Head	See Casing head	*Petroleum Engineering*
Bradenhead	A casinghead.	*Petroleum Drilling*
Bradenhead Test		*Petroleum Drilling*
Bradenhead	A casinghead.	*Petroleum Drilling*
Bradford Breaker	a screening and coal crushing machine which uses gravity impact to break the coal. It passes the run-of-mine coal through a cylindrical screen 8–14 ft in dia. and 15–22 ft long. It could deal with 500–600 t.p.h. reducing the coal to size according to the screen plates fitted.	*Mining*
Brady Brown	A type of frac sand (see Proppant) used in Eagle Ford Shale wells. Obtained from mines near the Texas towns of Brady and Voca.	*Petroleum Drilling*
Brae	an inclined roadway. (Scot.).	*Mining*
Bragg angle	Angle relative to a crystal plane from which x-ray diffraction occurs.	*Material Process*
Bragg's low	The relationship defining the condition for x-ray diffraction by a given crystal. plane.	*Material Process*
Brahman	See American Brahman.	*Agriculture*
Braid	A fibrous or metallic group of filaments interwoven in cylindrical form to form a covering over one or more wires.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Braided Stream	A stream that divides into or follows an interlacing or tangled network of several small branching and reuniting shallow channels separated from each other by branch islands or channel bars, resembling in plan the strands of a complex braid.	*Petroleum Engineering*
Brake	to lower trams down a dip using a wheel and rope (N. Staffs.)—see also Jig.	*Mining*
Brake Assist	Designed to shorten stopping distance in a "panic" stop. Applies full braking power even if the brake pedal is not fully depressed. Sensors gauge the speed at which the driver initially depresses the brake pedal and determine whether full emergency stopping power is warranted.	*Mechanical Engineering*
Brake bias	In most cars, including street cars, pressing on the brake pedal applies a little more force to the front brakes than the rear. This is designed to take advantage of the fact that under braking, weight transfers to the front of the car. With lots of weight on the front tires, the brakes can be applied very hard without completely stopping the wheels from rotating ("locking the wheels"). At the same time, the rear of the car tends to get lighter, so the rear brakes must be engaged less than the fronts to avoid locking the rear wheels and possibly losing control. In a racecar, brake bias is adjustable by the driver to compensate for changing conditions, such as on a wet track where there is less weight transfer to the front of the car under braking, or to adjust for a changing center of gravity as fuel is burned off.	*NASCAR*
Brake Drum	A drum brake is a brake in which the friction is caused by a set of shoes or pads that press against a rotating drum-shaped part called a brake drum.	*Mechanical Engineering*
Brake Fade	A condition brought about by repeated brake applications, resulting in build-up of heat that causes a temporary reduction or fading of braking effectiveness.	*Mechanical Engineering*
Brake fade	Brakes transform motion into heat. The heat in the rotors of a car can reach 5,000 degrees F. When the fluid in the brake system exceeds its boiling point due to hard use, bubbles can form in the brake lines and calipers. Since these bubbles can be squeezed smaller by pressure from the brake pedal, the pedal tends to "go soft" and may even go to the floorboard without the brakes working properly.	*NASCAR*
Brake horsepower (bhp)	The actual power output of an engine or a motor.	*Facility Engineering*
Brake incline	a self-acting haulage system that used a hand-operated brake to control the speed of descent. - see also Gravity haulage.	*Mining*
Brake Linings	The replaceable friction material which contacts the brake drum in a drum brake system to slow or stop the vehicle.	*Mechanical Engineering*
Brake Master Cylinder	A cylinder containing a movable piston activated by pressure on the brake pedal. The piston produces hydraulic pressure that pushes fluid through the lines and wheel cylinders. This forces the brake lining or pad against the drum or disc to slow or stop the vehicle.	*Mechanical Engineering*
Brake Motor	A device usually mounted on a motor shaft between motor and reducer with means to engage automatically when the electric current is cut off or fails.	*Manufacturing*
Brake Pads	In a disc system, they are the replaceable flat segments consisting of a rigid backing plate plus frictional lining that takes the place of the shoe and lining in a drum brake.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Brake Roller	Air or mechanically operated brakes used underneath roller conveyor to slow down or stop packages being conveyed.	*Equipment*
Brake Shoe	The arc-shaped carrier to which the brake linings are mounted in a drum brake. They also force the lining against the rotating drum during braking.	*Mechanical Engineering*
Brakes Disc	A type of braking system in which brake shoes, in a vise-like caliper, grip a revolving disk mounted on a wheel to slow or stop disc and wheel rotation for braking.	*Mechanical Engineering*
Brakes Drum	A type of braking system that utilizes a metal drum mounted on a wheel to form the outer shell of a brake. The brake shoes press against the drum to slow or stop drum and wheel rotation for braking.	*Mechanical Engineering*
Brakesman	the man managing the winding engine.	*Mining*
Braking Torque	Torque applied by a brake to a tire/wheel assembly, which slows or stops the vehicle.	*Mechanical Engineering*
Bran	The broken coat of the seed of cereal grain, separated from the flour or metal by sifting or bolting.	*Material Process*
Branch	dull hard coal forming the top part of the Silkstone Seam, (Yorks.); or sometimes inferior cannel coal.	*Mining*
Branch Connection	The attachment of a branch pipe to the run of a main pipe with or without the use of fittings.	*Maintenance and Repair*
Branches	cross-measure drifts. (Som.).	*Mining*
Branching	The addition of a polymeric molecule to the side of a main molecular chain.	*Material Process*
Branded product	A refined petroleum product sold by a refiner with the understanding that the purchaser has the right to resell the product under a trademark, trade name, service mark, or other identifying symbol or names owned by such refiner.	*Energy*
Brangus	A distinct breed of beef cattle developed by crossing registered Brahman and Angus cattle. The earliest crosses were made in 1912. Breed development was assisted by the USDA Experiment Station at Jeanerette , Louisiana . Genetically Brangus are 3/8 Brahman and 5/8 Angus. The breed registry is maintained by the International Brangus Breeders Association, Inc.	*Agriculture*
Brashing	the action of coal falling away from the face. - see also Ratching.	*Mining*
Brashy	Rotten old timbers in the mine that had been attacked by fungus and could look sound, but were in fact brashy. (Yorks).	*Mining*
Brass, Brasses or Brassy	Iron pyrites, fool's gold, iron sulfide, a brass-like mineral occurring in coal. Thought to be possibly one of the causes of heating or spontaneous combustion in wastes or gobs.	*Mining*
Brassey coal	Coal containing golden specks of iron pyrites, also a well-known coal seam in the Lancs. Coalfield.	*Mining*
Brat	A thin stratum of a coarse mixture of coal and carbonate of lime or pyrites, frequently found lying at the roof of a seam of coal, (N. East).	*Mining*

Term	Definition	*Industry*
Brattice and Brattice cloth	a division or partition in a shaft, heading or other underground working place to direct air to a specific point, often to dilute flammable or noxious gases. It could also be used to divide the place or a shaft into two parts, one for the ingress of fresh air and the other for the egress of the used air. A brattice could be constructed of wood, brick or stonework, or heavy-duty tightly woven (sometimes tarred) cloth nailed to a timber frame or timber boarding.	*Mining*
Brattice or brattice cloth	Fire-resistant fabric or plastic partition used in a mine passage to confine the air and force it into the working place. Also termed "line brattice," "line canvas," or "line curtain."	*Mining*
Bratticed shafts	before the Act of 1862 made it compulsory for every mine to have a second shaft it was common practice to divide the shaft into two or more sections by means of brattices. This enabled the one shaft to be used for several functions simultaneously e.g. winding, pumping and ventilation. These partitions were a source of great danger. Being constructed from timber, if the brattices caught fire or were wrecked the men would be trapped below ground.	*Mining*
Braze Welding	A method of welding whereby a groove, fillet, plug, or slot weld is made using a nonferrous filler metal having a melting point below that of the base metals, but above 800°F. The filler metal is not distributed in the joint by capillary action.5 (Bronze welding, the term formerly used, is a misnomer.)	*Maintenance and Repair*
Brazing	Brazing. A metal joining process in which coalescence is produced by use of a nonferrous filler metal having a melting point above 800°F but lower than that of the base metals joined. The filler metal is distributed between the closely fitted surfaces of the joint by capillary action.	*Maintenance and Repair*
Brazzle, Brazils or brazzles	Another name for iron pyrites; also ? the term 'brazils' was used for small round nut-shaped nodules found in some blackband ironstones.	*Mining*
BRC	BRC—See: Railway Carmen of America; Brotherhood (AFL-CIO)	*Industrial Relations*
Breadth	A series of coal pillars formed by rearer working. (N. Staffs).	*Mining*
Break	Loosely used to describe a large-scale regional shear zone or structural fault.	*Mining*
Break Distance	The minimum distance between separated mating contacts in their fully open position.	*Electrical Engineering*
Break Down Maintenance (BDM)	"Unplanned" corrective maintenance performed on equipment after the equipment has suffered a failure and has to be corrected during a break down of the equipment. Break down maintenance indicates a lack of planning. See also RunTo Failure	*Maintenance*
Break line	The line that roughly follows the rear edges of coal pillars that are being mined. The line along which the roof of a coal mine is expected to break.	*Mining*
Break lines	Break lines, -see Breaks.	*Mining*
Breakaway	The point at which tire cornering traction is lost.	*Mechanical Engineering*
Breakaway Torque	The torque necessary to put into reverse rotation a bolt that has not been tightened.	*Maintenance*
Break-Before-Make	A switch that is configured to break (open) the first set of contacts before engaging (closing) the new contacts. This prevents the momentary connection of the old and new signal paths.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Breakdown (Puncture)	A disruptive discharge through insulation due to failure under electrostatic stress.	*Electrical*
Breakdown maintenance	Maintenance performed after a machine has failed to return it to an operating state.	*Oil Analysis*
Breakdown Voltage	The voltage at which the insulation between two conductors, or a conductor and ground will break down.	*Electrical*
Breakdown Voltage Rating	The dc or ac voltage which can be applied across insulation portions of a transducer without arcing or conduction above a specific current value.	*Electrical*
Breaker props	props set at the waste edge.	*Mining*
Break-even cutoff grade	The lowest grade of material that can be mined and processed considering all applicable costs, without incurring a loss or gaining a profit.	*Energy*
Breaking Strength	Breaking Strength is the ultimate load at which a tensile failure occurs in the sample of wire rope being tested. (Note: The term breaking strength is synonymous with actual strength.) Minimum Acceptance Strength is that strength which is 2-1/2% lower than the catalog or nominal strength. This tolerance is used to offset variables that occur during a sample preparation and actual physical test of a wire rope. Nominal Strength is the published (catalog) strength calculated by a standard procedure that is accepted by the wire rope industry. The wire rope manufacturer designs wire rope to this strength, and the user should consider this strength when making design calculations.	*Wire Rope & Cable*
Breakloose Torque	The torque required to effect reverse rotation when a pre-stressed threaded assembly is loosened.	*Maintenance*
Breakout	Drilling a well.	*Civil Engineering*
Break-out	To Break apart; to disconnect flanged or screwed Connectors.	*Petroleum Engineering*
Breakout Pressure	The minimum pressure which starts moving an actuator.	*Mechanical, Process, and Operations*
Breaks	cracks and fissures found in the strata and coal seams due to the working of coal in the near vicinity or subsidence. This can also occur when a seam is being worked above a previously worked area. (S. Staffs.). Subsidence cracks at the surface are called 'Break lines'.	*Mining*
Breakthrough	A passage for ventilation that is cut through the pillars between rooms.	*Mining*
Break-up	Time in the spring, usually during April and May, when the frost comes out of the ground causing softening and heaving of roadbeds or muskeg. During break-up, drilling and service rig contractors can't move equipment.	*Petroleum Drilling*
Breast	A working face, usually restricted to a stope.	*Mining*
Breast	A working face in a mine, usually restricted to a stope.	*Mining*
Breasting	a short heading stall, worked at right angles to, and forming the face of the main level or a short face advancing along the strike in 'rearer working. (N. Staffs.); or a wide heading or level; or pushing tubs etc. as opposed to pulling them. (N. East).	*Mining*
Breasting Ore	Taking ore from the face, breast or end of a tunnel. Bullion. - Precious metals, gold and silver, etc., not coined.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Breather	A device which permits air to move in and out of a container or component to maintain atmospheric pressure.	*Mechanical, Process, and Operations*
Breccia	A coarse-grained clastic rock, composed of angular broken rock fragments held together by a mineral cement or in a fine-grained matrix.	*Energy*
Breccia	A rock in which angular fragments are surrounded by a mass of fine-grained minerals.	*Mining*
Breed	to produce offspring by giving birth or by hatching	*Agriculture*
Breeder reactor	A reactor that both produces and consumes fissionable fuel, especially one that creates more fuel than it consumes. The new fissionable material is created by a process known as breeding, in which neutrons from fission are captured in fertile materials.	*Energy*
Breeding fire	spontaneous combustion, usually caused by ventilation air mixing with fine coal and made worse by the presence of pyrites (S. Staffs)—see also Heatings.	*Mining*
Breese or Breeze	fine slack. (Scot.); or small coal; or poor coke, used to manufacture breeze blocks.	*Mining*
Breeze	The fine screenings from crushed coke. Usually breeze will pass through a 1/2-inch or 3/4-inch screen opening. It is most often used as a fuel source in the process of agglomerating iron ore.	*Energy*
Brew or Brow	section of rock above the seam that is removed to extend the gate road (S. Staffs)—see also Rip.	*Mining*
Brick casing	Brick casing—see Back-casing.	*Mining*
Bride cake or Bright cake	Black highly carbonaceous slickensided shale with mussels, (Yorks.).	*Mining*
Bridge	A structure spanning and providing passage over a river, chasm, road, or the like.	*Civil Engineering*
Bridge Battery	A battery intended to provide power to system memory while the main battery is replaced.	*Electrical Engineering*
Bridge Cable	(Structural Rope or Strand) The all-metallic wire rope or strand used as the catenary and suspenders on a suspension bridge.	*Wire Rope & Cable*
Bridge carrier	A rubber-tire-mounted mobile conveyor, about 10 meters long, used as an intermediate unit to create a system of articulated conveyors between a mining machine and a room or entry conveyor.	*Mining*
Bridge conveyor	A short conveyor hung from the boom of mining or lading machine or haulage system with the other end attached to a receiving bin that dollies along a frame supported by the room or entry conveyor, tailpiece. Thus, as the machine boom moves, the bridge conveyor keeps it in constant connection with the tailpiece.	*Mining*
Bridge rails	iron rails, the upper part of which was hollow, weighing about 5½ lbs. per foot, used in barrow-ways instead of tram-plates; the tubs being fitted with flanged wheels, (N. East).	*Mining*
Bridge Resistance	See Input impedance and Output impedance.	*Electronic Process*
Bridge Socket	A wire rope or strand end termination made of forged or cast steel that is designed with baskets-having adjustable bolts-for securing rope ends. There are two styles: 1) the closed type has a U-bolt with or without a bearing block in the U of the bolt, and 2) the open type has two eye-bolts and a pin.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bridges	a clearance to minimize seal extrusion.	*Mechanical, Process, and Operations*
Bridge-Tied Load	Used in audio applications, the load (a speaker in this case) is connected between two audio amplifier outputs (it "bridges" the two output terminals). This can double the voltage swing at the speaker, compared to a speaker that is connected to ground. The ground-tied speaker can have a swing from zero to the amplifier's supply voltage. A BTL-driven speaker can see twice this swing because the amplifier can drive either the + terminal of the speaker or the — terminal, effectively doubling the voltage swing. Example: Automotive or hand-held applications.	*Electrical Engineering*
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Bridgework	Civil Engineering, the art or process of bridge building.	*Civil Engineering*
Bridging	A condition of filter element loading in which contaminant spans the space between adjacent sections of a filter element thus blocking a portion of the useful filtration area.	*Mechanical, Process, and Operations*
Bridle or bridal chains	short chains by which the cage is attached to the winding rope; or a chain for preventing tubs overturning when travelling on a steep incline. (Scot.). Also called 'Bull chains'.	*Mining*
Bridle Sling	A two-part wire rope sling attached to a single-part line. The legs of the sling are spread to divide and equalize the load.	*Wire Rope & Cable*
Bright films	The opposite of bloomed films. A designation of film clarity.	*Material Process*
Bright Rope	Wire rope fabricated from wires that are not coated.	*Wire Rope & Cable*
Bright stock	A heavy residual lubricant stock with low pour point, used in finished blends to provide good bearing film strength, prevent scuffing, and reduce oil consumption. Usually identified by its viscosity, SUS at 210°F or cSt at 100°C.	*Oil Analysis*
Brighteners	Optical or fluorescent enhancers found in carpet cleaning products and fabric cleaners.	*Chemistry*
Brightness	Although the terms "brightness" and "luminance" are often used interchangeably, they are different. Luminance is the light intensity; brightness is how it is perceived by the human eye.	*Electrical Engineering*
Brights	bright coal, mainly vitrain.	*Mining*
Brine	A salt water and chemical mix that is produced after fracking a well. This liquid comes out of the ground with very high Total Dissolved Solids (TDS) levels and often toxic substances such as barium and strontium. After use in fracking, brine must be treated as contaminated waste water	*Petroleum Drilling*
Brine	Water that contains quantities of salt dissolved in it, particularly sodium chloride; salt water.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Brinell hardness	A value obtained by the use of the Brinell testing machine, in which a steel sphere of standard size is pressed with a standard pressure into the specimen under test for a standard length of time. The resistance to penetration being stated numerically as the Brinell hardness, the ratio of the pressure on the standardized sphere to the area of the indentation produced.	*Material Process*
BRINELL HARDNESS NO	BRINELL HARDNESS NO.—A number indicating metal hardness using the Brinell Scale. Can be converted to Rockwell B & C hardness by reference to conversion tables. See "Rockwell Hardness No."	*Mechanical*
Brinell hardness number	Parameter obtained from indentation test.	*Material Process*
Brinelling	Denting caused by impact of one bearing component against another while stationary.	*Lubrication*
Brinelling	Permanent deformation of the bearing surfaces where the rollers (or balls) contact the races. Brinelling results from excessive load or impact on stationary bearings. It is a form of mechanical damage in which metal is displaced or upset without attrition.	*Lubrication*
Brinkman equations	Extension of Darcy's law in order to include the transport of momentum through shear in porous media flow.	*Chemical*
Brinkman equations	Extension of Darcy's law in order to include the transport of momentum through shear in porous media flow.	*Chemical Engineering*
Briquettes	made from compressed coal dust, with or without a binding agent such as asphalt.	*Energy*
British Standard Brass	A specialist thread form based upon the Whitworth thread and consisting of 26 threads per inch whatever the thread diameter.	*Maintenance*
British thermal unit	The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).	*Energy*
British Thermal Unit (BTU)	The standard unit for measuring quantity of heat energy. It is the amount of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit.	*Energy*
Britisher	A strong corner pack formed of chocks built of broken wood and filled with stone.	*Mining*
Brittle	A brittle structure or material exhibits low ductility, meaning that it exhibits very little inelastic deformation before complete failure.	*Engineering Physics*
Brittle	Lacking in deformability.	*Material Process*
Brittle fracture	Failure of a material following mechanical deformation with the absence of significant ductility.	*Material Process*
Broad Spectrum	Killing a wide variety of Gram — (Negative) and Gram + (Positive) organisms.	*Chemistry*
Broadband	A transmission medium with enough bandwidth to carry multiple voice, video, or data channels simultaneously. Example: To provide fifty CATV channels on one coaxial cable; or to provide Internet access over cable TV; or to add DSL to a voice-grade telephone line.	*Electrical Engineering*
Broadband Communications	The result of utilities forming partnerships to offer consumers "one-stop-shopping" for energy-related and high-tech telecommunications services.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Brochure, Collaboration	Document describing The Cochrane Collaboration. Removed from the web site for updating; contact the Operations Unit for more information.	*Quality Engineering*
Broken place	an easy place to work with soft or loose coal. (N. East).	*Mining*
Broken reserves	The ore in a mine which has been broken by blasting but which has not yet been transported to surface.	*Mining*
Broken working	the second stage of bord and pillar working, i.e. abstracting the pillars. Also known as 'robbing the pillars'.	*Mining*
Broker	A retail agent who buys and sells power. The agent may also aggregate customers and arrange for transmission, firming and other ancillary services as needed.	*Energy*
Bronze powder	Particles of metals or alloys reduced to powder fineness, used in producing nacreous effects in plastics.	*Material Process*
Bronze Ropes	Wire rope made of bronze wires.	*Wire Rope & Cable*
Bronzing	A golden brown discoloration that usually appears on the lower surface of leaves and is often an advanced stage of the silvering or glazing typical of injury by PAN and other oxidants; brown coloration on needles due to spider mite infestation.	*Forestry*
Brookfield viscosity	Apparent viscosity in cP determined by Brookfield viscometer, which measures the torque required to rotate a spindle at constant speed in oil of a given temperature. Basis for ASTM Method D 2983; used for measuring low temperature viscosity of lubricants.	*Oil Analysis*
Brot	a thin stratum of coal contaminated with lime or pyrites. (Scot.).	*Mining*
Brow	A low place in the roof of a mine, giving insufficient headroom.	*Mining*
Brow or Broo	Hill or bank in Scotland, also the pit top or a haulage incline underground e.g. a 'jig brow' in Lancashire; or the face of a fault plane, (N. East).	*Mining*
Brown coal	woody or soft peaty looking coal, brown or black in color, with a high moisture content—see Lignite.	*Mining*
Brown Metal Coals	coals that when broken give much brown or red dust.	*Mining*
Brown Rake	shale with ironstone bands and balls.	*Mining*
Brown staining	reaction between exposed intermetallic layers (specifically the iron portion of the layers) and oxygen, resulting in surface color changes from gray to brown	*Materials Process*
Brown Swiss	Breed of dairy cattle that originated in Eastern Switzerland. Comes in various shades of brown.	*Agriculture*
Brownout	A controlled power reduction in which the utility decreases the voltage on the power lines, so customers receive weaker electric current. Brownouts can be used if total power demand exceeds the maximum available supply. The typical household does not notice the difference.	*Energy*
Brownout	A dip in the voltage level of a power system, which can damage electrical equipment or cause it to underperform, e.g., lights dim. (See Voltage drop.)	*Electrical*
BRS	BRS—See: Railroad Signalmen; Brotherhood of (AFL-CIO)	*Industrial Relations*

Term	Definition	*Industry*
BRSC	BRSC - See: Railway and Steamship Clerks, Freight Handlers, Express and Station Employees; Brotherhood of (AFL-CIO)	*Industrial Relations*
BRT	BRT—See: Railroad Trainmen; Brotherhood of (AFL-CIO)	*Industrial Relations*
Brunton compass	A pocket compass equipped with sights and a reflector, used for sighting lines, measuring dip and carrying out preliminary surveys.	*Mining*
Brush	the ripping face of a roadway. (Scot.) - see Ripping; or unscreened coal straight from the mine, i.e. 'run-of- mine coal'. (Bris. and Som.); or a strand torn out of a wire rope. (Scot.).	*Mining*
Brushing	Digging up the bottom or taking down the top to give more headroom in roadways.	*Mining*
BS 6755	The British Standard specification dealing with the fire testing of pipeline valves. Once a particular size and pressure class valve is tested and passes the BS 6755 fire test, like valves can be also identified with the BS 6755 standard.	*Mechanical*
BSAC	Shoe and Allied Craftsmen; Brotherhood of (AFL-CIO)	*Industrial Relations*
BSE	Bovine spongiform encephalopathy, mad-cow disease.	*Agriculture*
BSE	BSE - See: Building Service Employees' International Union (AFL-CIO)	*Industrial Relations*
BSF	British Standard Fine. A thread form based upon the British Standard Whitworth form but with a finer thread (more threads per inch for a given diameter). This thread form was first introduced in 1908, the thread form is specified in BS 84: 1956.	*Maintenance*
BSFC	brake specific fuel consumption	*Petro-Chemical Abbreviations*
BSI	British Standards Institution	*Petro-Chemical Abbreviations*
BSOIW	BSOIW - See: Iron Workers; International Association of Bridge, Structural and Ornamental (AFL-CIO)	*Industrial Relations*
BSP	The British Standard Pipe thread (BSP thread) is a family of standard screw thread types that has been adopted internationally for interconnecting and sealing pipe ends. BSP mates an external (male) thread with an internal (female) thread on pipe fittings. BSP threads can be distinguished as either Parallel (denoted by the letter G) or Tapered (denoted by the letter R). See also NPT	*Industrial*
B-stage resins	Intermediate stage of thermosetting resins. Molding powders usually in this stage. The term is not popular.	*Material Process*
BSW	BSW - See: Shoe Workers' Union; Boot and (AFL-CIO)	*Industrial Relations*
BTC	British Technical Council of the Motor and Petroleum Industries	*Petro-Chemical Abbreviations*
Btu	"British Thermal Unit"; the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at 39 degrees F; used as the standard for the comparison of heating values of fuels.	*Chemical*
Btu --	Btu --	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Btu conversion factor	A factor for converting energy data between one unit of measurement and British thermal units (Btu). Btu conversion factors are generally used to convert energy data from physical units of measure (such as barrels, cubic feet, or short tons) into the energy-equivalent measure of Btu. (Seehttp://www.eia.gov/totalenergy/data/monthly/pdf/sec13.pdf for further information on Btu conversion factors.)	*Energy*
Btu per cubic foot	The total heating value, expressed in Btu, produced by the combustion, at constant pressure, of the amount of the gas that would occupy a volume of 1 cubic foot at a temperature of 60 degrees F if saturated with water vapor and under a pressure equivalent to that of 30 inches of mercury at 32 degrees F and under standard gravitational force (980.665 cm. per sec. squared) with air of the same temperature and pressure as the gas, when the products of combustion are cooled to the initial temperature of gas and air when the water formed by combustion is condensed to the liquid state. (Sometimes called gross heating value or total heating value.)	*Energy*
Btu	British thermal unit. A measure of the energy required to raise the temperature of one pound of water one degree Fahrenheit.	*Mining*
BTX	The acronym for the commercial petroleum aromatics-- benzene, toluene, and xylene.	*Energy*
Bubble Internal	Spherical void, or a trapped globule of air or other gas, especially in a transparent or translucent plastic (see Boil, Seed).	*Material Process*
Bubble Point	Upon heating a liquid mixture, this is the point at which bubbles first appear.	*Chemical*
Bubble radius	the maximum radial distance away from a biosparging well where the effects of sparging are observable. Analogous to radius of influence of an air sparging well.	*Chemical*
Bubble Tight	A commonly used term to describe the ability of a control valve or regulator to shut off completely against any pressure on any fluid. Unfortunately, it is totally unrealistic. Control valves are tested to ANSI B16.104 and FCI 70-2-1976 which is the American National Standard for Control Valve Seat Leakage. This standard uses six different classifications to describe a valve's seat leakage capabilities. The most stringent of these is Class VI which allows a number of bubbles per minute leakage, depending on the port size of the valve. The correct response to the question "Will that valve go 'Bubble Tight'?" is to say that it is tested to meet Class VI shutoff requirements.	*Industrial Engineering*
Bubble tower	A fractionating (distillation) tower in which the rising vapors pass through layers of condensate, bubbling under caps on a series of plates.	*Petroleum Engineering*
Bubble-tight shut-off	A phrase used in describing the sealing ability of a valve. During air pressure testing of a new valve in the closed position, leakage past the seats is collected and bubbled thru water. To qualify as "bubble tight," no bubbles should be observed in a prescribed time span.	*Mechanical*
Buck	A "buck" or "step-down" switch-mode voltage regulator is one in which the output voltage is lower than its input voltage. Note: A customer asked the origin of the term and no one seems to know! A buck regulator is a step-down regulator, as opposed to boost. We think it's an American term — in England it was always "step-down." Buck means to resist or reduce (as in "buck the trend"), and hence was used to denote a step-down. Conveniently, it alliterates with the opposite, a boost regulator.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bucket	In a dam a concave surface at the foot of a spillway for deflecting the downward flow of water.	*Civil Engineering*
Bucket	In a dam a concave surface at the foot of a spillway for deflecting the downward flow	*Civil Engineering*
Bucket Line Dredge	Unlike modern dredges; a bucket line dredge was very large. Instead of sucking up water and gravel through the use of water pressure, the bucket line dredges would scoop it up and run it through a long sluice box.	*Mining*
Bucket Makeup	Selected varieties of scrap metal, pre-determined by metallurgists, are loaded into the charge buckets.	*Steel*
Bucket-wheel excavator	a continuous digging machine equipped with a broom on which is mounted a rotating wheel with buckets along its edge. The buckets scoop up material, then empty onto a conveyor leading to a spoil bank. It is best suited for removing overburden that does not require blasting. This excavator is not widely used in the United States.	*Energy*
Buckler or Buckler machine	a machine for making new joints in a conveyor belt. (Scot.).	*Mining*
Buckminsterfullerene	Carbon molecule named in honor of Buckminster Fuller, inventor of the geodesic dome, which resembled the initial fullerene C60.	*Material Process*
Buckyball	Nickname for the buckminsterfullerene molecule C60.	*Material Process*
Buckytube Cylindrical	Buckminster fullerene molecule composed of hexagonal carbon rings.	*Material Process*
Budget plan	An agreement between the household and the utility company or fuel supplier that allows the household to pay the same amount for fuel for each month for a number of months.	*Energy*
Buff	To polish with a buffing wheel.	*Material Process*
Buffer	1. A storage area for data that is used to compensate for a speed difference, when transferring data from one device to another. Usually refers to an area reserved for I/O operations, into which data is read, or from which data is written.2. Any substance or combination of substances which, when dissolved in water, produces a solution which resists a change in its hydrogen ion concentration on the addition of an acid or alkali.	*Electronic Process*
Buffer Capacity (B)	A measure of the ability of the solution to resist pH change when a strong acid or base is added.	*General Engineering*
Buffer Chamber	(Header) pressure vessel with multiple inlets and outlets, utilized to contain and direct the discharge from Chokes in a drilling Manifold system.	*Petroleum Engineering*
Buffer strip	A visual buffer consisting of trees or other vegetation used to screen a road, streamside, or harvest unit, or to protect a riparian area.	*Forestry*
Bug dust	The fine particles of coal or other material resulting from the boring or cutting of the coal face by drill or machine.	*Mining*
Build	drilling directionally with the intent to increase well bore inclination; also refers to increasing and orienting lateral bit force magnitude to or towards the high side of the drill hole.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Buildas	A way a Butty could avoid paying for work done. He would call "buildas" half way through the working day and then pay nothing for the half days work that had been done, or pay a proportion of the wages in beer.	*Mining*
Builders	large blocks of unlaminated sandstone, which are used for rough building purposes such as foundation work or strong walls (N. Staffs.).	*Mining*
Building	a portion of the pack wall as it is built.	*Mining*
Building shell (envelope) DSM program	A DSM program that promotes reduction of energy consumption through improvements to the building envelope. Includes installations of insulation, weather stripping, caulking, window film, and window replacement. (Also see DSM, Demand-Side Management Programs.)	*Energy*
Building shell conservation feature	A building feature designed to reduce energy loss or gain through the shell or envelope of the building. Data collected by EIA on the following specific building shell energy conservation features: roof, ceiling, or wall insulation; storm windows or double- or triple-paned glass (multiple glazing); tinted or reflective glass or shading films; exterior or interior shadings or awnings; and weather stripping or caulking. (See Roof or Ceiling Insulation, Wall Insulation, Reflective or Shading Glass or Film, Storm Window or Triple-Paned Glass, Building Shell (Envelope), and Weather Stripping or Caulking.)	*Energy*
Building Wire	Wire used for light and power in permanent installations utilizing 600 volts or less. Usually in an enclosure and which will not be exposed to outdoor environments.	*Electrical*
Built-in electric units	An individual-resistance electric-heating unit that is permanently installed in the floors, walls, ceilings, or baseboards and is part of the electrical installation of the building. Electric-heating devices that are plugged into an electric socket or outlet are not considered built in. (Also see Heating Equipment.)	*Energy*
Built-in-dirt	Material passed into the effluent stream composed of foreign materials incorporated into the filter medium.	*Oil Analysis*
Bulb (Liquid-in-Glass Thermometer)	The area at the tip of a liquid-in-glass thermometer containing the liquid reservoir.	*General Engineering*
Bulging	Term which is often use, but not recommended. Need use Blister or Domed.	*Material Process*
Bulk Appearance	Appearance of an undisturbed grease surface. Bulk appearance is described by: Bleeding — free oil on the surface(or in the cracks of a cracked grease). Cracked — surface cracks. Grainy — composed of small granules or lumps of constituent thickener. Smooth — relatively free of irregularities.	*Lubrication*
Bulk density	the amount of mass of a soil per unit volume of soil; where mass is measured after all water has been extracted and total volume includes the volume of the soil itself and the volume of air space (voids) between the soil grains.	*Chemical*
Bulk factor	The ratio of the volume of loose molding powder to the volume of the molded article made from it.	*Material Process*
Bulk mining	Any large-scale, mechanized method of mining involving many thousands of tons of ore being brought to surface per day.	*Mining*
Bulk modulus	The measure of resistance to compressibility of a fluid. The reciprocal of the compressibility of this fluid.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bulk Modulus (of elasticity)	A ratio of normal stress to a change in volume. A term used in determining the compressibility of a fluid. Data for petroleum products can be found in the International Critical Tables.	*Lubrication*
Bulk Power Market	A market where wholesale purchases and sales of electricity are made.	*Energy*
Bulk Power Market	Wholesale purchases and sales of electricity.	*Energy*
Bulk Power Supply	Often this term is used interchangeably with wholesale power supply. In broader terms, it refers to the aggregate of electric generating plants, transmission lines, and related equipment. The term may refer to those facilities within one electric utility, or within a group of utilities in which the transmission lines are interconnected.	*Energy*
Bulk power transactions	The wholesale sale, purchase, and interchange of electricity among electric utilities. Bulk power transactions are used by electric utilities for many different aspects of electric utility operations, from maintaining load to reducing costs.	*Energy*
Bulk sales	Wholesale sales of gasoline in individual transactions which exceed the size of a truckload.	*Energy*
Bulk sample	A large sample of mineralized rock, frequently hundreds of tons, selected in such a manner as to be representative of the potential orebody being sampled. Used to determine metallurgical characteristics.	*Mining*
Bulk station	A facility used primarily for the storage and/or marketing of petroleum products, which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.	*Energy*
Bulk terminal	A facility used primarily for the storage and/or marketing of petroleum products, which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.	*Energy*
Bulkheading	The construction of bulkheads; bulkheads in general.	*Civil Engineering*
Bulking value	Solid volume of a unit weight usually expressed as a gallons per pound.	*Material Process*
Bull	A male bovine. Bulls are breeding stock in beef and dairy operations.	*Agriculture*
Bull calf	An male calf that hasn't been castrated.	*Agriculture*
Bull chains	Bull chains, -see Bridle chains.	*Mining*
Bull end	return roller unit of a belt conveyor.	*Mining*
Bull float	A machine for giving the final surfacing to an area of concrete, as on a road.	*Civil Engineering*
Bull market	Term used to describe financial market conditions when share prices are going up.	*Mining*
Bull props	props set at an angle to prevent tubs running away on an incline. Various other names used; Bull Stumps, Warwicks., Derricks, (S. Derbys)., Stall,	*Mining*
Bull quartz	A prospector's term for white, coarse-grained, barren quartz.	*Mining*
Bull stakes	the four posts at the floor of the shafts to which the conductors are fixed. (Yorks.).	*Mining*
Bulldoze	To clear, level, or reshape the contours of (land) by or as if by using a bulldozer. Example: To bulldoze a building site.	*Civil Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bulldoze	To clear, level, or reshape the contours of (land) by or as if by using a bulldozer. Example—To bulldoze a building site.	*Civil Engineering*
Bulldozed	To clear away by or as if by using a bulldozer. Example: To bulldoze trees from a site.	*Civil Engineering*
Bulldozed	To clear away by or as if by using a bulldozer. Example—To bulldoze trees from a site.	*Civil Engineering*
Bulldozer	A large, powerful tractor having a vertical blade at the front end for moving earth, tree, stumps, rocks, etc.	*Civil Engineering*
Bullion	Metal formed into bars or ingots.	*Mining*
Bullion	Metal in bars, ingots or other uncoined form.	*Mining*
Bullion or Stone bullion	calcareous concretions, occasionally ironstone nodules or quartzite boulders (Lancs).	*Mining*
Bull's head	The motorized end of a boring machine. The name roughly describes its shape. Various other names used in other coalfields are, Pig's head, (Leics.), Tup, (Lancs.), Tich, (S. Derbys.).	*Mining*
Bummer	the man in charge of a group of men on the longwall face. Various other local names were used such as Coddy, (Leics.), Puffler, sometimes Fuffler, (War.), Pool-leader and Leading man, (Scot,), also Face captain and Face chargeman (Lancs.).	*Mining*
Bump	the sound caused by a break in the strata above while underground, or the actual movement due to the break; or a sudden floor uplift due to a break in the floor. Also called a 'pounce' or 'crump'.	*Mining*
Bump (or burst)	A violent dislocation of the mine workings which is attributed to severe stresses in the rock surrounding the workings.	*Mining*
Bump Steer	Refers to changes in wheel alignment (toe, camber and caster) as the wheel moves through the suspension range. Wheel alignment is set with the car stationary, so bump steer affects must be properly considered to ensure that suspension movement does not cause adverse changes in handling or grip.	*NASCAR*
Bump Test	To determine a process model, there needs to be some "excitation" of the process. This is typically accomplished through bump testing. Bump tests can be performed many ways. Some ways to do this include: Make a Setpoint Change, with the loop in MANUAL change the controller output, Make a Setpoint Change, Perform a Fast Plant Test	*Process Control*
Bump Thread	A modified thread profile patented and trade mark of the Bosco Tool Inc. The thread form has a small projection at the pitch diameter that eliminates the clearance from the thread assembly on both flanks. By doing this it is claimed that resistance to vibration loosening is significantly improved.	*Maintenance*
Bumper	a large piece of iron that was used as a counter balance on a hand windlass when winding loaded corves or tubs up and down an underground staple shaft. (Som.) and (Bris.), also iron catches fitted in a cage to hold the tubs in place during winding. (Lancs.), (Mids.).	*Mining*
Bumpsteer	A steering effect resulting from toe or camber changes as the suspension moves up and down.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Buna N (Perbunan)	Buna N (Perbunan)	*Material Process*
Buna S Synthetic	rubber produced by the copolymerization of butadiene and styrene.	*Material Process*
Bunch Stranding	A method of stranding where a single conductor is formed from any number of wires twisted together in the same direction, such that all strands have the same lay length, but no specific geometric arrangement.	*Electrical*
Bunches	small temporary areas or pillars of coal left during holing to support the coal until the holing is complete. (N. Staffs.).	*Mining*
Bundled utility service (electric)	A means of operation whereby energy, transmission, and distribution services, as well as ancillary and retail services, are provided by one entity.	*Energy*
Bunker	Bunker	*Mining*
Bunker fuels	Fuel supplied to ships and aircraft, both domestic and foreign, consisting primarily of residual and distillate fuel oil for ships and kerosene-based jet fuel for aircraft. The term "international bunker fuels" is used to denote the consumption of fuel for international transport activities. Note: For the purposes of greenhouse gas emissions inventories, data on emissions from combustion of international bunker fuels are subtracted from national emissions totals. Historically, bunker fuels have meant only ship fuel.	*Energy*
Bunker top-holes	another term for a rise heading in steep seam working (S. Wales).	*Mining*
Bunkey	A small fault in a coal seam (S. Derbys.).	*Mining*
Bunton	A beam of wood or steel placed horizontally across a shaft to act as a support or for fixing equipment or a brattice—see Main Buntons and Collaring Buntons.	*Mining*
Burden of the Past	The 30,000 Existing Chemicals estimated to be on the EU market, for which little or no information is available, in particular about their long-term effects on human health or the environment.	*Chemical*
Burgers vector	Displacement vector necessary to close a stepwise loop around a dislocation.	*Material Process*
Burgy	small coal also slack or poor coal with a high dirt content; or coal that readily breaks into smalls. (Lancs.).	*Mining*
Buried service	An application in which valves are installed in lines which are buried below ground level.	*Mechanical*
Buried Valley	A depression in an ancient land surface or in bedrock now covered by younger deposits, especially a preglacial valley filled with glacial drift.	*Petroleum Engineering*
Burn days	The number of days the station could continue to operate by burning coal already on hand assuming no additional deliveries of coal and an average consumption rate.	*Energy*
Burned	Showing evidence of thermal decomposition through some discoloration, distortion or destruction of the surface of the plastic.	*Material Process*
Burnett's coal wedge	a roller wedge patented in 1884 by C, Burnett. The wedge was used to break down coal after it had been undercut.	*Mining*
Burn-In	A long term screening test (either vibration, temperature or combined test) that is effective in weeding out infant mortalities because it simulates actual or worst case operation of the device, accelerated through a time, power, and temperature relationship.	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Burnup	Amount of thermal energy generated per unit mass of fuel, expressed as Gigawatt-Days Thermal per Metric Ton of Initial Heavy Metal (GWDT/MTIHM), rounded to the nearest gigawatt day.	*Energy*
Burr	Burr—see Cank.	*Mining*
burro	A small donkey.	*Agriculture*
Burst Dimming	Burst Dimming is a method of controlling the brightness of cold cathode fluorescent lamps (CCFL) by turning the lamps on and off at a rate faster than the human eye can detect. The on/off rate is nominally 100Hz to 300Hz. The higher the ratio of on-time to off-time, the brighter the lamps will be. Because of CCFL response times, on-time to off-time ratios of less than 1% are not practical.	*Electrical Engineering*
Burst Mode	A temporary high-speed data-transfer mode that can transfer data at significantly higher rates than would normally be achieved with nonburst technology.	*Electrical Engineering*
Burst Pressure	The maximum pressure applied to a transducer sensing element or case without causing leakage.	*General*
Burst pressure rating	The maximum specified inside-out differential pressure that can be applied to a filter element without outward structural or filter-medium failure.	*Oil Analysis*
Burst Proportioning	A fast-cycling output form on a time proportioning controller (typically adjustable from 2 to 4 seconds) used in conjunction with a solid state relay to prolong the life of heaters by minimizing thermal stress.	*Electrical*
Bursted	The condition resulting from the pulling apart of filler in a laminated plastic caused by flow or speading.	*Material Process*
Bus	An electrical conductor that serves as a common connection for two or more electrical circuits.	*Energy*
Busbar	An electrical conductor that makes a common connection between several circuits. Sometimes, electrical wire cannot accommodate high-current applications, and electricity must be conducted using a more substantial busbar—a thick bar of solid metal (usually copper or aluminum). Busbars are uninsulated, but are physically supported by insulators. They are used in electrical substations to connect incoming and outgoing transmission lines and transformers; in a power plant to connect the generator and the main transformers; in industry, to feed large amounts of electricity to equipment used in the aluminum smelting process, for example, or to distribute electricity in large buildings	*Electrical*
Bushel	A dry measure commonly used as a measure of crops. In the United States a bushel equals 4 pecks, or 2150.42 cubic inches. In the United States , the bushel is the common measure of wheat and some other crops. A bushel of apples is 42 pounds.	*Agriculture*
Busheling	A widely traded form of steel scrap consisting of sheet clips and stampings from metal production. Bushel baskets were used to collect the material through World War II, giving rise to the term.	*Metallurgy*
Bushing	(1) In machinery, a removable liner fixed in a bore to improve the bearing surface; (2) In chain, a renewable liner fixed in the barrel of a link, or center link, to provide an improved bearing surface; (3) in chain, a hollow cylinder used to spa	*Equipment*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Bushing	A bushing is a cylindrical insulating component, usually made of ceramic, that houses a conductor. It enables a conductor to pass through a grounded enclosure, such as a transformer tank (the physical shell of a transformer), a wall or other physical barrier, to connect electrical installations. In the case of a transformer, bushings protect the conductors that connect a transformer's core to the power system it serves through channels in the transformer's housing.	*Electrical*
Business Process Reengineering (BPR)	Business Process Reengineering or Business Process Reorganization is itself a process that aims improving organizational performance by improving its business processes. BPR came into use after Michael Hammer and James Champy published their best-selling "Re-engineering the Corporation" in 1993. Re-engineering means 'starting over' and the defining words are fundamental, radical, dramatic and process. In short, starting with a clean piece of paper, to design an organization to perform a process. Re-engineering is not about "continuous improvement", which by definition is an examination and analysis of the status quo where minute improvements are continuously applied to the existing process. A combined approach of continuous improvement and radical change (where needed) is aimed in Business Process Management (BPM).	*Maintenance*
Buskins	sacking tied around the legs when working underground in water (S. Staffs.).	*Mining*
Butadiene also 1,3 Butadiene, divinyl, or erythrene (CH2 CHCH CH2)	A gas, a diolefin of a type that polymerizes to form rubber like substances and hence is used in the production of synthetic rubber. n-Butanol or Butyl alcohol CH3 (CH2) 2	*Material Process*
Butadiene Colorless	volatile liquid. Derived from petroleum or alcohol. The chief raw material for synthetic rubber.	*Material Process*
Butadiene, divinyl, or erythrene (CH2 CHCH CH2)	A gas, a diolefin of a type that polymerizes to form rubber like substances and hence is used in the production of synthetic rubber.	*Material Process*
Butane (C_4H_{10})	A straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams, which is gaseous at standard temperature and pressure. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association specifications for commercial butane.	*Energy*
Butler–Volmer equation	Expression that relates the reaction rate of an electron transfer reaction on an electrode surface to the exponential of the overpotential. The equation can be derived from the Arrhenius rate equation by accounting for the contribution of the electric potential to the activation energy.	*Chemical*
Butoxyethyl stearate (C17H35COOC2H4 OC4 H9)	A plasticizer.	*Material Process*
Butt	another word for a heading, i.e., a roadway, usually in coal (S. Wales).	*Mining*
Butt cleat	Butt cleat, -see Cleat.	*Mining*
Butt cleat	Butt cleat	*Mining*
Butt Coupling	Angles or plates designed to join conveyor sections together.	*Manufacturing*
Butt entry	A coal mining term that has different meanings in different locations. It can be synonymous with panel entry, submain entry, or in its older sense it refers to an entry that is "butt" onto the coal cleavage (that is, at right angles to the face).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Butt Joint	A splice or connection formed by placing the ends of two conductors together and joining them by welding, brazing or soldering.	*Electrical*
Butt Weld	Weld along a seam that is butted edge to edge.	*Maintenance and Repair*
Butt weld end	The end connection of a valve suitably prepared for butt welding to a connecting pipe.	*General Mechanical*
Butt weld end (BWE)	The end connection of a valve suitably prepared for butt welding to a connecting pipe.	*Mechanical*
Butt Weld Ends	Profiles that are machined on the ends of the pipework components, to allow the joining of components by circumferential weld.	*Industrial Engineering*
Butt Weld Fitting	Any fitting that has Butt weld ends.	*Petroleum Engineering*
Butt Weld Joint	A form of weld joint having specially prepared surfaces that makes a 'Full Penetration Weld'. A small gap between the adjacent pieces of pipe or fittings is left then deposited weld metal will bridge, fill, and close.	*Petroleum Engineering*
Butt Wrap	Tape wrapped in an edge: to :edge manner with no overlapping between adjacent turns.	*Electrical*
Butterfly	A detaching hook associated with cages. In the event of the cage being 'overwound' the hook detached the cage from the winding rope and prevented the cage from going through the headgear and into the winding house.	*Mining*
Butterfly valve	A shut-off valve usually found in larger pipe sizes (4 inches or greater). This type of valve can be used for non-critical flow control.	*Chemical*
Buttock	A corner formed by two coalfaces more or less at right angles, such as the end of a working face, also called the 'fast side'; or any short piece of coal approximately at right angles to the face; or the amount of coal removed from a handgot face in one operation (cycle), also called a 'turnover'.	*Mining*
Buttocking	a method of working a handgot longwall by forming a length of coal on bord, known as a 'buttock', which is then worked parallel to the face. If worked in both directions, it was known as 'double buttocking'. A modification of the buttocking system was 'continuous buttocking', where a buttock was commenced at one end of a face and was then advanced, or 'taken up', until it reaches the end of the stall in which it was started. The next stall and succeeding stalls take up the work in turn, and the first stall commences another buttock, producing a stepped face line.	*Mining*
Button Conveyor Rope	Wire ropes to which buttons or discs are attached at regular intervals to move material in a trough.	*Wire Rope & Cable*
Button-man	a man who monitors conveyor transfer points. Stopping and starting the conveyors after stoppages or breakdowns, by use of the button.	*Mining*
Buttress pack	a strong pack in the waste, stronger than and in addition to the roadside packs, placed some distance away from the roadway to protect it. If this is carried out on both sides of the roadway with comparatively narrow roadside packs, then this is termed 'Double packing'.	*Mining*
Butty	a mate or working partner in the pit. Several men could work a 'butty system' together in a working place or district within a mine, also an early name for an underground boss, contractor or Charter Master who supervised the extraction of coal for the owner. He engaged and paid the underground labor.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Buttyman	a man in charge of others who is paid for the whole job and he himself pays those under him. The 'butty system' first started with a miner employing members of his own family including his wife and children to transport coal from the workings to the pithead.	*Mining*
Butyl propionate or n-Butyl propionate	A solvent, ester.	*Material Process*
Butyl stearate (C17H35COOC4H9)	A plasticizer.	*Material Process*
Butylene (C_4H_8)	An olefinic hydrocarbon recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Butylene is used in the production of gasoline and various petrochemical products.	*Energy*
Butyraldehyde CH3(CH2)2CHO	A colorless liquid. An aldehyde that can be used in place of formaldehyde in various resins. One of the better known butyraldehyde resins is vinyl butyraldehide resin.	*Material Process*
Butyrate	A salt or ester of butyric acid, an informal trade term for cellulose acetate butyrate plastics.	*Material Process*
Butyric acid CH3 (CH2) 2COOH	A colorless liquid, an acid used in the production of cellulose acetate butyrate and other butyric esters for plastics.	*Material Process*
Buy Through	An agreement between utility and customer to import power when the customer's service would otherwise be interrupted.	*Energy*
Buy-back oil	Crude oil acquired from a host government whereby a portion of the government's ownership interest in the crude oil produced in that country may or should be purchased by the producing firm.	*Energy*
Buyer	A professional purchaser. Buyers typically specialize in a given group of materials or services and are responsible for market analysis, purchase planning, and coordination with users.	*Procurement*
Buzz	A sound exemplified by loose power transformer laminations (dominated by 120 Hz where the power frequency is 60 Hz).	*Reliability Engineering*
Buzzard	small layer of inferior coal in the roof of the Arley Mine. (Lancs.).	*Mining*
Buzzer	a steam siren sounding at the beginning and end of each shift and at midnight to let in each New Year. If a miner was late for work he was said to be 'buzzed' (S. Staffs.).	*Mining*
BVR	Ball Valve Regulator—An automatic throttling valve controlling flow or pressure in a pipeline; comprising a package involving al ball valve actuator, positioner, and controlling instrument.	*Mechanical*
BWR	Boiling-Water Reactor	*Energy*
BX	Refer 6 BX	*Petroleum Engineering*
BX life	The time at which X% of the units in a population will have failed. For example, if an item has a B10 life of 100 hours, that means that 10% of the population will have failed by 100 hours of operation.	*Reliability Engineering*
By gate	the passages from the mainways to the headings. (Yorks.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Byat	a harness, which in the south (Staffs) is described as the 'girdle', but differs from it by being a pair of straps over the shoulders, meeting in a broad piece behind, and terminating in a chain and hook, used for drawing coal dans. (N Staffs).	*Mining*
Bye work	Bye work, -see Dead work.	*Mining*
Bypass	A small passage around a large valve for warming up a line. An emergency connection around a reducing valve, trap, etc., to use in case it is out of commission.	*Maintenance and Repair*
Bypass Filtration	A system of filtration in which only a portion of the total flow of a circulating fluid system passes through a filter at any instant or in which a filter having its own circulating pump operates in parallel to the main flow.	*Oil Analysis*
Bypass Flow Regulator Valve	A valve which regulates the flow to a circuit at a constant volume, dumping excess oil.	*Mechanical, Process, and Operations*
Bypass Valve (Relief valve)	A valve mechanism that assures system fluid flow when a preselected differential pressure across the filter element is exceeded; the valve allows all or part of the flow to bypass the filter element.	*Lubrication*
Bypassed footage	Bypassed footage is the footage in that section of hole that is abandoned as the result of remedial sidetrack drilling operations.	*Energy*
By-pit	a pit or shaft situated at a higher elevation than the main winding shaft of the colliery, e.g. on a hillside. The by-pit was usually a ventilation pit that promoted natural ventilation currents.	*Mining*
Byproduct	A secondary or additional product resulting from the feedstock use of energy or the processing of nonenergy materials. For example, the more common byproducts of coke ovens are coal gas, tar, and a mixture of benzene, toluene, and xylenes (BTX).	*Energy*
Byte	The number of adjacent binary digits operated upon as a unit.	*Electrical Engineering*
C Cases	a designation made by the National Labor Relations Board of those cases on its docket involving an unfair labor practice in violation of the law.	*Industrial Relations*
C or cent.	Centigrade	*Oil Analysis*
C.I.F.	Cost Insurance & Freight—Shipper pays all freight and insurance charges. Same as F.O.B. Destination.	*Mechanical*
C/gal	Cents per gallon	*Energy*
C-4	Allison ATF specification	*Petro-Chemical Abbreviations*
C_4H	A mixture of light hydrocarbons that have the general formula C_4H_n, where n is the number of hydrogen atoms per molecule. Examples include butane (C_4H_{10}) and butylene (C_4H_8).	*Energy*
CA	Controlled atmosphere storage.	*Agriculture*
Ca Canny Strike	a procedure used by British trades unions many years ago to indicate opposition to employer policy or alleged inadequate wages.	*Industrial Relations*
CA Case	a National Labor Relations Board case involving a complaint against an employer.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CAA	Clean Air Act	*Petro-Chemical Abbreviations*
CAAA	Clean Air Act Amendment	*Petro-Chemical Abbreviations*
Cabin	an enclosed place underground used for a particular purpose such as an underground office, e.g. Lamp cabin, Deputy's cabin, or another name for the Lamp Room on the surface.	*Mining*
Cable	A very strong rope made of strands of metal wire, as used to support cable cars or suspension bridges. A cord of metal wire used to operate or pull a mechanism.	*Civil Engineering*
Cable belt conveyor	a heavy-duty, high capacity, conveyor belt that uses two stranded steel ropes, one on either side of the belt to provide tensile pull. Molded rubber shoes along the edge of the belt grip the steel ropes, which support the belt and provide the motive power. Cable belt conveyers can carry coal up steeply inclined roadways for long distances.	*Mining*
Cable bolt	A steel cable, capable of withstanding tens of tons, cemented into a drillhole to lend support in blocky ground.	*Mining*
Cable Core	A cable core is the portion of an insulated cable lying under the protective covering or coverings.	*Electrical*
Cable Filler	The material used in multiple conductor cables to occupy the spaces formed by the assembly of components, thus forming a core of the desired shape.	*Electrical*
Cable Tool Drilling	A heavy bit is attached to the end of a wire cable and is raised and dropped repeatedly, pounding its way downward. Periodically, cuttings are bailed out of the hole. The method is slow and in most places has been replaced by rotary drilling.	*Petroleum Engineering*
Cable Tool Drilling Line	The wire rope used to operate the cutting tools in the cable tool drilling method (i.e., rope drilling).	*Wire Rope & Cable*
Cable-Laid Wire Rope	A type of wire rope consisting of several wire ropes laid into a single wire rope (e.g., 6x42 (6x6x7) tiller rope).	*Wire Rope & Cable*
CAD	Computer Aided Design. This may allow designers to manipulate parts drawings and simulate processes.	*Control Engineering*
CAD	Computer Aided Design	*Gears*
Cadmium Electroplating	Coating of threaded fasteners with cadmium can provide the parts with excellent corrosion resistance. The appearance of the coating is bright silver or yellow if subsequently passivated. The friction values associated with this coating are also comparatively low. A chromate conversion coating is frequently applied to the surface to improve corrosion resistance. Cadmium is not now frequently used because of the environmental and worker health problems associated with the coating process and should not be used in applications above 250C or when contact with food is possible.	*Maintenance*
Cadmium Ion Plating	The deposition of cadmium by a vacuum process to provide galvanic corrosion protection.	*Paint and Coatings*
Cadmium Plating	The electrolytic deposition of cadmium to provide galvanic corrosion protection. Restricted by environmental considerations.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CAFE	corporate average fuel economy	*Petro-Chemical Abbreviations*
Cage	A hollow cylindrical trim element that is sometimes used as a guide to align the movement of a valve plug with a seat ring. It may also act to retain the seat ring in the valve body. On some types of valve, the cage may contain different shaped openings which act to characterize the flow through the valve. The cage may also act as a noise attenuation or anti-cavitation device.	*Industrial Engineering*
Cage dip	a roadway driven to the rise in 'rearers' workings used as the intake airway (N. Staffs.).	*Mining*
Cage guides	Cage guides—see Guides.	*Mining*
Cage props	Cage props—see Keps.	*Mining*
Cager	a power operated ram. Usually hydraulically powered, but in the earlier days steam powered. Also used for pushing mine cars on and off the cage at the pit bottom or the pit top.	*Mining*
CAHE	College of Agriculture and Home Economics, at Washington State University. (College of Agriculture, 1917-1982; College of Agriculture and Home Economics, 1982-2003; College of Agricultural, Human, and Natural Resource Sciences, 2003-.)	*Agriculture*
CAHNRS	College of Agricultural, Human, and Natural Resource Sciences, at Washington State University, formerly College of Agriculture and Home Economics. (College of Agriculture, 1917-1982; College of Agriculture and Home Economics, 1982-2003.)	*Agriculture*
Caisson	A structure used in underwater work, consisting of an airtight chamber, open at the bottom and containing air under sufficient pressure to exclude the water. A boatlike structure used as a gate for a dock or the like.	*Civil Engineering*
Caisson Disease	sometimes known as "the bends." Results from the sudden changed in pressure or form the use of compressed air.	*Industrial Relations*
Caissons	(See Foundation).	*Facility Engineering*
Caking index or Agglutinating power	a method used in the laboratory for determining the degree of caking, coking power or binding together of coal when a pulverized sample is heated in a prescribed manner.	*Mining*
Calcination	A process in which a material is heated to a high temperature without fusing, so that hydrates, carbonates, or other compounds are decomposed and the volatile material is expelled.	*Energy*
Calcine	Name given to concentrate that is ready for smelting (i.e., the sulfur has been driven off by oxidation).	*Mining*
Calcium carbide (CaC2)	A rhombic gray crystalline compound. As a source of acetylene, calcium carbide is an important raw material for synthetic resins, especially vinyl ester resins and vinyl indene chloride. Acetylene is also the base material for the manufacture of many other organic compounds used in various plastics. The calcium carbide itself is used as a raw material in the production of melamine-formaldehyde resins.	*Material Process*

Term	Definition	*Industry*
Calcium cyanamide (N CN Ca)	Colorless hexagonal rhombohedral crystals. The product of calcium carbide and nitrogen passed through the electric furnace, and the source material for dicyandiamide.	*Material Process*
Calcium hypochlorite (Ca(ClO)2 4H2O)	Colorless deliquescent crystals. Bleaching powder, which is used to bleach cotton linters or other cellulosic material which is being prepared for acetylating or esterification for the production of various cellulose plastics? Fillers may also be bleached with this.	*Material Process*
Calcium oxide, or lime (CaO)	Colorless cubic crystals. A raw material for the manufacture of calcium carbide and many other synthetic materials used as intermediates or in the finished plastics of various kinds.	*Material Process*
Calcium stearate (CH3 (CH)16COO)2 Ca)	A plasticizer and waterproofing agent incorporated in small amounts in such plastics as phenolics.	*Material Process*
Calcium sulfate	A white crystalline salt, insoluble in water. Used in Keene's cement, in pigments, as a paper filler, and as a drying agent.	*Energy*
Calcium sulfite	A white powder, soluble in diluted sulfuric acid. Used in the sulfite process for the manufacture of wood pulp.	*Energy*
Cauldron button	The fossil root of a tree or fern lying on the roof of a seam of coal. It could drop without giving any warning, occasioning accidents. It derives its name from the resemblance to the bottom of a cauldron or pot; in Somersetshire, it is called a 'bell-mould'.	*Mining*
Calendar-Based Maintenance	A maintenance strategy where specified activities (typically preventative in nature) are undertaken on a predetermined schedule at fixed intervals of time.	*Maintenance*
Calender	A machine consisting of two or more large rollers revolving at differential speeds against each other, used in coating textiles and paper.	*Material Process*
Calender-van Dusen Equation	An equation that defines the resistance-temperature value of any pure metal that takes the form of RT = RO(1 + AT + BT2) for values between the ice point (0°C) and the freezing point of antimony (630.7°C) and the form RT = RO[1 + AT + BT2 + C(T-100)T2] between the oxygen point (-183.0°C) and the ice point (0°C).	*General Engineering*
Calibration	The process of adjusting an instrument or compiling a deviation chart so that its reading can be correlated to the actual value being measured.	*General Engineering*
Calibration	A test during which known values are applied to the device under test and corresponding output readings are recorded under specified conditions.	*Electrical Engineering*
Calibration Curve	A graphical representation of the calibration record.	*Electrical Engineering*
Calibration Cycle	The application of known values and recording of corresponding Output readings over the full or the specified portion of the Range, in an ascending and descending direction.	*Electrical Engineering*
Calibration verification	"The assaying of calibration materials in the same manner as patient samples to confirm that the calibration of the instrument, kit, or test system has remained stable throughout the laboratory's reportable range for patient test results." [CLSI]	*Quality*
California power exchange	A State-chartered, non-profit corporation which provides day-ahead and hour-ahead markets for energy and ancillary services in accordance with the power exchange tariff. The power exchange is a scheduling coordinator and is independent of both the independent system operator and all other market participants.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Caliper	In a disk brake, a housing for cylinder, pistons and brake shoes, connected to the hydraulic system. The caliper holds the brake shoes so they straddle the brake disc.	*Mechanical Engineering*
Caliper	In a disk brake, a housing for cylinder, pistons and brake shoes, connected to the hydraulic	*Mechanical Engineering*
Call	an option, but not an obligation to buy (See Options and Put).	*Metallurgy*
Call Back	A job where the maintenance person is called back because the asset broke down again or the job was not properly finished the first time.	*Maintenance*
Call-Back Pay	Call-Back Pay	*Industrial Relations*
Calley-stone	a type of gannister. (Yorks.).	*Mining*
Callice	Callis or Clod and callice, dirt and waste., or a shaley coal. (Lancs.)	*Mining*
Call-In Pay	the number of hours of pay guaranteed, usually by contract, to a worker who reports to work when there is insufficient work for him to do.	*Industrial Relations*
Calling course	the time at which the 'caller' made his rounds from house to house to wake the early shift men. He would then make a later call to wake the boys and day workers. In early days he would knock on the door and call 'Wake up and go to work, in the name of God!'. (19th century N East). The 'knocker-up' was still employed in the Lancashire mill towns as late as the mid. 1940s.	*Mining*
Call-Out	To Summon A Tradesperson To The Workplace During His Normal Non-Working Time So That He Can Perform A Maintenance Activity (Normally An Emergency Maintenance Task)	*Management*
Callus tissue	A protective tissue of thin-walled cells developed on wound surfaces, often beginning at the edges of a wound.	*Forestry*
Calorie	The quantity of thermal energy required to raise one gram of water 1°C at 15°C.	*Electronic Process*
Calorific value	The quantity of heat that can be liberated from one pound of coal or oil measured in BTU's.	*Mining*
Calorifier	A calorifier/storage calorifier is a large cylindrical hot water heater. The calorifier heats fluids by circulating them over heating coils, and is necessary for in-demand hot water needs for feeding a boiler. May be storage or non-storage calorifier. See also Water Heater	*Industrial*
Calvey heifer	A cow pregnant with its first calf.	*Agriculture*
CAM	Computer Aided Manufacturing is a generic term for systems help manufacturing. They include CNC and process control.	*Control Engineering*
Camber	the condition of having an arched surface	*Materials Process*
Camber Angle	The inward or outward angle which a front-wheel spindle makes with a vertical line, as viewed by either the front or the rear of the vehicle. Positive camber results when the top of the tire tilts out further than its bottom. The adjustment of this setting affects both tire wear and vehicle handling.	*Mechanical Engineering*
Camber Thrust	The lateral force developed by a tire due to its camber. A force in the same direction as the leaning of the tire.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Campbell diagram	A mathematically-constructed diagram used to check for coincidences of vibration sources (1x, 2x, etc. shaft speed) with rotor natural frequencies, resulting in rotor resonances. It plots frequency vs RPM, with plot size growing with increasing amplitude. Sometimes called an interference diagram.	*Reliability Engineering*
Campshed	To line (the bank of a river) with campshot.	*Civil Engineering*
Campshot	A facing of planks and piles placed along the bank of a river to prevent erosion.	*Civil Engineering*
Cams	Eccentric shafts used in most internal combustion engines to open and close valves.	*Lubrication*
Camshaft	The shaft in the engine which is driven by gears, belts or chain from the crankshaft. The camshaft has a series of cams that opens and closes intake and exhaust valves as it turns.	*Mechanical Engineering*
Canadian and Catholic Confederation of Labor	a labor organization, composed primarily of Catholic workers, bringing together local unions in a number of industries.	*Industrial Relations*
Canadian Congress of Labor	an organization consisting primarily of international unions originally affiliated with the C.I.O.	*Industrial Relations*
Canadian deuterium uranium reactor (CANDU)	Uses heavy water or deuterium oxide (D_2O), rather than light water (H_2O), as the coolant and moderator. Deuterium is an isotope of hydrogen that has a different neutron absorption spectrum from that of ordinary hydrogen. In a deuterium-moderated-reactor, fuel made from natural uranium (0.71U-235) can sustain a chain reaction.	*Energy*
Canadian Federation of Labor	The - members of the Knights of Labor who were in the Trades and Labor Congress seceded in 1902-3.	*Industrial Relations*
Canadian Industrial Disputes Investigation Act (1907)	a Canadian Act which provides compulsory investigation in disputes affecting public utilities, railroads, and mines.	*Industrial Relations*
Canadian Labor Congress	an organization formed in 1956 by merger of the Trades and Labor Congress of Canada and the Canadian Congress of Labor.	*Industrial Relations*
Canadian Trades and Labor Congress	an outgrowth of the Toronto Trades assembly on 1881.	*Industrial Relations*
Canal	a waterway built to let boats navigate the waters	*Agriculture*
Canaries	During a mine rescue operation, the rescue team would enter the mine wearing breathing apparatus. As the amount of air carried was limited, the breathing apparatus would not be brought into use until absolutely necessary. To avoid delay by having to stop to test for gas with a safety lamp, the team would carry two or three canaries in separate cages. At the first sign of carbon monoxide (after damp), the bird would become distressed and in some cases fall from its perch. A small cylinder of oxygen was often carried to resuscitate the bird. There are now more sophisticated electronic means of testing for gas.	*Mining*
Canch	Caunch or Kench, the face of a ripping or brushing; or the part of the roof of an underground roadway (top canch) that has to be taken down; or the portion of the floor (bottom canch) that is required to be removed to increase roadway height; or the step of rock up onto the face when dinting or pavement brushing. - see also Brush, Rip, Dinting and Lip.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Canch holes	holes drilled and fired around the 'sumpers' in shaft sinking or road heading. Also called 'side holes'.	*Mining*
Candellila wax	Natural wax obtained from a small shrub grown in Mexico and Texas softer than Carnauba wax, melting at about 156°F (68.88°C).	*Material Process*
Candle coal or Cannel coal	An unlaminated coal that breaks with a glassy, conchoidal fracture, rather like that of pitch. Composed of much-altered plant material including spores, resin, cuticles and oil algae. Probably water transported and deposited as organic sediments. It burns with a bright, smoky flame like a candle.	*Mining*
Cank or Kank	a compact, fine-grained sandstone, or any fine-grained rock that was hard to drill. (Yorks.), e.g. an irony mudstone or siltstone. The cank in the Mansfield Marine Band is an ankeritic siltstone.	*Mining*
Canker	the ochreous sediment in pit water. - see Ochre.	*Mining*
Canker	A plant disease symptom characterized by a sharply defined necrosis of cortical tissue, often sunken below bark surface.	*Forestry*
Canned Music	The term of disdain applied by the American Federation of Musicians to music produced by recording machines.	*Industrial Relations*
Cannel	Cannel, -see Candle Coal.	*Mining*
Cannel coal	A compact, tough variety of coal, originating from organic spore residues, that is non-caking, contains a high percentage of volatile matter, ignites easily, and burns with a luminous smoky flame.	*Energy*
Canopy	the roof member of a chock-type powered support.	*Mining*
Canopy	A layer or multiple layers of branches and foliage at the top or crown of a forest's trees.	*Forestry*
Canopy (Natural draft tower)	Connects the hyperbolic shell to the cooling section, acting as an air conduit and air seal between the two.	*Facility Engineering*
Canopy	A protective covering of a cab on a mining machine.	*Mining*
Canvas	Closely woven, heavy cloth, of cotton, hemp, or flax, used as a laminating material.	*Material Process*
CAODC	Canadian Association of Oilwell Drilling Contractors.	*Petroleum Engineering*
Cap	A cap is a type of fitting, often liquid or gas tight, which covers the end of a pipe. A cap has a similar function to a plug. In steam systems that use threads the cap has female threads. See also Pipe Fittings	*Industrial*
Cap block	A flat piece of wood inserted between the top of the prop and the roof to provide bearing support.	*Mining*
Cap head	a top placed upon an air-box, used in shaft sinking, &c., for the purpose of catching as much air as possible; its front is kept facing the wind by means of a vane.	*Mining*
Cap lamp	a rechargeable battery operated light worn on a miner's safety helmet.	*Mining*
Cap Rock	Formation overlaying the ore or vein stone.	*Mining*
Capability	Maximum load that a generating unit can carry without exceeding approved limits.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Capable of being fueled	A vehicle is capable of being fueled by a particular fuel(s) if that vehicle has the engine components in place to make operation possible on the fuel(s). The vehicle does not necessarily have to run on the fuel(s) in order for that vehicle to be considered capable of being fueled by the fuel(s). For example, a vehicle that is equipped to operate on either gasoline or natural gas but normally operates on gasoline is considered to be capable of being fueled by gasoline and natural gas.	*Energy*
Capacitance	**Capacitance**—The ability of a device to store an electrical charge (electrical charge is what flows in electric current). Capacitance is used in many different applications. (See Capacitor.) **The unit of capacitance is the Farad, though it can also be referred to in Coulombs per volt (Coulomb being the standard unit of electrical charge). The Farad is a very large unit and capacitances are usually on the order of microfarads, μF (1 μF = 10-6 F) and picofarads, abbreviated pF (1 pF = 10-12 F).**	*Electrical*
Capacitance (Capacity)	That property of a system of conductors and dielectrics which permits the storage of electricity when potential difference exists between the conductors.	*Electrical*
Capacitive Coupling	Electrical interaction between two conductors caused by the capacitance between them.	*Electrical*
Capacitor	This is a device that helps improve the efficiency of the flow of electricity through distribution lines by reducing energy losses. It is installed in substations and on poles. Usually it is installed to correct an unwanted condition in an electrical system	*Energy*
Capacitor (also referred to as a condenser)	A multi-purpose device that can store electrical charge in the form of an electric field. It is used, for example, for power factor correction in (inductive) AC circuits. Capacitors are used to buffer electricity (smooth out peaks) and to guard against momentary voltage losses in circuits (when changing batteries, for example). (See also Capacitance.)	*Electrical*
Capacitor bank	A number of capacitors connected in parallel. (See also Parallel.)	*Electrical*
Capacity	The maximum load a generating unit, generating station, or other electrical apparatus is rated to carry by the user or the manufacturer or can actually carry under existing service conditions.	*Energy*
Capacity (Purchased)	Energy available for purchase from outside the system.	*Energy*
Capacity Charge	An assessment on the amount of capacity being purchased.	*Energy*
Capacity factor	The ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period.	*Energy*
Capacity factor	CAPACITY FACTOR—See "Cv"	*Mechanical*
Capacity Factor	The ratio of the average load on a machine or equipment for a period of time to the capacity rating of the machine or equipment.	*Energy*
Capacity transaction	The acquisition of a specified quantity of generating capacity from another utility for a specified period of time. The utility selling the power is obligated to make available to the buyer a specified quantity of power.	*Energy*
Capacity utilization	Capacity utilization is computed by dividing production by productive capacity and multiplying by 100.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Capillarity	A property of a solid-liquid system manifested by the tendency of the liquid in contact with the solid to rise above or fall below the level of the surrounding liquid; this phenomenon is seen in a small bore (capillary) tube.	*Oil Analysis*
Capillary Action	The movement of water within the spaces of a porous material (such as soil and plant roots) due to the forces of adhesion, cohesion, and surface tension.	*Petroleum Engineering*
Capillary Action	The phenomenon of liquid rising in a small interstice due to surface tension.	*Electrical*
Capillary fringe	the zone of a porous medium above the water table within which the porous medium is saturated by water under pressure that is less than atmospheric pressure.	*Chemical*
Capillary suction	the process whereby water rises above the water table into the void spaces of a soil due to tension between the water and soil particles.	*Chemical*
Capillary Viscometer	A viscometer in which the oil flows through a capillary tube.	*Lubrication*
Capillary Zone	Area above the water table where groundwater is drawn upward and held in tension in the pore spaces.	*Petroleum Engineering*
Capital cost	The cost of field development and plant construction and the equipment required for industry operations.	*Energy*
Capital gains	Profit on the sale of an asset such as timber, land, or other property.	*Forestry*
Capital Recovery Factor (CRF)	A factor used to convert a lump sum value to an annual equivalent.	*Energy*
Capital Spares	Usually large, expensive, long lead time parts that are capitalized (not expensed) on the books and depreciated. They are often deemed as a "protection" against downtime.	*Reliability Engineering*
Capital stock	Property, plant and equipment used in the production, processing and distribution of energy resources.	*Energy*
Capital stock	The total ownership of a limited liability company divided among a specified number of shares.	*Mining*
Capitalization	A financial term used to describe the value financial markets put on a company. Determined by multiplying the number of outstanding shares of a company by the current stock price.	*Mining*
Cappers	Cappers, -see 'Cap'.	*Mining*
Capping or Rope capping	the fixing of a winding rope to the top of the cage. Originally often achieved by bending back the end of the rope to form a loop and then clamping the pieces together. This proved a source of weakness and ropes are now capped using a steel socket containing the separated strands of the end of the rope where molten white metal is poured into this socket, forming, on cooling, a solid white metal cap.	*Mining*
Capscrew	A fastener having a head and whose shank is normally threaded throughout its entire length. Not used with a nut, but rather engagement is made with a female thread in the piece to be joined.	*Mechanical*
Captive Audience	a group of workers assembled by an employer during working hours to listen to the employer discuss unionization, or the employer's point of view during an organization drive, or a statement on how much the employer has done for his workers.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Captive coal	Coal produced to satisfy the needs of the mine owner, or of a parent, subsidiary, or other affiliate of the mine owner (for example, steel companies and electricity generators), rather than for open market sale.	*Energy*
Captive Customer	A customer who does not have realistic alternatives to buying power from the local utility, even if that customer had the legal right to buy from competitors.	*Energy*
Captive Mines	a term applied to the coal mines owned by steel companies.	*Industrial Relations*
Captive refinery MTBE plants	MTBE (methyltertiary butyl ether) production facilities primarily located within refineries. These integrated refinery units produce MTBE from Fluid Cat Cracker isobutylene with production dedicated to internal gasoline blending requirements.	*Energy*
Captive refinery oxygenate plants	Oxygenate production facilities located within or adjacent to a refinery complex.	*Energy*
Captive stope	A stope that is accessible only through a manway.	*Mining*
Car	a mine wagon. The name is now used for large mine tubs i.e. mine car. - see also Shuttle car; also another term for 'canker' (N. Staffs.).	*Mining*
Car	A railway wagon, especially any of the wagons adapted to carrying coal, ore, and waste underground.	*Mining*
CARB	California Air Resources Board	*Petro-Chemical Abbreviations*
Carbamide	Another name for urea.	*Material Process*
Carbide bit	More correctly, cemented tungsten carbide. A cutting or drilling bit for rock or coal, made by fusing an insert of molded tungsten carbide to the cutting edge of a steel bit shank.	*Mining*
Carbitol Trade	name for monoethyl ether of diethylene glycol used as high boiling lacquer solvent.	*Material Process*
Carbohydrate	Generic name for sugars; e.g., fructose, sucrose.	*Agriculture*
Carbolic acid	Another name for phenol.	*Material Process*
Carbon	A non-metallic element - No. 6 in the periodic table. Diamonds and graphite are pure forms of carbon. Carbon is a constituent of all organic compounds. It also occurs in combined form in many inorganic substances; i.e., carbon dioxide, limestone, etc.	*Oil Analysis*
Carbon	naturally occurring element commonly found in steel	*Materials Process*
Carbon Steel	Carbon Steel. A steel which owes its distinctive properties chiefly to the carbon (as distinguished from the other elements) which it contains. Steel is considered to be carbon steel when no minimum content is specified or required for aluminum, boron, chromium, cobalt, columbium, molybdenum, nickel, titanium, tungsten, vanadium, or zirconium or for any other element added to obtain a desired alloying effect; when the specified minimum for copper does not exceed 0.40 percent; or when the maximum content specified for any of the following elements does not exceed the percentages noted: manganese, 1.65 percent; silicon, 0.60 percent; copper, 0.60 percent.	*Maintenance and Repair*
Carbon (deposit)	Solid black residue in piston grooves which can interfere with piston ring movement leading to wear and/or loss of power.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Carbon Black	A black pigment. It imparts useful ultraviolet protective properties, and so is frequently suspended into plastic and elastomeric compounds intended for outside weather exposure.	*Electrical*
Carbon budget	The balance of the exchanges (incomes and losses) of carbon between carbon sinks (e.g., atmosphere and biosphere) in the carbon cycle. Also see Carbon cycle and Carbon sink.	*Energy*
Carbon cycle	The circulation of carbon through its various forms in the environment. Briefly, carbon dioxide in the atmosphere is fixed (i.e., converted into solid matter) by the process of photosynthesis in plants and green algae. These then die and rot under the influence of bacteria and fungi or are consumed by higher organisms in the form of food or fuel (burning plant matter or fossil fuels). Either way, carbon is released into the atmosphere as carbon dioxide and is available again for fixation (i.e., incorporation into biomass).	*Electrical*
Carbon dioxide (CO_2)	A colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of fossil-fuel combustion as well as other processes. It is considered a greenhouse gas as it traps heat (infrared energy) radiated by the Earth into the atmosphere and thereby contributes to the potential for global warming. The global warming potential (GWP) of other greenhouse gases is measured in relation to that of carbon dioxide, which by international scientific convention is assigned a value of one (1). Also see Global warming potential (GWP) and Greenhouse gases.	*Energy*
Carbon dioxide equivalent	The amount of carbon dioxide by weight emitted into the atmosphere that would produce the same estimated radiative forcing as a given weight of another radiatively active gas. Carbon dioxide equivalents are computed by multiplying the weight of the gas being measured (for example, methane)by its estimated global warming potential (which is 21 for methane)."Carbon equivalent units" are defined as carbon dioxide equivalents multiplied by the carbon content of carbon dioxide (i.e., 12/44).	*Energy*
Carbon disulfide (CS2)	Colorless inflammable liquid. Used as solvent and in the manufacture of cellophane.	*Material Process*
Carbon fiber	Carbon fiber is lighter than aluminum, stronger than steel, and very expensive material. It's used to construct the chassis of a modern open wheeled car. Sheets of carbon fiber cloth are "laid up" like fiberglass by an expert fabricator using a mold, and then heated and reheated for days in an autoclave, a large, high-tech oven.	*NASCAR*
Carbon fibers	a form of carbon made by converting a precursor fiber into an all-aromatic fiber with exceptional mechanical properties	*Physics*
Carbon flux	Carbon flux: See Carbon budget.	*Energy*
Carbon intensity	The amount of carbon by weight emitted per unit of energy consumed. A common measure of carbon intensity is weight of carbon per British thermal unit (Btu) of energy. When there is only one fossil fuel under consideration, the carbon intensity and the emissions coefficient are identical. When there are several fuels, carbon intensity is based on their combined emissions coefficients weighted by their energy consumption levels. Also see Emissions coefficient and Carbon output rate.	*Energy*
Carbon monoxide (CO)	Colorless, odorless, poisonous gas. A raw material for the synthetic production of methyl alcohol and of formaldehyde.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Carbon nanotubes	synthetic tubes of carbon formed by folding one graphene plane over another	*Physics*
Carbon output rate	The amount of carbon by weight per kilowatt hour of electricity produced.	*Energy*
Carbon Residue	Coked material remaining after an oil has been exposed to high temperatures under controlled conditions.	*Lubrication*
Carbon sequestration	The fixation of atmospheric carbon dioxide in a carbon sink through biological or physical processes.	*Energy*
Carbon sink	A reservoir that absorbs or takes up released carbon from another part of the carbon cycle. The four sinks, which are regions of the Earth within which carbon behaves in a systematic manner, are the atmosphere, terrestrial biosphere (usually including freshwater systems), oceans, and sediments (including fossil fuels).	*Energy*
Carbon steel	Iron containing carbon in the form of carbides, about 0.1 to 0.3 percent carbon with no other alloying elements other than the sulfur, phosphorus, and other elements present in almost all steels.	*General Mechanical*
Carbon steel	Ferrous alloy with nominal impurity level and carbon as the primary compositional variable.	*Material Process*
Carbon steel (CS)	Iron containing carbon in the form of carbides, about 0.1 to 0.3 percent carbon with no other alloying elements other than the sulfur, phosphorus, and other elements present in almost all steels.	*Mechanical*
Carbon stocks	The quantity of carbon stored in biological and physical systems including: trees, products of harvested trees, agricultural crops, plants, wood and paper products and other terrestrial biosphere sinks, soils, oceans, and sedimentary and geological sinks.	*Energy*
Carbon tetrachloride (CCl 4)	A solvent, hydrocarbon.	*Material Process*
Carbon Type	The distinction between paraffinic, naphthenic, and aromatic molecules. In relation to lubricant base stocks, the predominant type present.	*Lubrication*
Carbonate	A sediment formed by the organic or inorganic precipitation from aqueous solution of carbonates of calcium, magnesium, or iron.	*Petroleum Engineering*
Carbonate hardness	Hardness in water caused by bicarbonates of calcium and magnesium. If alkalinity exceeds total hardness, all hardness is carbonate hardness; if hardness exceeds alkalinity, the carbonate hardness equals the alkalinity.	*Chemical Engineering*
Carbonate Rocks	A rock consisting chiefly of carbonate minerals, such as limestone and dolomite.	*Petroleum Engineering*
Carbon-carbon composite	An advanced composite system with especially high modulus and strength.	*Material Process*
Carboniferous	Containing coal.	*Mining*
Carbon-in-pulp	A method of recovering gold and silver from pregnant cyanide solutions by adsorbing the precious metals to granules of activated carbon, which are typically ground up coconut shells.	*Mining*
Carbonitriding	Similar to Carburising. Diffusion of carbon and nitrogen at about 900°C (by pack, gas, salt bath or plasma process) into low carbon steel, followed by quenching and tempering to produce martensitic case (typically 1mm thick).	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Carbonyl Iron Powder	A contaminant which consists of up to 99.5% pure iron spheres.	*Lubrication*
Carborundum Trade	name of silicon carbide, a very hard abrasive, produced synthetically in an electric furnace from coke, sand, sawdust, and salt.	*Material Process*
Carburetor	A fuel delivery device for producing a proper mixture of gasoline vapor and air and for delivering it to the intake manifold of an internal combustion engine. Gasoline is gravity-fed from a reservoir bowl into a throttle bore, where it is allowed to evaporate into the stream of air being inducted by the engine. Also see Diesel Fuel System and Fuel Injection.	*Energy*
Carburising (also called Case Hardening)	Diffusion of carbon at about 900 °C (by pack, gas, salt bath or plasma process) into low carbon steel, followed by quenching and tempering to produce martensitic case (typically 1mm thick).	*Paint and Coatings*
Carburization	The diffusion of carbon atoms into surface of steel for the purpose of hardening the alloy.	*Material Process*
Carcinogen	A cancer-causing substance. Certain petroleum products are classified as potential carcinogens OSHA criteria. Suppliers are required to identify such products as potential carcinogens on package labels and Material Safety Data Sheets.	*Lubrication*
Card Carrying Members	union members in good standing who have evidence of their membership.	*Industrial Relations*
Cardox	a blasting method used in gassy mines that employs gas at high pressure. The gas is carbon dioxide and steel shells or cartridges (essentially steel tubes with firing and discharge heads) are filled with liquid carbon dioxide, inserted into pr-drilled holes in the coal or rock and then actuated by a powder fuse primer. The gas then escapes through ports at the end of the shell disrupting the coal or rock by a heaving force acting through any existing planes of weakness. This method was designed to produce lumps rather than coal fines.	*Mining*
Car-dump	The mechanism for unloading a loaded car.	*Mining*
Carlot	One carlot is one railcar, or its equivalent.	*Agriculture*
Carnauba wax	A natural wax, the hardest in use, obtained from the leaves of a Brazilian palm tree, m.p. about 185°F (85 °C). It is used to modify the consistency of plastics, to polish finished articles, and as a lubricant.	*Material Process*
Carpenters and Joiners of America	United Brotherhood of (AFL-CIO) - a national union organized in Chicago in August 1881, as the Brotherhood of Carpenters and Joiners of America.	*Industrial Relations*
Carred-water or Carrod-water	Water colored with yellow ochre (hydrated oxide of iron) held in suspension (N. Staffs.).	*Mining*
Carrier Gas	Usually nitrogen or argon gas that carries powder into the thermal spray process.	*Paint and Coatings*
Carrier mobility	Drift velocity per unit electric field strength for a given charge carrier in a conducting material.	*Material Process*
Carry over	[In a cross-over trial:] The persistence, into a later period of treatment, of some of the effects of a treatment applied in an earlier period. See also: Cross-over trial	*Quality Engineering*
Carryall scraper (or pan scraper)	a self-loading machine, usually self-propelled, with a scraper-like retractable bottom. It is used to excavate and haul overburden.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Carrying bars,	log bars used to span wide underground openings. –see Bars.	*Mining*
Carrying Capacity	Amount of load that a tire can carry at a given inflation pressure as established by the Tire and Rim Association.	*Mechanical Engineering*
Carrying costs	Costs incurred in order to retain exploration and property rights after acquisition but before production has occurred. Such costs include legal costs for title defense, ad valorem taxes on nonproducing mineral properties, shut-in royalties, and delay rentals.	*Energy*
Cart	Championship Auto Racing Teams; sanctions races for Indy type cars.	*Mechanical Engineering*
Cartage	A charge made for the hauling and transferring of goods, usually on a local basis and short haul in nature.	*Procurement*
Cartage firm	A company that delivers produce from a terminal market company to that firm's customers.	*Agriculture*
Cartridge	a charge of blasting powder contained in a case.	*Mining*
Cartridge	1. The replaceable element of a fluid filter. 2. The pumping unit from a vane pump, composed of the rotor, ring, vanes and one or both side plates.	*Mechanical, Process, and Operations*
Cartridge or Filter Cartridge	A filtration or separation device (usually in the shape of a cylinder or disk—that is designed for easy installation and removal. The cartridge/cylinder design contains a porous material or media through which a liquid or gas is passed in order to separate the fluid from suspended particulate matter. The media may be a membrane or another material that contains pores of set or varying size.	*Contamination Control*
Cartridge Seal	A completely self-contained assembly including seal, gland, sleeve, mating ring, etc., usually needing no installation measurement.	*Lubrication*
Carts	a term for small tubs (S. Wales).	*Mining*
Carvings	The air roads formed by the angle of the steps in longwall working where the face is stepped.	*Mining*
CAS Number	A unique identifier for chemical substances. Chemical Abstracts Service (CAS) is a division of the American Chemical Society that is responsible for the administration, quality assurance and maintenance of the CAS registry. A CAS Number itself has no inherent chemical significance but provides an unambiguous way to identify a chemical substance or molecular structure when there are many possible systematic, generic, proprietary or trivial names.	*Petroleum Engineering*
CASAC	Clean Air Scientific Advisory Committee	*Petro-Chemical Abbreviations*
Cascade	A chain of steps for dissipating the momentum of falling water in a steep place in order to maintain a steady rate of flow.	*Civil Engineering*
Cascade	To combine logic circuitry to get more complex logic or timing control. (Inputs and outputs are wired in series.)	*Electrical Engineering*
Cascade Control	Controllers arranged such that the output of one controller manipulates the setpoint input of a second controller instead of manipulating a process variable directly.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cascading power failure	A cascade happens when a part of the power grid fails, and shifts its power load to other elements in the grid. Overloaded, these elements also begin to shut down and shift their power load onto other elements, and so on. The resulting surge current can induce ongoing failures and take down an entire power system in a very short time, "cascading" through parts and systems like a ripple on a pond until the grid collapses.	*Electrical*
Case Drain Filter	A filter located in a line conducting fluid from a pump or motor housing to reservoir.	*Lubrication*
Case drain line	A line conducting fluid from a component housing to the reservoir.	*Mechanical, Process, and Operations*
Case series	A study reporting observations on a series of individuals, usually all receiving the same intervention, with no control group.	*Quality Engineering*
Case study	A study reporting observations on a single individual. Also called: Anecdote, Case history, Single case report	*Quality Engineering*
Case-control study	Retrospective comparison of exposures of persons with disease (cases) with those of persons without the disease (controls) (see Retrospective study).	*Analysis*
Case-hardening	See Carburising	*Paint and Coatings*
Casein	A protein prepared from cows milk, informal trade term for casein plastics.	*Material Process*
Casein plastics	Hornlike substances obtained from casein, usually rennet casein, hardened through the action of formaldehyde or some other agent, and seasoned by drying.	*Material Process*
Case-series	Report of a number of cases of disease.	*Analysis*
Cash	waste obtained from holing (Scot.); or a soft band, sometimes found separating one stratum from another; when thin, called a 'cashy parting', (N. East).	*Mining*
Cash and carry	Kerosene, fuel oil, or bottled gas (tank or propane) purchased with cash, by check, or by credit card and taken home by the purchaser. The purchaser provides the container or pays extra for the container.	*Energy*
Cash crop	what a farmer raises, crop or livestock, to sell for money	*Agriculture*
Cash Discount	A form of discount the purpose of which is to secure prompt payment of an account.	*Procurement*
Cash flow	The net of the inflow and outflow of cash during an accounting period. Does not account for depreciation or bookkeeping write-offs which do not involve an actual cash outlay.	*Mining*
Cash On Delivery (C.O.D.)	Cash payment for purchases on delivery.	*Procurement*
Cash Refund Annuity	a policy which provides an annual income at retirement for life.	*Industrial Relations*
Casine law	Expression describing the scattering of light from an ideally rough surface.	*Material Process*
Casing	A steel pipe or tubing, esp. as used in oil and gas wells.	*Civil Engineering*
Casing (Carcass)	The structure of tire cords locked around wire beads, (most often used in relation to worn tires).	*Mechanical Engineering*
Casing (Well Casing)	Pipe, tubing, or other material installed in a well to support its sides.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Casing Head	A piece of well control equipment (flanged, welded or hub clamp) attached to the top of surface casing, allowing the attachment of Blowout Preventers during the drilling, phase and later used to hang and suspend a secondary string of casing set inside hung on a set of casing slips.	*Petroleum Engineering*
Casing panel	A pre-assembled or pre-cut unit of the casing.	*Facility Engineering*
Casing Spool	A piece of well control equipment attached below the Casing Head, used to suspend and seal a secondary casing string with casing slips.	*Petroleum Engineering*
Casing string	The steel tubing that lines a well once it has been drilled, formed from sections of steel tubing screwed together.	*Petroleum Drilling*
Casing string	The steel tubing that lines a well after it has been drilled. It is formed from sections of steel tube screwed together.	*Petroleum Drilling*
Casing	Pipe cemented in the well to seal off formation fluids or keep the hole from caving in.	*Petroleum Drilling*
Casinghead Gas	Gas produced with oil in oil wells. The gas is taken from the well through the casinghead at the top of the well.	*Petroleum Drilling*
Casinghead gas (or oil well gas)	Natural gas produced along with crude oil from oil wells. It contains either dissolved or associated gas or both.	*Energy*
Cassava	A gum obtained from a tropical plant, used in the manufacture of adhesives and synthetic rubber and as a modifier for some plastics.	*Material Process*
Cast	The form of a particular part of a valve, where the basic shape is formed by molding rather than fabricating.	*Mechanical*
Cast iron	The common term for cast gray iron or iron containing flake carbon in the range of _% to 2 _%. Cast iron is brittle, exhibiting very little ductility before fracturing.	*General Mechanical*
Cast resin	Resinous product prepared by pouring liquid resin into a mold and heat treating the mass of cure it. Hot liquid resin is usually used in the case of phenolics, but cold resin with accelerators may be substituted. In the case of the methacrylates, heating is usually done after pouring.	*Material Process*
Cast silicon	Crystalline silicon obtained by pouring pure molten silicon into a vertical mold and adjusting the temperature gradient along the mold volume during cooling to obtain slow, vertically advancing crystallization of the silicon. The polycrystalline ingot thus formed is composed of large, relatively parallel, interlocking crystals. The cast ingots are sawed into wafers for further fabrication into photovoltaic cells. Cast silicon wafers and ribbon silicon sheets fabricated into cells are usually referred to aspolycrystalline photovoltaic cells.	*Energy*
Cast steel	steel in the form of an object at or near finished shape, produced by pouring molten steel into a mold	*Materials Process*
Caster	toe. Also, the adjustment of components to bring them into a predetermined position for the most efficient operation of wheel and vehicle for proper even tire wear.	*Mechanical Engineering*
Caster Angle	The forward or backward tilt of the steering axis as viewed from the side. If the point of load is ahead of the point of contact, the caster angle is positive. The caster angle tends to keep wheels in a straight line. Proper caster adjustment improves both tire wear and fuel economy.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Caster	Another measure of chassis tuning related to the front wheels. The front wheels are attached to the suspension at the top and bottom of the wheel assembly. The top attachment is typically set a little farther back than the lower attachment, creating caster. The more caster used, the more the wheel resists turning forces, providing stability. Too much caster makes it very difficult to steer, and causes the tire camber to change significantly as the wheel is turned. Not enough caster results in the front end "wandering," or trying to turn on its own.	*NASCAR*
Casters	Wheels mounted in a fork (either rigid or swivel) used to support and make conveyors portable. See our caster section for information on industrial applications.	*Manufacturing*
Casting	an object at or near finished shape obtained by solidification of a metal or alloy in a mold	*Materials Process*
Casting	Material processing technique involving pouring of molten liquid into a mold, followed by solidification of the liquid. Forming a material to a desired shape by pouring it into a mold while liquid and then hardening it. Also, refers to the manufacture of film.	*Material Process*
Casual Labor	work occupations in which the demand for employment is highly variable, such as port work, farm migratory work, and other jobs of an unskilled, intermittent nature.	*Industrial Relations*
Casual Worker	workers who work occasionally and intermittently and are not attached to a particular company.	*Industrial Relations*
Cat coal	coal containing pyrites. (Yorks.).	*Mining*
Cat skinner	A person who drives or operates a Caterpillar tractor.	*Agriculture*
Cat	Abbreviation for Caterpillar tractor.	*Agriculture*
Catalyst	A substance which aids or promotes a chemical reaction without forming part of the final product.	*Chemical*
Catalyst	A substance which changes the rate of a chemical reaction but is itself not changed. Switch contact material sometimes acts as a catalyst, accelerating the formation of polymers on the contact surface.	*Electrical Engineering*
Catalyst coke	Catalyst coke: See Petroleum coke, catalyst.	*Energy*
Catalytic converter	A device containing a catalyst for converting automobile exhaust into mostly harmless products.	*Energy*
Catalytic cracking	The process of breaking up heavier hydrocarbon molecules into lighter hydrocarbon fractions by use of heat and catalysts.	*Chemical*
Catalytic cracking	The process of breaking up heavier hydrocarbon molecules into lighter hydrocarbon fractions by use of heat and catalysts.	*Petroleum Engineering*
Catalytic hydrocracking	A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending on product output, and can handle high sulfur feed stocks without prior desulfurization.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Catalytic hydrotreating	A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.	*Energy*
Catalytic oxidizer	an off-gas posttreatment unit for control of organic compounds. Gas enters the unit and passes over a support material coated with a catalyst (commonly a noble metal such as platinum or rhodium) that promotes oxidation of the organics. Catalytic oxidizers can also be very effective in controlling odors. High moisture content and the presence of chlorine or sulfur compounds can adversely affect the performance of the catalytic oxidizer.	*Chemical*
Catalytic reforming	A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, there by converting paraffinic and naphthenic type hydrocarbons (e.g., low octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:	*Energy*
Catastrophic Failure	Sudden, unexpected failure of a machine resulting in considerable cost and downtime.	*Lubrication*
Catband	an iron loop placed on the underside of the centre of a flat corf bow, in which to insert the hook, (N. East.).	*Mining*
Catch basin	A receptacle, located where a street gutter opens into a sewer, designed to retain matter that would not readily pass through the sewer.	*Civil Engineering*
Catch prop	a prop set temporarily under broken roof bars for safety during roadway repair work; or props set down the middle of a roadway for extra support, also called 'middle sets'.	*Mining*
Catcher	a safety or disengaging hook that comes into action during 'over-winding' or another name for the 'Keps'. (Lancs.); or a qualified face worker without a regular position in a face team, who covers for absentees. (S. Staffs.).	*Mining*
Catches	the cage support at the shaft top, also called 'keps' or 'keeps'; or the movable checks by which the tubs are secured in the cages.	*Mining*
Catchment	Something for catching water, as a reservoir or basin, the water that is caught in such a catchment.	*Civil Engineering*
Categorical data	Data that are classified into two or more non-overlapping categories. Race and type of drug (aspirin, paracetamol, etc.) are examples of categorical variables. If there is a natural order to the categories, for example, non-smokers, ex-smokers, light smokers and heavy smokers, the data are known as ordinal data. If there are only two categories, the data are dichotomous data. See also: Continuous data	*Quality Engineering*
Category	A group of closely related chemicals whose physico-chemical, ecotoxicological or toxicological properties follow a regular pattern because of structural similarity.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cathead	an ironstone ball, (N. East). Roughly spheroidal ironstone nodules larger than 'dog balls'.	*Mining*
Cathead hoist	a small, deep-flanged, spool-like winch or capsan mounted on the countershaft of the hoisting drum near the front and generally to one side of the swivel head of a diamond drill. It is used to wind a line when breaking or making up rod, casing, or pipe joints, and to operate a drive hammer.	*Petroleum Drilling*
Cathode	A negatively charged electrode (which attracts cations in electrolysis).	*Chemical Engineering*
Cathode	The switch contact connected to the negative terminal of the power supply.	*Electrical Engineering*
Cathodic	exhibiting properties of a cathode; steel is cathodic in relation to zinc	*Materials Process*
Cathodic protection	reduction or prevention of corrosion of a metal surface by making it a cathode in an electrolytic cell, using either a galvanic or impressed current; zinc cathodically protects steel, i.e. sacrificially giving up electrons to protect the steel from corrosive attack	*Materials Process*
Cathodic Protection	A technique to reduce the corrosion rate of a metal by making it the cathode of an electrochemical cell. Thermal spray zinc and aluminum coatings provide this protection to steel substrates, the coating being the anode and the steel being the cathode.	*Paint and Coatings*
Cathodic reaction	the reduction reaction occurring at the cathode in an electrochemical cell.	*Material Process*
Cation	A positively charged ion resulting from dissociation of molecules in solution.	*Chemical Engineering*
Cation	A positively charged ion.	*Paint and Coatings*
Catshead	Catshead—see 'Boilum'.	*Mining*
Catwalk	Steel platform immediately in front of the derrick substructure on which joints of drill pipe are stored prior to being lifted to the derrick floor by the catline. *	*Petroleum Drilling*
Caucus	a meeting of a small group of influential members of an organization to plan strategy or policy prior to a general meeting.	*Industrial Relations*
Causal effect	An association between two characteristics that can be demonstrated to be due to cause and effect, i.e. a change in one causes the change in the other. Causality can be demonstrated by experimental studies such as controlled trials (for example, that an experimental intervention causes a reduction in mortality). However, causality can often not be determined from an observational study.	*Quality Engineering*
Causality	The relating of causes to the effects they produce. Most of epidemiology concerns causality and several types of causes can be distinguished. It must be emphasized, however, that epidemiological evidence by itself is insufficient to establish causality, although it can provide powerful circumstantial evidence.	*Analysis*
Causeway	A raised road or path, as across low or wet ground. A highway or paved way. To pave (a road or street) with cobblestones or pebbles.	*Civil Engineering*
Causeway	A raised road or path, as across low or wet ground. A highway or paved way. To pave (a road or street) with cobblestones or pebbles.	*Civil Engineering*
Caustic	Strong base (alkaline) substance which irritates the skin. Corrosive. When the term is used alone it usually refers to caustic soda (sodium hydroxide), which is used in manufacturing hard soap. It also refers to caustic potash (potassium hydroxide), which is used in manufacturing soft soap.	*Chemistry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Caustic cleaning	the cleaning of steel in a solution with high alkalinity; in the hot-dip galvanizing process, organic residues are removed by immersing steel in a tank of caustic solution	*Materials Process*
Caustic wash	A process in which distillate is treated with sodium hydroxide to remove acidic contaminants that contribute to poor odor and stability.	*Petroleum Engineering*
Caution period	When the track is unsafe because of an accident, debris or a sudden downpour, the officials may put the track under caution by waving yellow flags at the starter stand and around the track. This brings out the pace car to gather the field and lead them around at reduced speed until the track is safe for a restart.	*NASCAR*
Cautionary zone	a zone in which unworked coal lies at or less than a specified distance from unconsolidated deposits or other sources of danger.	*Mining*
CAV	Current Asset Value.	*Maintenance*
Cave or Caving	to allow the roof to fall by removing the supports or waste packs.	*Mining*
Caved-in	ground where the roof has fallen or where the sides of the roadway have collapsed.	*Mining*
Cavils or Cavills	a type of lottery system or draw by which is decided the working place of each individual (N. East)—see Kyevilin day. Caving, method of mining which allows the waste area behind the face to collapse on the removal of supports.	*Mining*
Cavitation	The boiling of a liquid caused by a decrease in pressure rather than an increase in temperature.	*General Engineering*
Cavitation	Formation of an air or vapor pocket (or bubble) due to lowering of pressure in a liquid, often as a result of a solid body, such as a propeller or piston, moving through the liquid; also, the pitting or wearing away of a solid surface as a result of the violent collapse of a vapor bubble. Cavitation can occur in a hydraulic system as a result of low fluid levels that draw air into the fluid, producing tiny bubbles that expand followed by rapid implosion, causing metal erosion and eventual pump destruction.	*Lubrication*
Cavitation attack	Cavitation attack takes place locally, the behavior is determined by the structural constitution to a greater extent with this type of erosion than with others. A homogenous, fine grained microstructure is required, soft inclusions and soft, or very brittle, grain boundaries reduce the resistance.	*Material Process*
Cavitation Erosion	A material-damaging process which occurs as a result of vaporous cavitation. "Cavitation" refers to the occurrence or formation of gas- or vapor- filled pockets in flowing liquids due to the hydrodynamic generation of low pressure (below atmospheric pressure). This damage results from the hammering action when cavitation bubbles implode in the flow stream. Ultra-high pressures caused by the collapse of the vapor bubbles produce deformation, material failure and, finally, erosion of the surfaces.	*Lubrication*
Cavity	Depression in a mold, usually for one article. Molds are single cavity or multicavity.	*Material Process*
Cavity block	The lower part of a mold containing the depressions.	*Material Process*
CB Case	an unfair labor practice case under the Taft-Hartley Act filed against a union.	*Industrial Relations*
CBM	See Condition Based Maintenance.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CBOB	conventional gasoline blendstock for oxygenate blending	*Energy*
cc	Cubic centimeter	*Oil Analysis*
CCAG	See Cochrane Register of Studies Board	*Quality Engineering*
CCB	combustion by-products	*Petro-Chemical Abbreviations*
CCBBA	Committee for Commonality in Blood Banking Automation	*Gears*
CCC - Commodity Credit Corporation	CCC - Commodity Credit Corporation.	*Agriculture*
CCD	combustion chamber deposits	*Petro-Chemical Abbreviations*
CCD	Charge Coupled Device. This scanner type has is usually inexpensive and light weight. The disadvantage is that the scanner must touch the barcode and usually can only scan a barcode the same length as the device. Meaning, if you have a 4" bar-code and the CCD is only 3", there is a good chance that it may not read it correctly.	*Gears*
CCDI	combustion chamber deposit interference	*Petro-Chemical Abbreviations*
CCE	climate change emissions	*Petro-Chemical Abbreviations*
CCF	One hundred (100) cubic feet.	*Petroleum Drilling*
CCMC	Comité des Constructeurs d'Automobiles du Marché Commun (predecessor of ACEA)	*Petro-Chemical Abbreviations*
CCNet	See Cochrane Consumer Network (CCNet)	*Quality Engineering*
CCPA	Canadian Chemical Producers Association	*Petro-Chemical Abbreviations*
CCR	Conradson carbon residue	*Petro-Chemical Abbreviations*
CCRCT	See CENTRAL (Cochrane Central Register of Controlled Trials [CCRCT])	*Quality Engineering*
CCS	cold crank simulator	*Petro-Chemical Abbreviations*
CCSG	See Cochrane Collaboration Steering Group (CCSG)	*Quality Engineering*
CD-2/CF-2	API 2-stroke diesel engine oil specification	*Petro-Chemical Abbreviations*
CDA	Copper Development Association	*Metallurgy*
CDC	Centers for Disease Control	*Quality*
CDD	CDD: See Cooling Degree Days.	*Energy*
CDF	An acronym for Cumulative density function which is a function obtained by integrating the failure distribution pdf. In life data analysis, the cdf is equivalent to the unreliability function.	*Reliability Engineering*
CDP	candidate data package	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CDSR	See Cochrane Database of Systematic Reviews (CDSR)	*Quality Engineering*
Cease and Desist Order	an order issued by the National Labor Relations Board to a labor organization or employer to stop an unfair labor practice held in violation of the law.	*Industrial Relations*
CEC	California Energy Commission	*Petro-Chemical Abbreviations*
CE-CERT	College of Engineering, Center for Environmental Research and Technology of UC, Riverside	*Petro-Chemical Abbreviations*
CEED	Center for Energy and Economic Development	*Petro-Chemical Abbreviations*
CEFIC	Conseil Européen des Federations de l'Industrie Chimique (European Chemical Industry Council)	*Petro-Chemical Abbreviations*
Ceiling Hanger	A support fastened from an overhead frame work to position and carry loads.	*Equipment*
Ceiling Hangers	Lengths of steel rod, attached to the ceiling, from which conveyors may be supported to provide maximum utilization of floor space or when required height exceeds floor support capability.	*Manufacturing*
Celanese	Trade name of a rayon silk made from cellulose acetate.	*Material Process*
Celite	Celite A trade name for diatomaceous earth, used as a filler or filter aid.	*Material Process*
Cell	The smallest tower subdivision which can function as an independent unit with regard to air and water flow; it is bounded by exterior walls or partitions. Each cell may have one or more fans or stacks and one or more distribution systems.	*Facility Engineering*
Cell dimensions	(a) Width: dimensions perpendicular to tower longitudinal axis and usually at right angles to the louver area; (b) Length: dimension parallel to longitudinal axis and the plane where louvers are usually placed; (c) Height: distance from basin curb to top of fan deck but not including fan stack. Nominal width and length are measured from and to the column center lines.	*Facility Engineering*
Cellar	A pit in the ground to provide additional height between the rig floor and the well head.	*Petroleum Drilling*
Cellar coal	any seam lying a short distance below a main seam in which sumps or cellars are made. (Lancs.).	*Mining*
Cellophane	Trade name for transparent packaging film materials prepared from hydrated cellulose obtained by the precipitation of sodium cellulose xanthate in an acid bath.	*Material Process*
Cells	Refers to the un-encapsulated semi-conductor components of the module that convert the solar energy to electricity.	*Energy*
Cells to OEM (non-PV)	Cells shipped to non-photovoltaic original equipment manufacturers such as boat manufacturers, car manufacturers, etc.	*Energy*
Cellular Manufacturing	A manufacturing approach in which equipment and workstations are arranged to facilitate small-lot, continuous-flow production-often in a U-shaped cell. In a manufacturing "cell," all operations necessary to produce a component or subassembly are performed in close proximity, thus allowing for quick feedback between operators when quality problems and other issues arise. Workers in a manufacturing cell are typically cross-trained and, hence, able to perform multiple tasks as needed.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Celluloid	Trade name for a cellulose nitrate or pyroxylin plastic.	*Material Process*
Cellulose	component of plant cell walls that is not digestible by most animals	*Agriculture*
cellulose	A major component of the cell wall.	*Agriculture*
Cellulose	A basic raw material (cotton or pulped wood) used in the production of cellulose plastics, also used as a filter.	*Material Process*
Cellulose $(C_6H_{10}O_5)_x$	A white amorphous substance. Cellulosic materials are treated to purify the cellulose as much as possible, and then subjected to reagents to esterify or etherify them to yield plastics materials.	*Material Process*
Cellulose Acetate	A product of esterification of cellulose with acetic anhydride and acetic acid.	*Material Process*
Cellulose Media	A filter material made from plant fibers. Because cellulose is a natural material, its fibers are rough in texture and vary in size and shape. Compared to synthetic media, these characteristics create a higher restriction to the flow of fluids.	*Lubrication*
Cellulose nitrate	A product of the nitration of cellulose by nitric acid mixed with sulfuric acid.	*Material Process*
Cellulosics	Cellulosics has been around since 1868 when it was invented by John Wesley Hyatt. Several variations of the original cellulosics have been introduced since the early 1900s. Today, it is found in appliance housings, toys, knobs, handles, packaging, and automotive parts.	*Material Engineering*
CELSIUS	A temperature scale. 0 Celsius (or 0 Centigrade) is the freezing point of water (32 degrees F)	*Mechanical, Process, and Operations*
Celsius (centrigrade)	A temperature scale defined by 0°C at the ice point and 100°C at boiling point of water at sea level.	*Electronic Process*
Cement	A mixture of Portland cement and water.	*Petroleum Engineering*
Cement	A powder consisting of alumina, silica, lime and other substances that hardens when mixed with water. Used extensively in the oil industry to bond casing to the walls of the wellbore.	*Petroleum Drilling*
Cement Matrix	material, usually a calcium aluminosilicate, on concrete, an aggregate composite.	*Material Process*
Cement plug	A plug of cement slurry placed in the wellbore to seal the well.	*Petroleum Engineering*
Cementing	Permanently securing the casing to the wellbore or plugging and sealing the wellbore.	*Petroleum Engineering*
CEN	Comité European de Normalisation.	*Maintenance*
CENELEC	CENELEC is the European Committee for Electro-technical Standardization. It was established in 1973 as a non-profit organization under Belgian Law. The European Commission in Directive 83/189/EEC has officially recognized CENELEC as the European Standards Organization.	*Maintenance*
Censored	[In survival analysis:] A term used in studies where the outcome is the time to a particular event, to describe data from patients where the outcome is unknown. A patient might be known not to have had the event only up to a particular point in time, so 'survival time' is censored at this point.	*Quality Engineering*
Censored data	Data in which not all of the data points represent failures, i.e. there may be operation times for units that have not failed. Censoring schemes include right-censoring, left-censoring and interval censoring.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Census division	Any of nine geographic areas of the United States as defined by the U.S. Department of Commerce, Bureau of the Census. The divisions, each consisting of several States, are defined as follows:	*Energy*
Census Region	Any of four geographic areas of the United States as defined by the U.S. Department of Commerce, Bureau of the Census. The Regions, each consisting of various States selected according to population size and physical location, are defined as follows:	*Energy*
Census Region/division	An hierarchical organization of the United States according to geographic areas and sub-areas as follows:	*Energy*
Center	The axial member of a strand about which the wires are laid.	*Wire Rope & Cable*
Center Distance	The distance between the parallel axes of spur gears and parallel helical gears, or between the crossed axes of crossed helical gears and worm gears. Also, it is the distance between the centers of the pitch circles.	*Mechanical Engineering*
Center Drive	A drive assembly mounted underneath normally near the center of the conveyor, but may be placed anywhere in the conveyor length. Normally used in reversing or incline application.	*Manufacturing*
Center for Nutrition Policy and Promotion, (CNPP) - A unit within the USDA	Center for Nutrition Policy and Promotion, (CNPP) - A unit within the USDA.	*Agriculture*
Center of Gravity	The location of the resultant of gravity forces on an object or objects: sometimes called center of mass.	*Engineering Physics*
Center of Gravity (Mass Center)	The center of gravity of a body is that point in the body through which passes the resultant of weights of its component particles for all orientations of the body with respect to a uniform gravitational field.	*General Engineering*
Center of Gravity (Mass Center)	The center of gravity of a body is that point in the body through which passes the resultant of weights of its component particles for all orientations of the body with respect to a uniform gravitational field.	*Electronic Process*
Center pivot	A type of sprinkler system commonly used on large-scale farms in arid areas. Water is delivered to the center of a field by a deeply buried pipe, which attaches to main pipe that is supported on wheeled towers and pivots up to 360 degrees to irrigate the field. Center pivots may irrigate up to 200 acres. They are popular because of their labor savings. One person can manage operations of several center pivots.	*Agriculture*
Centerline	A plane dividing a tire, wheel, or vehicle into two symmetrical halves.	*Mechanical Engineering*
Centi	Hundredth	*Lubrication*
Centigrade	The temperature scale on which the freezing point of water is designed as 0° and the boiling point 100°.	*Material Process*
Centipoise (cp)	A unit of absolute viscosity. 1 centipoise = 0.01 poise.	*Oil Analysis*
Centipoise and Centistoke	A centipoise is 1/100th of the unit of absolute viscosity (the poise), e.g., the viscosity of water at 20oC is approximately one centipoise. The centipoise is derived from one kinematic unit of viscosity (the centistoke), by multiplying the latter by the density of the liquid, i.e., 1 centipoise = 1 centistoke x the density of the liquid. These units are part of the metric system, commonly used in Europe and becoming adopted in the U.S. and Canada.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CENTIPOISE, CENTISTOKE	CENTIPOISE - A unit of absolute (dynamic) viscosity. CENTISTOKE - A unit of kinematic viscosity.	*Mechanical, Process, and Operations*
Centistoke (cst)	A unit of kinematic viscosity. 1 centistoke = 0.01 stoke.	*Oil Analysis*
CENTRAL (Cochrane Central Register of Controlled Trials [CCRCT])	The Cochrane Collaboration's register of reports of studies that may be relevant for inclusion in Cochrane Reviews. CENTRAL aims to include all relevant reports that have been identified through the work of The Cochrane Collaboration, through the transfer of this information to the US Cochrane Center. It is published in The Cochrane Library. Also called: CCRCT, Cochrane Central Register of Controlled Trials	*Quality Engineering*
Central Appalachian Region	Consists of Eastern Kentucky, Virginia, Southern West Virginia, and the Tennessee counties of: Anderson, Campbell, Claiborne, Cumberland, Fentress, Morgan, Overton, Pickett, Putnam, Roane, and Scott.	*Energy*
Central chiller	Any centrally located air conditioning system that produces chilled water in order to cool air. The chilled water or cold air is then distributed throughout the building, using pipes or air ducts or both. These systems are also commonly known as "chillers," "centrifugal chillers," "reciprocating chillers," or "absorption chillers." Chillers are generally located in or just outside the building they serve. Buildings receiving district chilled water are served by chillers located at central physical plants.	*Energy*
Central cooling	Cooling of an entire building with a refrigeration unit to condition the air. Typically central chillers and duct work are present in the centrally cooled building.	*Energy*
Central Estimate	A range of exploration drilling scenarios from which the following activity levels, based on recent historical experience, are adopted as the central estimates.	*Petroleum Drilling*
Central estimate	A range of exploration drilling scenarios from which the following activity levels, based on recent historical experience, are adopted as the central estimates.	*Petroleum Drilling*
Central Labor (Trades) Council	an organization of local A.F. and L. unions in a locality or city, to provide coordination of effort in political, economic, or other areas.	*Industrial Relations*
Central physical plant	A plant owned by, and on the grounds of, a multibuilding facility that provides district heating, district cooling, or electricity to other buildings on the same facility. To qualify as a central plant it must provide district heat, district chilled water, or electricity to at least one other building. The central physical plant may be by itself in a separate building or may be located in a building where other activities occur.	*Energy*
Central Plane	In a worm gear this is the plane perpendicular to the gear axis and contains the common perpendicular of the gear and worm axes. In the usual case with the axes at right angles, it contains the worm axis	*Mechanical Engineering*
Central warm air furnace	A type of space heating equipment where a central combustor or resistance unit generally using gas, fuel oil, or electricity provides warm air through ducts leading to the various rooms. Heat pumps are not included in this category. A forced air furnace is one in which a fan is used to force the air through the ducts. In a gravity furnace, air is circulated by gravity, relying on the natural flow of warm air up and cold air down; the warm air rises through ducts and the cold air falls through ducts that return it to the furnace to be reheated and this completes the circulation cycle.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Centralized water heating system	Equipment, to heat and store water for other than space heating purposes, which provides hot water from a single location for distribution throughout a building. A residential type tank water heater is a good example of a centralized water heater.	*Energy*
Center	Cochrane Centers have responsibility for helping to co-ordinate and support the Collaboration. Each Centre is responsible for providing support within its geographic and linguistic area. Details of Centre responsibilities and a list of the Centers responsible for any given country are available in The Cochrane Library.	*Quality Engineering*
Centre for Reviews and Dissemination (CRD)	CRD, based in York, UK, produces the Database of Abstracts of Reviews of Effects (DARE).Also called: CRD	*Quality Engineering*
Centrifugal Compressor	A centrifugal compressor compresses air or gas by means of mechanical rotating rotating vanes or impellers.	*Chemical*
Centrifugal Force	The force that tends to throw a tire away from the axis of rotation, same as radial force.	*Mechanical Engineering*
Centrifugal Pump	A pumping mechanism that spins water by means of an "impeller". Water is pushed out by centrifugal force. Centrifugal deep-well jet pumps work with two lines into the well. As water is moved at the surface by an impeller, some of the water is returned to the well to the ejector assembly above the intake. This return water creates a "venturi" effect in the ejector, sucking well water through the check valve.	*Petroleum Engineering*
Centrifugal separator	A separator that removes immiscible fluid and solid contaminants that have a different specific gravity than the fluid being purified by accelerating the fluid mechanically in a circular path and using the radial acceleration component to isolate these contaminants.	*Oil Analysis*
Centrifugally Cast Pipe	Centrifugally Cast Pipe. Pipe formed from the solidification of molten metal in a rotating mold. Both metal and sand molds are used. After casting, if required the pipe is machined, to sound metal, on the internal and external diameters to the surface roughness and dimensional requirements of the applicable material specification.	*Maintenance and Repair*
Centrifuge	A machine used to separate liquid from solids held in suspension or to separate a liquid of one density from that on another by centrifugal force.	*Material Process*
Centrifuge volume	The volume of liquid or solid or both, separated from a volume of liquid exposed to centrifugal force.	*Mechanical, Process, and Operations*
Centrifuging	the process of removing excess zinc from small hot-dip galvanized parts by placing them in a perforated, rapidly spinning cylindrical container	*Materials Process*
Centripetal Force	A force exerted on an object moving in a circular path which is exerted inward toward the center of rotation.	*General*
Centrist	the group in an organization which represents the middle position betweens the extremes of the left and right.	*Industrial Relations*
Centroid	Similar to the concept of center of gravity, except that it applies to a two dimensional shape rather than an object. For a given shape, the centroid location corresponds to the center of gravity for a thin flat plate of that shape, made from a homogeneous material.	*Engineering Physics*
CEPA	Canadian Environmental Protection Act	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ceramic	Polycrystalline ferroelectric materials which are used as the sensing units in piezoelectric accelerometers. There are many different grades, all of which can be made in various configurations to satisfy different design requirements.	*General Engineering*
Ceramic cement	A ceramic –metal composite.	*Material Process*
Ceramic Dual Inline Package	A DIP package with a ceramic body.	*Electrical Engineering*
Ceramic Insulation	High-temperature compositions of metal oxides used to insulate a pair of thermocouple wires. The most common are Alumina (Al2O3), Beryllia (BeO), and Magnesia (MgO). Their application depends upon temperature and type of thermocouple. High-purity alumina is required for platinum alloy thermocouples. Ceramic insulators are available as single and multihole tubes or as beads.	*Electrical*
Ceramic magnet	ceramic material with an engineering application predominantly based on its magnetic properties.	*Material Process*
Ceramic Nonmetallic	inorganic engineering material.	*Material Process*
Ceramic-matrix-composite	Composite material in which the reinforcing phase is dispersed in a ceramic.	*Material Process*
Ceramics	any of various hard, brittle, heat and corrosion resistant material made typically of metallic elements combines with oxygen or with carbon, nitrogen, or sulfur. Most ceramics are crystalline and are poor conductors of electricity, though some recently discovered copper-oxide ceramics are superconductors at low temperatures, compounds that contain metallic atoms bonded to nonmetallic atoms such as oxygen, carbon, or nitrogen.	*Physics*
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	*Energy*
cereal grains	Plants of the grass family that produce grain (seeds) that provide human food. They include wheat, rice, barley, oats, corn (maize), rye and triticale.	*Agriculture*
Ceresin or ceresin wax	A noncrystaline wax, white or yellow refined ozokerite, m.p. about 190°F (87.77 °C).	*Material Process*
Cermet Powders	A blended or composite powder of metal and ceramic constituents.	*Paint and Coatings*
Certificate	A type of permit for public convenience and necessity issued by a utility commission, which authorizes a utility or regulated company to engage in business, construct facilities, provide some services, or abandon service.	*Energy*
Certificate of Age	a document issued under the Fair Labor Standards Act which limits child labor.	*Industrial Relations*
Certificate of Compliance	A written statement that the materials, equipment, or services are in accordance with the specified requirements. It may have to be supported by documented evidence.	*Maintenance and Repair*
Certificate of Intent	a statement formerly filed by unions under the registration section of the Taft-Hartley Act to indicate compliance with the requirements of the law.	*Industrial Relations*
Certificate of restoration	A document issued by the BC Oil and Gas Commission certifying that an abandoned wellsite has been restored to meet regulatory requirements.	*Petroleum Engineering*
Certificate requirement	The maximum annual volume allowed for sales to resale or direct sale customers under certificate authorizations by the Federal Energy Regulatory Commission.	*Energy*
CERTIFICATION	An evaluation provided by a third party organization that confirms forests are managed sustainably, based on the implementation of a written plan that meets established standards.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Certified	Describes a person who has passed an examination to do a required job.	*Mining*
Certified Farmers' Market (CFM)	locations where farmers and ranchers are allowed to sell directly to customers, exempt from USDA packaging, sizing, and labeling regulations. These locations must be certified by the County Agricultural Commissioner. Many CFMs have technically separate, but adjacent markets where prepared food, bread and other complimentary items may be sold. Farmers may also sell direct to consumers at Farm Stands.	*Agriculture*
Certified Material Test Report (CMTR)	A document attesting that the material is in accordance with specified requirements, including the actual results of all required chemical analyses, tests, and examinations.	*Maintenance and Repair*
Certified reference material, CRM	"A reference material that has one or more values certified by a technically valid procedure and is accompanied by, or is traceable to, a certificate or other document that is issued by a certifying body." [CLSI]	*Quality*
Certifying authority (CA) (Certification Authority)	An independent body appointed by the purchaser to carry out a survey of the equipment and/or materials that they are buying. It is the responsibility of the supplier to provide the C.A. with information, documents, access to works and personnel to enable the survey to be carried out.	*Mechanical*
CES	Cummins Engineering Specification	*Petro-Chemical Abbreviations*
Cesium chloride	Simple compound crystal structure.	*Material Process*
Cesium magnetometer	An geophysical instrument which measures magnetic field strength in terms of vertical gradient and total field.	*Mining*
Cesspool	An underground reservoir for liquid waste, typically household sewage.	*Energy*
Cetane Index	A value calculated from the physical properties of a diesel fuel to predict its Cetane Number.	*Lubrication*
Cetane Number	A measure of the ignition quality of a diesel fuel, as determined in a standard single cylinder test engine, which measures ignition delay compared to primary reference fuels. The higher the Cetane Number, the easier a high-speed, direct-injection engine will start, and the less "white smoking" and "diesel knock" after start-up.	*Lubrication*
Cetane Number Improver	An additive (usually an organic nitrate) that boosts the Cetane Number of a fuel.	*Lubrication*
CEU	See Cochrane Editorial Unit (CEU)	*Quality Engineering*
CF	Cubic Foot	*Energy*
CFC	CFC: See Chlorofluorocarbon.	*Energy*
CFI	cold flow improver	*Petro-Chemical Abbreviations*
cfm	Cubic feet per minute (See acfm, scfm)	*Facility Engineering*
cfm	Cubic feet per minute	*Lubrication*
CFPP	cold filter plugging point	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CFR	Code of Federal Regulations (US)	*Petro-Chemical Abbreviations*
CFS	Cubic Feet per Second	*Energy*
CFV	clean fuel vehicle	*Petro-Chemical Abbreviations*
CG	conventional gasoline	*Petro-Chemical Abbreviations*
CGSB	Canadian General Standards Board	*Petro-Chemical Abbreviations*
CH2OH	Colorless liquid. An inexpensive, widely used solvent obtained from corn by fermentation. It is widely used in lacquers because it is blush retardant, and dissolves cellulose nitrate in the presence of a minimum amount of solvent ester.	*Material Process*
CH4	Methane	*Energy*
Chain	A series of links pivotally joined together to form a medium for conveying or transmitting motion or power.	*Manufacturing*
Chain Conveyor	Any type of conveyor in which one or more chains act as the conveying element.	*Equipment*
Chain conveyor or Scraper chain conveyor	Chain conveyor or Scraper chain conveyor. - see Armored flexible conveyor.	*Mining*
Chain Drive	A power transmission device employing a drive chain and sprockets.	*Manufacturing*
Chain Driven Live Roller Conveyor	See Live Roller Conveyor.	*Equipment*
Chain growth	Polymerization process involving a rapid, chair reaction of chemically activated monomers.	*Material Process*
Chain Guard	A covering or protection for drive or conveyor chains for safety purposes.	*Manufacturing*
Chain pillar	The pillar of coal left to protect the gangway or entry and the parallel airways.	*Mining*
Chain Roller Conveyor	A conveyor in which the tread rollers have attached sprockets which are driven by a chain.	*Manufacturing*
Chain Tension	The actual pull existing at any point in a conveyor chain.	*Equipment*
Chain wheel operated valve	An overhead valve operated by a chain drive wheel instead of a handwheel.	*Mechanical*
Chained dollars	A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period covered and is therefore subject to less distortion over time.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chainhand (also motorman)	An experienced laborer capable of maintaining most parts of the rig. The chainhand is in charge of throwing the chain to make up or break down pipe stands during tripping pipe. They are also responsible for maintaining the motors on the drilling rig	*Petroleum Drilling*
Chainless haulage	a rack and pinion mechanism between the armored face conveyor and the shearer.	*Mining*
Chair	another word foe 'shaft'.	*Mining*
Chalcocite	A sulfide mineral of copper common in the zone of secondary enrichment.	*Mining*
Chalcogenide	Compound containing S (sulfur), Se (selenium), or Te (tellirium).	*Material Process*
Chalcopyrite	A sulfide mineral of copper and iron; the most important ore mineral of copper.	*Mining*
Chaldron	the Newcastle chaldron was a measure containing 53 cwts. of coal.	*Mining*
Chalk	A soft white mineral of sea - shell origin, essentially calcium carbonate, used as a source of whiting (filler or pigment) when ground and purified.	*Material Process*
Chalker-on	Chalker-on—see Craneman.	*Mining*
Chalkford	Transition zone play involving both Austin Chalk and Eagle Ford Shale formations.	*Petroleum Drilling*
Chalking Dry	Chalk-like appearance or deposit on the surface of a plastic.	*Material Process*
Chalking deal	a flat board upon which the craneman or flat-lad apportions and keeps account of the work done by the putters in the district of which he has charge, (N. East).	*Mining*
Chamber	The space between any two gates of a lock.	*Civil Engineering*
Chamfering	The preparation of a contour, other than for a square groove weld, on the edge of a member for welding.	*Maintenance and Repair*
Chance or Chance Band	an irregular, often nodular, band of ironstone (N. Staffs.).	*Mining*
Chandler	In the early days of mining the chandler was employed at the colliery to manufacture candles.	*Mining*
Change house	A special building constructed at a mine where the miner changes to his working clothes; also known as a dry house.	*Mining*
Change Order	A purchaser's written authorization to the supplier to modify or change an existing purchase order. In public sector purchasing, these changes generally must be within the scope of the contract.	*Procurement*
Changeover	The time required to modify a system or workstation, including teardown and setup time.	*Quality*
Channel	Term used within SKF to indicate an integrated or linked production line from turning operation to packing.	*Maintenance*
Channel Associated Signaling	Some communications protocols include "signaling" functions along with data. Channel Associated Signaling protocols include signaling in the data channel (as opposed to a dedicated signaling channel). Also called Robbed Bit Signaling.	*Electrical Engineering*
Channel sample	A sample composed of pieces of vein or mineral deposit that have been cut out of a small trench or channel, usually about 10 cm wide and 2 cm deep.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Channeling	The phenomenon observed among gear lubricants and greases when they thicken due to cold weather or other causes, to such an extent that a groove is formed through which the part to be lubricated moves without actually coming in full contact with the lubricant. A term used in percolation filtration; may be defined as: a preponderance of flow through certain portions of the clay bed.	*Lubrication*
Channeling-1	Grooves in a lubricating grease formed by passing rolling elements. Unworked grease in the shoulders of the channel serves as a seal and reservoir.	*Lubrication*
Channeling-2	The low-temperature change in structure of a flow-type lubricating grease that prevents flow due to gravity.	*Lubrication*
Chap	Chap, -see Sounding and Jowl.	*Mining*
Chapman Strut	A rear suspension system which operates on the same principles as the MacPherson Strut; it uses lower links or a control arm and a long spring-shock strut.	*Mechanical Engineering*
Character	A letter, digit or other symbol that is used as the representation of data. A connected sequence of characters is called a character string.	*General Engineering*
Characteristic Life	The life at which 63.2% of the population has failed. In the rolling elements bearing industry, L1 and L10 life are generally used corresponding to the number of hours at which 1% and 10% of the population has failed, respectively. See Patterns of Failure.	*Maintenance*
Characterization	Sampling, monitoring, and analysis activities to determine the extent and nature of contamination at a facility or site. Characterization provides the necessary technical information to develop, screen, analyze, and select appropriate clean-up techniques.	*Energy*
Characterized gate or ball	A ball or gate, the shape of whose port has been specially altered to provide a specific throttling capability.	*Mechanical*
Charge	Quantity of positive or negative carriers. Also, this term use for the measurement or weight of material either performed or in powder form used to load a mold.	*Material Process*
Charge amplifier	An amplifier which converts a charge input signal (as from an accelerometer) into an output voltage; a charge-to-voltage converter.	*Reliability Engineering*
Charge capacity	The input (feed) capacity of the refinery processing facilities.	*Energy*
Charge carrier	Atomic scale species by which electricity is conducted in materials.	*Material Process*
Charge Coupled Device	One of the two main types of image sensors used in digital cameras. When a picture is taken, the CCD is struck by light coming through the camera's lens. Each of the thousands or millions of tiny pixels that make up the CCD convert this light into electrons.	*Electrical Engineering*
Charge density	Number of charge carriers per unit volume.	*Material Process*
Charge Injection	A parameter pertinent to analog switches. As an analog switch turns on and off, a small amount of charge can be capacitively coupled (injected) from the digital control line to the analog signal path.	*Electrical Engineering*
Charge neutrality	Absence of net positive	*Material Process*

Term	Definition	*Industry*
Charge pressure	The pressure at which replenishing fluid is forced into the hydraulic system (above atmospheric pressure).	*Mechanical, Process, and Operations*
Charge Pump	A power supply which uses capacitors to store and transfer energy to the output, often stepping the voltage up or down. Charge is transferred from one capacitor to another under control of regulator and switching circuitry. Maxim offers both regulated and non-regulated charge pumps, as well as ICs with on-board charge pumps to boost internal voltages.	*Electrical Engineering*
Charge Rate	This is the rate that you charge for a mechanic or engineer's time. In addition to the direct wages, it includes provision for benefits and overhead (such as supervision, clerical support, shop tools, truck expenses, and supplies).	*Maintenance*
Charge Sensitivity	For accelerometers that are rated in terms of charge sensitivity, the output voltage (V)is proportional to the charge (Q) divided by the shunt capacitance (C). This type of accelerometer is characterized by a high output impedance. The sensitivity is given in terms of charge; picocoulombs per unit of acceleration (g).	*General*
Charge, Charging	Terms used for putting raw materials into a furnace. For example, a blast furnace is charged with coke, coal, iron or scrap to make raw steel. The charge itself is the amount of material loaded into the furnace.	*Metallurgy*
Chargeman or Chargehand	a working foreman or team leader who is not a mine official.	*Mining*
Charging Current	The current produced when a d:c voltage is first applied to conductors of an unterminated cable. It is caused by the capacitive reactance of the cable, and decreases exponentially with time.	*Electrical*
Charging station	An installation at which an electric vehicle can be plugged into the grid to charge its battery. There are several types of charging station, including low-voltage, lower current installations that charge a battery over a period of several hours (for use in homes, for example), and higher-voltage, higher current fast-charging stations for a more rapid service in public places (car parks, public buildings, etc.).	*Electrical*
Charles' law	The volume of a fixed mass of gas varies directly with absolute temperature, provided the pressure remains constant.	*Mechanical, Process, and Operations*
Charolais	A beef breed that originated in France , perhaps as early as the 9th century A.D. It entered the United States from Mexico in 1836.	*Agriculture*
Charollais	A breed of sheep that originated in the same region of France as the Charolais cattle. Their development began in the early 1800's. The breed's primary use is as a sire to increase the muscling and growth rate of the lambs.	*Agriculture*
Charpy impact test	Method for measuring	*Material Process*
Charpy impact test	A destructive mechanical test conducted on a precisely machined coupon of steel to be tested. The coupon is clamped in a special machine and subjected to lateral hammer blow. The test provides a relative measure of the toughness of the steel or its resistance to shock or impact loads and is usually required for material used in low temperature applications.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Charpy test	A destructive mechanical test conducted on a precisely machined coupon of steel to be tested. The coupon is clamped in a special machine and subjected to lateral hammer blow. The test provides a relative measure of the toughness of the steel or its resistance to shock or impact loads and is usually required for material used in low temperature	*General Mechanical*
Charpy V-Notch Test	A test performed (at a nominated temperature) utilizing a calibrated falling pendulum (hammer) fracturing a Specimen of Material and measuring the force required.	*Petroleum Engineering*
Charter	A document issued by a governing authority creating a company or other corporation.	*Mining*
Chartered bank	A financial institution that accepts deposits and provides loans.	*Mining*
Chase	The part of a mold which contains the charge and holds it while pressure is being applied in the closing of the mold. Also refers to the iron frame used for making Celluloid cakes.	*Material Process*
Chase or Chess (the ropes)	After the winding-engine has been standing for some time, to run the cages up and down the shaft to see that all is right before men are allowed to ride the cage.	*Mining*
Chassis	The frame, suspension system, engine, and drive train of a vehicle. The assembled parts of the automobile without the body.	*Mechanical Engineering*
Chatter	The rapid cycling on and off of a relay in a control process due to insufficient bandwidth in the controller.	*Electrical*
CHD unit	See Hydrodesulfurization (A catalytic process in which the principal purpose is to remove sulfur from petroleum fractions in the presence of hydrogen).	*Petroleum Engineering*
Check	Check—see Motty, Pin, Tally and Token.	*Mining*
Check Character	Character added to guard against undetected errors.	*Gears*
Check curtain	Sheet of brattice cloth hung across an airway to control the passage of the air current.	*Mining*
Check valve	A one-directional valve which is opened by the fluid flow in one direction and closed automatically when the flow stops or is reversed.	*Mechanical*
Check viewer	a viewer employed by the lessor to see that the provisions of the coal lease are duly observed.	*Mining*
Checker packs	square packs placed in a chess board pattern. Adopted where the available stowing material was not sufficient for complete packing of the waste.	*Mining*
Checkered flag	This black-and-white checked flag is the most famous in racing, signifying the end of the session or race. At the end of a race, the first car to receive the checkered flag at the finish line is the winner.	*NASCAR*
Checkweighman	employed by the miners to verify the weights of the tubs.	*Mining*
Chemical Abstracts System number	Chemical Abstracts System number is the producer of the world's largest and most comprehensive databases of chemical information. It is a division of the American Chemical Society.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chemical cleaning	the process of immersing steel in chemical solvents to remove (dissolve) residues that would otherwise prevent the galvanized coating from forming	*Materials Process*
Chemical composition	the makeup of steel, broken down into naturally occurring elements; usually carbon, manganese, phosphorous, silicon as primary elements	*Materials Process*
Chemical Conversion Coating	A protective or decorative non-metallic coating produced in situ by chemical reaction of a metal with a chosen environment. (It is often used to prepare the surface prior to the application of an organic coating.)	*Paint and Coatings*
Chemical dosage	The amount of chemical added to a system, usually expressed as ppm, or pounds of chemical per million pounds of water.	*Chemical Engineering*
Chemical process	Assembly of two or more operations with chemical conversion.	*Material Process*
Chemical process system	A system for chemical substance processing.	*Material Process*
Chemical Reaction	A chemical process in which substances are changed into different substances with different properties.	*Chemical*
Chemical Recycling	Chemical recycling is the process of recycling waste products by partially altering their chemical structure.	*Chemical*
Chemical separation	A process for extracting uranium and plutonium from dissolved spent nuclear fuel and irradiated targets. The fission products that are left behind are high-level waste. Chemical separation is also known as reprocessing.	*Energy*
Chemical Stability	The tendency of a substance or mixture to resist chemical change.	*Lubrication*
Chemical vapor deposition	The production of thin layers of materials in the fabrication of integrated circuits by means of specific chemical reactions.	*Material Process*
Chemical Vapor Deposition (CVD)	The deposition of a coating by means of a chemical reaction in gases in a chamber producing components which deposit on and adhere to the substrate.	*Paint and Coatings*
Chemically strengthened glass	A fracture resistant glass produced by the compressive stressing of the silicate network as a results of the chemical exchange of larger radius K+ ions for the Na+ in the glass surface.	*Material Process*
chemigation	Delivering chemicals to plants through irrigation water.	*Agriculture*
chemotrophs	organisms that obtain energy from oxidation or reduction of inorganic or organic matter.	*Chemical*
Cherry coal	a freely burning non-caking coal giving a bright flame. (Scot.).	*Mining*
Chess	One of the planks forming the roadway of a floating bridge.	*Civil Engineering*
Chester White	A breed of hogs that originated in Chester County, Pennsylvania. It originally was called the Chester County White. The breed traces to importation of a white boar from England some time between 1815–1818. The boar was referred to as a Bedforshire. It was crossed with local breeds to produce the ancestors of today's Chester White, which is registered by the Chester White Swine Registry.	*Agriculture*
Cheviot	A breed of sheep that originated on the Cheviot Hills along the border of England and Scotland . Its history traces at least to 1372. It was introduced to the United States in 1838, from Scotland . Cheviot are distinctive white-faced sheep with wool-free face and legs. They have black muzzles and feet.	*Agriculture*
CHEVRON PACKING	A type of packing used in packing boxes consisting of a nest of "V" cross-section rings.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chevrons	Cracks start on a microscopic level as voids. If they are on the same plane they will eventually join to become a tiny crack with a relatively smooth surface. If however these tiny cracks do not all lie on the same plane, then as they get bigger and get closer to each other there will be a point when they will join from a tearing action. Visually consider if you will, two columns of 10 dots each. Now start a crack at the upper left dot and progress downward along the same column connecting the dots; at the same time start a crack at the lower right dot and progress upwards, again, connecting the dots in the same column. You can see that as the cracks approach each other there is less solid area between them. At some point, depending upon the type of material it is, there will not be enough material left between them and the two cracks will join. The location of this change in direction is known as a "chevron mark." On a very large scale these chevron marks join and they clearly show to the naked eye the direction of travel of the crack. This is very important when trying to determine where the crack started in	*Reliability Engineering*
Chewing insects	Insects that consume all tissues of leaves or portions of leaves, using robust mandibles for chewing.[1] Fin.	*Forestry*
Chianina	The Chianina (pronounced kee-a-nee-na) is one of the oldest breeds of cattle. It provided models for Roman sculptures. Chianina originated in Italy where it was used primarily as draft animals until the advent of modern mechanized farming. These large, gentle animals then became important for their meat-producing qualities. The breed was first introduced into the United States via semen imports in 1971. Its main use in the U.S. cattle industry is for crossing with beef breeds. It is registered by the American Chianina Association.	*Agriculture*
Chicane	A quick succession of sharp, slow turns, usually intended to reduce straight-away speeds.	*NASCAR*
Chief steward	Any time cars are on the racing surface, the chief steward is in charge of the entire facility. He is stationed in race control with radio communications all around the circuit, and he also has at his disposal a full bank of television monitors that give him a view of the entire circuit.	*NASCAR*
Chilean Mill	A machine, somewhat like the arastra, in which heavy stone wheels turn about a central shaft and crush ore.	*Mining*
Chinley or Shingly coals	coals that are neither round (or large) nor small, but are such that they will pass over the screens and are some of the best coals, (N. East).	*Mining*
Chip	A thin slice of crystalline semiconductor upon which electrical circuitry is produced by controlled diffusion.	*Material Process*
Chip	A die (unpackaged semiconductor device) cut from a silicon wafer, incorporating semiconductor circuit elements such as resistors, diodes, transistors, and/or capacitors.	*Electrical Engineering*
Chip control (grit control, last-chance) filter	A filter intended to prevent only large particles from entering a component immediately downstream.	*Oil Analysis*
Chip sample	A method of sampling a rock exposure whereby a regular series of small chips of rock is broken off along a line across the face.	*Mining*
"Chipped area"	A surface irregularity near the edge of a molded piece, appearing as if chipped away, but usually due to an imperfect mold.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chi-squared test	A statistical test based on comparison of a test statistic to a chi-squared distribution. Used in RevMan analyses to test the statistical significance of the heterogeneity statistic.	*Quality Engineering*
Chittery coal	bright coal, free from fusain or muddy partings, with a conchoidal fracture and brittle nature (Yorks.), i.e., tending to chip.	*Mining*
Chloramine	A compound formed when chlorine reacts with ammonia or a chemical containing the ammonium ion. The result is mono-, di-, tri-, and organochloramines. The resulting chloramines are weak oxidants or nonoxidants. They are a component of total chlorine. These are very weak biocides.	*Chemical Engineering*
Chlorides	A compound of chlorine and silver.	*Mining*
Chlorinate	To treat with chlorine gas.	*Material Process*
Chlorinated diphenyl (ClC6H4C6H5)	A crystalline compound. A plasticizer for certain plastics such as ethyl cellulose.	*Material Process*
Chlorinated Polyethylene (CPE)	A synthetic rubber jacketing compound.	*Electrical*
Chlorinated Wax	Certain solid hydrocarbons treated with chlorine gas to form straight-chain hydrocarbons with a relatively high chlorine component. Chlorinated waxes are used primarily as polyvinyl chloride plasticizers, extreme-pressure additives for lubricants, and formulation components for many cutting fluids	*Lubrication*
Chlorination	Adding chlorine or a chlorine derivative to water to prevent the growth of various organisms that cause biofouling.	*Chemical Engineering*
Chlorination, dechlorination	The act of removing chlorine from water, usually via a reducing agent or strong aeration.	*Chemical Engineering*
Chlorine	A poisonous yellow gas with chemical symbol Cl2 used for water treatment. It is soluble in water but can be removed by reducing aeration and reaction with sunlight.	*Chemical Engineering*
Chlorine	Powerful oxidizing agent sometimes used as a germicide.	*Chemistry*
Chlorine Bleach	A group of strong oxidizing agents commonly sold in an approximately 5% solution of sodium hypochlorite. As a laundry additive, liquid chlorine removes stains, aids in soil removal, whitens, disinfects, and deodorizes. Dry forms of chlorine bleach are frequently used in cleansers and automatic dishwasher detergents. Bleach should not be used with silk, woolens, dyes sensitive to hypochlorite, and on certain stains such as rust (which it can set). Chlorine bleach deactivates enzymes in laundry cleaners.	*Chemistry*
Chlorine demand	The relation of the amount of chlorine to be added to a system to react with chlorine-oxidizable material until a free residual in a given system is achieved.	*Chemical Engineering*
Chlorine dioxide	A compound with the symbol ClO2, used mainly for bleaching wood pulp for paper. It is also used for the taste and odor control of phenolic compounds in water and can be used as a disinfectant in cooling towers.	*Chemical Engineering*
Chlorine, free	The total amount of hypochlorous ion and hypochlorous acid in the system.	*Chemical Engineering*
Chlorine, residual	The amount of available chlorine present in water at any given time subsequent to the addition of chlorine.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chloroacetyl chloride	A solvent.	*Material Process*
Chlorofluorocarbon (CFC)	Any of various compounds consisting of carbon, hydrogen, chlorine, and flourine used as refrigerants. CFCs are now thought to be harmful to the earth's atmosphere.	*Energy*
Chlorophorm	A solvent.	*Material Process*
Chloroprene	Colorless, volatile liquid b.p. 140 °F (60 °C). Derived from acetylene, coal and lime, and salt. Raw material for one type of oil resistant synthetic rubber.	*Material Process*
Chlorosis	Yellowing of plant tissue due to failure of chlorophyll synthesis or to chlorophyll destruction.	*Forestry*
Chlorosulfonated Polyethylene (CSPE)	A synthetic rubber jacketing compound manufactured by Du Pont under trade name of Hypalon.	*Electrical*
Chlorotic dwarf	An abiotic disease of Pinus strobus characterized by reduced growth, chlorosis and mottling of the needles, and premature abscission of all but current needles. [1]	*Forestry*
Chock	Large hydraulic jacks used to support roof in longwall and shortwall mining systems.	*Mining*
Chock blocks	square section, rectangular wooden blocks used to assemble a chock.	*Mining*
Chogs	blocks of wood used as packing behind the pipes in a pumping shaft. (Yorks.).	*Mining*
Choke	A restriction, the length of which is large with respect to its cross-sectional dimension. CIRCUIT - An arrangement of components interconnected to perform a specific function within a system.	*Mechanical, Process, and Operations*
Choke Manifold	A complete assembly of valves, Fittings, Flanges and Chokes configured to control and regulate the flow of fluid from a well bore.	*Petroleum Engineering*
Choked Flow	Also known as critical flow. This condition exists when at a fixed upstream pressure the flow cannot be further increased by lowering the downstream pressure. This condition can occur in gas, steam or liquid services. Fluids flow through a valve because of a difference in pressure between the inlet (Pl) and outlet (P2) of the valve. This pressure difference (Delta-P) or pressure drop is essential to moving the fluid. Flow is proportional to the square root of the pressure drop, which means that higher pressure drops allow more fluid to be moved through the valve. If the inlet pressure to a valve remains constant, then the differential pressure can only be increased by lowering the outlet pressure. For gases and steam, which are compressible, the maximum velocity of the fluid through the valve is limited by the velocity of the propagation of a pressure wave which travels at the speed of sound in the fluid. If the pressure drop is sufficiently high, the velocity in the flow stream at the vena contracta will reach the velocity of sound. Further decrease in the outlet pressure will not be felt upstream because the pressure wave can only travel at sonic velocity and the signal will never translate upstream. Choked Flow can also occur in liquids but only if the fluid is in a flashing or cavitating condition. The vapor bubbles block or choke the flow and prevent the valve from passing more flow by lowering the outlet pressure to increase the pressure drop. A good rule of thumb for gas and steam services is that if the pressure drop across the valve equals or exceeds one half the absolute inlet pressure, then there is a good chance of a choked flow condition.	*Industrial Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chokedamp or blackdamp	an accumulation of carbon dioxide.	*Mining*
Choker Rope	ROPE A short wire rope sling that forms a slip noose around an object that is to be moved or lifted.	*Wire Rope & Cable*
Chopping	The rock that appears on the surface indicating the presence of a lode.	*Mining*
Chordal Addendum	Addendum: The height from the top of the tooth to the chord subtending the circular-thickness arc.	*Mechanical Engineering*
Chordal Thickness	Thickness: Length of the chord subtended by the circular thickness arc (the dimension obtained when a gear-tooth caliper is used to measure the thickness at the pitch circle).	*Mechanical Engineering*
CHP	Combined heat and power, an acronym for the co-generation of heat and power. (See Co-generation.)	*Electrical*
Christmas tree	The valves and fittings installed at the top of a gas or oil well to control and direct the flow of well fluids.	*Energy*
Christmas Tree	The assembly of fittings and valves on the top of the casing which control the production rate of oil.	*Petroleum Drilling*
Christmas tree	The assembly of fittings and valves on the top of the casing which control the production rate of oil.	*Petroleum Drilling*
Chromate quenching	treating metal in a tank of containing a solution of chronium compounds to produce a conversion coating consisting of trivalent and hexavalent chromium compounds; chromate passivations sometimes are used on galvanized reinforcing bar to control reactions between zinc and concrete while the concrete cures, particularly the hydrogen evolution that adversely affects bonding; chromate quenching other galvanized articles prevents the formation of wet storage stain	*Materials Process*
Chromating	chromate quenching a galvanized article	*Materials Process*
Chromatography	Chromatography is a process for separating mixtures such as gases into their component parts for analytical purposes.	*Chemical*
Chromatography	An analytical technique whereby a complex substance is adsorbed on a solid or liquid substrate and progressively eluted by a flow of a substance (the eluant) in which the components of the substance under investigation are differentially soluble. The eluant can be a liquid or a gas. When the substrate is filter paper and the eluant a liquid, a chromatogram of colored bands can be developed by use of indicators. For gas chromatography, electronic detectors are normally used to indicate passage of the various components from the system.	*Lubrication*
CHROMEGA®	A chromium-nickel alloy which makes up the positive leg of type K and type E thermocouples (registered trademark of OMEGA ENGINEERING, INC.).	*Electrical*
Chromising	High temperature (approx. 900oC) pack or gaseous diffusion of chromium into the surface of a component to enhance high temperature corrosion and oxidation resistance.	*Paint and Coatings*
Chromite	The chief ore mineral of chromium.	*Mining*
Chromium	A steel-gray, lustrous, hard and brittle metallic element that takes its name from the Greek word for color—chrome—because of the brilliant colors of its compounds. It is found primarily in chromite. Resistant to tarnish and corrosion, it is a primary component of stainless steel and is used to harden steel alloys.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Chromosome	The structure in plants and animals that carries genes.	*Agriculture*
Chronic injury	Injury which develops after long-term or repeated low dose exposure to an air pollutant expressed as chlorosis, bronzing, premature senescence, reduced growth, etc.	*Forestry*
Chrysotile	A fibrous, hydrated magnesium silicate, a common mineral also known asbestos.	*Material Process*
Chummings (chum'uns)	empty tubs. (N. East).	*Mining*
Chute	A trough through which objects are lowered by gravity. Can either be a slider bed or roller/wheel bed.	*Manufacturing*
CI	cetane index	*Petro-Chemical Abbreviations*
Cidal Or "Cide"	Generally refers to agents with the ability to kill microorganisms.	*Chemistry*
CIDI	compression ignition direct injection (diesel)	*Petro-Chemical Abbreviations*
CIF (cargo, insurance and freight)	CIF refers to cargos for which the seller pays for the transportation and insurance up to the port of destination.	*Energy*
CIF (cost, insurance, freight)	This term refers to a type of sale in which the buyer of the product agrees to pay a unit price that includes the f.o.b. value of the product at the point of origin plus all costs of insurance and transportation. This type of a transaction differs from a "delivered" purchase, in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Lading and Quality Report) rather than pay based on the quantity and quality ascertained at the unloading port. It is similar to the terms of an f.o.b. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.	*Energy*
CIFER	Colorado Institute for Fuels and High Altitude Research	*Petro-Chemical Abbreviations*
CIM	Computer Integrated Manufacturing is a term used to describe an operation which makes all or most of its information available through a fully integrated data management network. The object is to increase efficiency by integrating all the facility's data management systems.	*Control Engineering*
CIM	Computer Integrated Manufacturing	*Gears*
CIMAC	Congrès International des Machines à Combustion	*Petro-Chemical Abbreviations*
CINAHL (Cumulative Index to Nursing and Allied Health Literature)	Electronic database covering the major journals in nursing and allied health.	*Quality Engineering*
Cinder coal	Coal near a 'trap' or a 'whin dyke', which has been altered by the heat of the hot rock.	*Mining*
Cinnabar	A vermilion-colored ore mineral of mercury.	*Mining*
Circuit	Conductor for electric current.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Circuit breaker	Devices that interrupt high currents to protect electrical equipment from damage caused by current surges, e.g., from a short circuit or a lightning strike. (On a much smaller scale, they are used as an alternative to fuses in the home.)	*Electrical*
Circuit breakers	Circuit breakers are typically classified according to the medium they use to inhibit arc formation between the open contacts of the breaker. Media used include air, sulfur hexafluoride gas, oil and a vacuum.	*Electrical*
Circuit card	A flat board that holds chips and other components on the top side and has printed electrically conductive paths in multiple layers for the components on its bottom side.	*Reliability Engineering*
Circuit, Regenerative	A circuit in which pressurized fluid discharged from a component is returned to the system to reduce power input requirements. On single rod end cylinders the discharge from the rod end is often directed to the bore end to increase rod extension speed.	*Mechanical, Process, and Operations*
Circuit, Sequence	A circuit which establishes the order in which two or more functions of a circuit occur.	*Mechanical, Process, and Operations*
Circuit, Servo	A closed loop circuit which is controlled by some type of feedback; i.e., the output of the system is sensed or measured and is compared with the input. The actual output and the input controls the circuit. The system output may be position, velocity, force, pressure, level flow rate, or temperature, etc.	*Mechanical, Process, and Operations*
Circuit-mile	The total length in miles of separate circuits regardless of the number of conductors used per circuit.	*Energy*
Circular Mil	A unit of area equal to the area of a circle whose diameter is 1 mil (0.001 inch). Used chiefly in specifying cross-sectional areas of round conductors.	*Electrical*
Circular Pitch	Length of the arc of the pitch circle between the centers or other corresponding points of adjacent teeth. Normal Circular Pitch is the circular pitch in the normal plane.	*Gears*
Circular Thickness	The length of arc between the two sides of a gear tooth, on the pitch circle unless otherwise specified. Normal Circular Thickness is the circular thickness in the normal plane.	*Gears*
Circulating Header System	A lubrication system having isolated lube zones wherein the lube pump runs continuously and circulates oil through the header, a return filter and back to tank during the idle period. When lubrication is required, a normal open solenoid valve in the return loop is actuated, allowing pump pressure to build. The zone valves are then sequentially opened to provide lubricant to the individual zones. Oil dispensed to the friction points is not reused, therefore, the system is a terminating type.	*Lubrication*
Circulating load	Over-sized chunks of ore returned to the head of a closed grinding circuit before going on to the next stage of treatment.	*Mining*
Circulating lubrication	A system of lubrication in which the lubricant, after having passed through a bearing or group of bearings, is recirculated by means of a pump.	*Oil Analysis*
Circulating Oil	A lubrication system wherein the oil pump runs continuously and circulates oil to the friction points on a continuous basis. The oil is drained back to tank, filtered, cooled as required and reused.	*Lubrication*
Circulating System	A lubricating system in which oil is recirculated from a central sump to the parts requiring lubrication and then returned to the sump.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Circulating water rate	Quantity of water pumped from the tower basin to the equipment to be cooled, usually expressed as gallons per minute (gpm).	*Chemical Engineering*
City Gate	The location where natural gas transfers from the interstate gas pipeline to the local utility's distribution system	*Energy*
City Gate	City Gate Station - The metering and pressure reducing station where gas is transferred from a high pressure cross-country transmission line to a low pressure distribution piping system within a city.	*Mechanical*
Citygate	A point or measuring station at which a distributing gas utility receives gas from a natural gas pipeline company or transmission system.	*Energy*
CIV	customs import value	*Energy*
Civil engineer	A person who designs public works, as roads, bridges, canals, dams, and harbors, or supervises their construction or maintenance.	*Civil Engineering*
Cladding	A method of coating metals by which the coating becomes an integral part of the material. This can be done by casting or hot working. It is generally done on valves where special trims are required for difficult applications.	*Mechanical*
Cladding	The application of a thick (generally above 1mm) coating which melts or diffuses into the substrate. Processes include weld cladding and plasma transferred arc (PTA).	*Paint and Coatings*
Claggy	a seam of coal is said to have a "claggy" top when it adheres to the roof and is with difficulty separated, (N. East).	*Mining*
Claim	A piece of land 25 to 300 feet wide and 1,500 feet long, which the government sells to the man who finds mineral within its limits.	*Mining*
Claim	A portion of mining land held under federal or provincial law.	*Mining*
Clam	a clip used for retaining pipes or electrical cables etc.; or a haulage clip, an appliance for attaching mine-cars or tubs to a haulage rope.	*Mining*
Clamp Hub	'Hub Clamp Connector' a type of end connector documented in API Spec 16A that joins with a hub and attaches with a Clamp.	*Petroleum Engineering*
Clamping Force	The compressive force which a fastener exerts on the joint.	*Maintenance*
Clapper	The hinged closure element of a swing check valve.	*Mechanical*
Clarification	Process of clearing dirty water by removing suspended material.	*Mining*
Clarty	muddy. (N. East).	*Mining*
Class	A designation of pressure capability. See "ANSI," "MWP."	*Mechanical*
Class 4	A theoretical rather than practical class, now obsolete.	*Fastening*
Class 5	For a wrench fit. Used principally for studs and their mating tapped holes. A force fit requiring the application of high torque for semi-permanent assembly.	*Fastening*
Class A amplifiers	The simplest type of amplifier, class A amplifiers are those in which the output transistors conduct (i.e. do not fully turn off) irrespective of the output signal waveform. This type of amplifier is typically associated with high linearity but low efficiency.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Class A pressure rating expressed as a dimensionless number.	The class rating charts give actual pounds per square inch maximum allowable pressure at a given temperature.	*General Mechanical*
Class AB amplifiers	Class AB amplifiers combine Class A and Class B to achieve an amplifier with more efficiency than Class A but with lower distortion than class B. This is achieved by biasing both transistors so they conduct when the signal is close to zero (the point where class B amplifiers introduce non-linearities). The transistors transition to class B operation for large excursions.	*Electrical Engineering*
Class C amplifiers	Class C amplifiers are very efficient because the transistors are off most of the time and when they are on, they are in full conduction. They deliver high distortion and are often used in RF circuits, where tuning circuits restore some of the original signal and reduce distortion. They are also used in low-fidelity applications where the distortion is not important, such as a siren speaker driver.	*Electrical Engineering*
Class D amplifiers	Class D amplifiers are those that output a switching waveform, at a frequency far higher than the highest audio signal that needs to be reproduced. The low-pass filtered, average value of this waveform corresponds to the actual required audio waveform.	*Electrical Engineering*
Class G amplifiers	Class G amplifiers are more efficient than class AB amplifiers since they use the maximum supply voltage only when required, while a class AB amplifier always uses the maximum supply voltage.	*Electrical Engineering*
Class H amplifiers	Class H amplifiers modulate the supply voltage to the amplifier output devices so that it is never higher than necessary to support the signal swing. This reduces dissipation across the output devices connected to that supply and allows the amplifier to operate with an optimized class AB efficiency regardless of output power level. Class H amplifiers are generally more complex than other designs, with extra control circuitry required to predict and control the supply voltage.	*Electrical Engineering*
Class of Fit	The Class of Fit is a measure of the degree of fit between mating internal and external threads. Three main Classes of Fit are defined for metric screw threads as fine, medium, and course.	*Maintenance*
Class of Fit, Coarse	This has a tolerance class of 7H for internal threads and 8g for external threads.	*Maintenance*
Class of Fit, Fine	This has a tolerance class of 5H for internal threads and 4h for external threads.	*Maintenance*
Class of Fit, Medium	This has a tolerance class of 6H for internal threads and 6g for external threads.	*Maintenance*
Class rate schedule	An electric rate schedule applicable to one or more specified classes of service, groups of businesses, or customer uses.	*Energy*
Classes	Classes of thread are distinguished from each other by the amounts of tolerance and allowance specified. External threads or bolts are designated with the suffix "A"; internal or nut threads with "B".	*Fastening*
Classes 1A And 1B	For work of rough commercial quality where loose fit for spin-on-assembly is desirable.	*Fastening*
Classes 2A And 2B	The recognized standard for normal production of the great bulk of commercial bolts, nuts and screws.	*Fastening*
Classes 3A And 3B	Used where a closed fit between mating parts for high quality work is required.	*Fastening*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Classes of service	Customers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial, and other.	*Energy*
Classification	Group, or family designation based on wire rope constructions with common strengths and weights listed under the broad designation.	*Wire Rope & Cable*
Classifier	A mineral-processing machine which separates minerals according to size and density.	*Mining*
Clastic	Pertaining to a rock or sediment composed principally of broken fragment derived from pre-existing rocks or minerals that have been transported some distance from their places of origin.	*Petroleum Engineering*
Clatch harness or Clatch iron	the cross bar of iron attached to the fall of the rope with chains and hook at each end to suspend the corve by. (Yorks.).	*Mining*
Clay	A fine-grained material composed of hydrous aluminum silicates.	*Mining*
Clay	Fine grained soil, composed chiefly of hydrous aluminosilicate minerals.	*Material Process*
Clay Filtration	A refining process using fuller's earth (activated clay), bauxite or other mineral to absorb minute solids from lubricating oil, as well as remove traces of water, acids, and polar compounds.	*Lubrication*
Clay vein	A body of clay-like material that fills a void in a coal bed.	*Mining*
Clayband	an argillaceous ironstone, usually found in bands a few inches in thickness, or in nodules.	*Mining*
Clay-dyke	a vertical fissure sometimes met with in coal seams, which has been filled in with clay.	*Mining*
Clay-seam	inferior coal between the Hards and Top Softs of the Barnsley Seam. (Yorks.).	*Mining*
Clay-seam dirt	a clay parting between the Clay Seam and the Top Softs of the Barnsley Seam. (Yorks.).	*Mining*
Clea	100 particles >10 micron per milliliter	*Oil Analysis*
Clead	to cover with planks or deals, (N. East).	*Mining*
Cleading	the rope grooves in a winding drum.	*Mining*
Clean	100 particles >10 micron per milliliter - in regards to an oil sample bottle cleanliness	*Lubrication*
Clean air	When a car is running by itself on the track, it's in "clean air" because the air is not being disturbed by other cars. See Dirty air.	*NASCAR*
Clean Air	The ideal conditions. Climate controlled or sterile area.	*Electrical Engineering*
Clean Air Act Amendments of 1990	A comprehensive set of amendments to the federal law governing the nation's air quality. The Clean Air Act was originally passed in 1970 to address significant air pollution problems in our cities. The 1990 amendments broadened and strengthened the original law to address specific problems such as acid deposition, urban smog, hazardous air pollutants and stratospheric ozone depletion.	*Mining*
Clean coal	a coal seam free from dirt partings; or coal from which impurities have been separated.	*Mining*

Term	Definition	*Industry*
Clean Coal Technologies	A number of innovative, new technologies designed to use coal in a more efficient and cost-effective manner while enhancing environmental protection. Several promising technologies include: fluidized-bed combustion, integrated gasification combined cycle, limestone injection multi-stage burner, enhanced flue gas desulfurization (or "scrubbing"), coal liquefaction and coal gasification.	*Mining*
Clean Development Mechanism (CDM)	A Kyoto Protocol program that enables industrialized countries to finance emissions-avoiding projects in developing countries and receive credit for reductions achieved against their own emissions limitation targets. Also see Kyoto Protocol.	*Energy*
Clean locker	the locker in the pit head baths where a miner stores his everyday clean clothes between shifts. - see also Dirty locker.	*Mining*
Clean room	A facility or enclosure in which air content and other conditions (such as temperature, humidity, and pressure) are controlled and maintained at a specific level by special facilities and operating processes and by trained personnel.	*Oil Analysis*
Clean Water Act	The federal law that regulates discharges into waterways.	*Petroleum Drilling*
Cleanable	A filter element which, when loaded, can be restored by a suitable process, to an acceptable percentage of its original dirt capacity.	*Oil Analysis*
Cleaned coal or prepared coal	has been processed to reduce the amount of impurities present and improve the burning characteristics.	*Energy*
Cleaning	the process of chemically or mechanically removing unwanted residue or contaminants (mill scale, rust, dirt, oil) from the surface of a steel article prior to galvanizing	*Materials Process*
Cleaning solutions	liquids used to remove unwanted residue or contaminants (mill scale, rust, dirt, oil) from the surface of steel prior to galvanizing, typically alkalai caustic solution, hydrochloric or sulfuric acid, and zinc ammonium chloride flux solution	*Materials Process*
Cleaning up	filling coal or stone from where it has fallen, cleaning up spillages.	*Mining*
Cleanliness Level	A measure of relative freedom from contaminants.	*Lubrication*
Cleanliness, Level	The analogue of contamination level.	*Mechanical, Process, and Operations*
Clear	To restore a device to a prescribed initial state, usually the zero state.	*General Engineering*
Clearance	The amount by which the dedendum in a given gear exceeds the addendum of its mating gear. It is also the radial distance between the top of a tooth and the bottom o the mating tooth space.	*Mechanical Engineering*
Clearance Bearing	A journal bearing in which the radius of the bearing surface is greater than the radius of the journal surface.	*Lubrication*
Clear-cut harvest	A harvest practice that removes all trees within a given area.	*Forestry*
Clearing House	Part of a commodities exchange that monitors buying and selling of contracts, matches the buys and the sales.	*Metallurgy*
Cleat	An attachment fastened to the conveying surface to act as a pusher, support, check or trip, etc. to help propel material, parts or packages along the normal path of conveyor travel.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cleat spar	Whitish, crystalline mineral usually mixed carbonates of iron, lime and magnesium (ankerite) in the cleat of coal.	*Mining*
Cleated Belt	Belt: A belt having raised sections spaced uniformly to stabilize flow of material.	*Equipment*
Cleavage	The tendency of a mineral to split along crystallographic planes.	*Mining*
Cleveland Open Cup	A flash point test in which the surface of the sample is completely open to the atmosphere, and which is therefore relatively insensitive to small traces of volatile contaminants.	*Lubrication*
Cleveloc Nut	A torque prevailing nut of all metal construction. The collar of the nut is elliptical in cross section and it is this that provides the flexible locking element. The nut is pre-lubricated to reduce the torque needed when tightening and to minimize galling.	*Maintenance*
Clevis	A "U" shaped connecting yoke at the end of a stem or rod, between the ends of which a gate or other part may be pinned or bolted.	*Mechanical*
Clevis (hinge) pendulum	A "U" shaped mounting device which Contains a common pin hole at right angle to the axis of symmetry through each arm of the U. A clevis usually connects with an eye.	*Mechanical, Process, and Operations*
Clevis or Clivey	a spring-loaded hook attached to the winding rope; or a shackle for the easy coupling and uncoupling on chain haulage, winding etc.	*Mining*
CLIA	Clinical Laboratory Improvement Amendments of 1988	*Quality*
CLIB	See Cochrane Library (CLIB)	*Quality Engineering*
Click/Pop Reduction	A feature that eliminates "clicks" and "pops" — unwanted transient noise signals during power-up, shutdown, connection, etc.	*Electrical Engineering*
Click-and-Pop	Click-and-pop refers to the unwanted transient signals in the audio band that are reproduced by the headphone and/or speaker when the audio device driving it is either: powered up (power applied), powered down (power removed), brought out of shutdown (power applied previously), forced into shutdown (power still applied).	*Electrical Engineering*
Client Needs Analysis (CNA)	The Client Needs Analysis is a quick, SKF facilitated assessment with focus on the SKF AEO solution. The Client Needs Analysis can be completed in just a few hours and asks 10 assessment questions for each of the four main facets of the AEO Process: maintenance strategy, work identification, work control, and work execution. These 40 questions are designed to investigate, quantify, and visualize the situation at the your facility. Results are displayed in a graphical "spider chart" format which provides a visual footprint of a particular plant assessment in accordance with international standards/models of business excellence.	*Maintenance*
Cliffe's Hook	a safety device comprising a spring attached to the end of the gin rope to stop the loose bar from disengaging.	*Mining*
Clift	Clift, another word for "shale" (S. Wales).	*Mining*
Clift-cwar	Clift-cwar, another word for 'siltstone'. (S. Wales).	*Mining*
Climate change	A term used to refer to all forms of climatic inconsistency, but especially to significant change from one prevailing climatic condition to another. In some cases, "climate change" has been used synonymously with the term "global warming"; scientists, however, tend to use the term in a wider sense inclusive of natural changes in climate, including climatic cooling.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Climax community	A relatively stable, undisturbed plant community that has evolved through stages and adapted to its environment.	*Forestry*
Clinical guideline	A systematically developed statement for practitioners and participants about appropriate health care for specific clinical circumstances.	*Quality Engineering*
Clinical quality requirement	Used here for a quality requirement that states the medically important change in a test result or describes the gray zone or decision interval for interpreting a test result.	*Quality*
Clinical reportable range, CRR	Defined by CAP (College of American Pathologists) as the lowest and highest numeric results that can be reported after accounting for any specimen dilution or concentration that is used to extend the analytical measurement range.	*Quality*
Clinical sensitivity, diagnostic sensitivity	A measure of how frequently a test is positive when a particular disease is present. Generally given as a percentage of individuals with a given disease who have a positive test result. Ideally, a test should have a sensitivity of 100%, i.e., the test should always give a positive result when the patient has the particular disease. CLSI prefers the term true positive ratio, TPR.	*Quality*
Clinical specificity, diagnostic specificity	A measure of how frequently a test is negative in the absence of a particular disease. Generally given as the percentage of individuals without a given disease who have a negative test result. Ideally, a test should have a specificity of 100%, i.e., the test should always give a negative result when the patient does not have the disease. CLSI prefers the term true negative ratio, TNR.	*Quality*
Clinical trial	An experiment to compare the effects of two or more healthcare interventions. Clinical trial is an umbrella term for a variety of designs of healthcare trials, including uncontrolled trials, controlled trials, and randomized controlled trials. Also called: Intervention study	*Quality Engineering*
Clinically significant	A result (e.g. a treatment effect) that is large enough to be of practical importance to patients and healthcare providers. This is not the same thing as statistically significant. Assessing clinical significance takes into account factors such as the size of a treatment effect, the severity of the condition being treated, the side effects of the treatment, and the cost. For instance, if the estimated effect of a treatment for acne was small but statistically significant, but the treatment was very expensive, and caused many of the treated patients to feel nauseous, this would not be a clinically significant result. Showing that a drug lowered the heart rate by an average of 1 beat per minute would also not be clinically significant.	*Quality Engineering*
Clinically significant, clinically significant difference	Used in method validation to describe a difference or error that is larger than allowable for the clinical or medical use of a test. An important conclusion when judging the acceptability of a method's performance, in contrast to a statistically significant difference, which only infers that a difference is larger than the experimental uncertainty of the data.	*Quality*
Clinker	Powdered cement, produced by heating a properly proportioned mixture of finely ground raw materials (calcium carbonate, silica, alumina, and iron oxide) in a kiln to a temperature of about 2,700 degrees Fahrenheit.	*Energy*
Clinometer	An instrument for determining angles of inclination or slope.	*Civil Engineering*
Clip	Fitting for clamping two parts of wire rope to each other.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Clipper Lacing	Lacing attached to the belt with a clipper lacing machine.	*Manufacturing*
Clippers or Clippus	s the hook used in shaft sinking to attach the rope to the corf, a corruption of Cliffe's hook.	*Mining*
Clipping	The term applied to the phenomenon which occurs when an output signal is limited in some way by the full range of an amplifier, ADC or other device. When this occurs, the signal is flattened at the peak values, the signal approaches the shape of a square wave, and high frequency components are introduced. Clipping may be hard, as is the case when the signal is strictly limited at some level; or it may be soft, in which case the clipping signal continues to follow the input at some reduced gain.	*General Engineering*
Clivvy hook	the hook which attaches the rope to the kibble or hoppit in shaft sinking and is provided with a special locking tongue, designed to suit the particular form of kibble in use.	*Mining*
Clock	The device that generates periodic signals for synchronization.	*General Engineering*
Clock and Data Recovery	The process of extracting and reconstructing clock and data information from a single-wire/channel, serial data stream.	*Electrical Engineering*
Clock Jitter	A periodic waveform (especially a clock) is expected to cross certain thresholds at precisely timed moments. Variations from this ideal are called jitter.	*Electrical Engineering*
Clod or Clot	a soft shale lying directly above the coal seam. It invariably falls as the coal is taken from beneath it and has to be separated from the coal and discarded. Often traversed by numerous oblique, discontinuous, slippery surfaces (slickensides or listric surfaces). Also known as clot. (Som.). In the Bristol area it was called 'come-down' or 'comb-dung'; or a thick fireclay above or below a seam of coal. (Lancs.), (Scot.); also known as bannocking dirt (Yorks.). Clod was also a term used for any lenticular or irregular friable dirt below, and particularly above a coal seam.	*Mining*
Clonal lines	A group of plants originating from buds or cuttings from the same individual. [1]	*Forestry*
Closed center circuit	One in which flow through the system is blocked in neutral and pres- sure is maintained at the maximum pressure control setting.	*Mechanical, Process, and Operations*
Closed center system	A hydraulic system in which the control valves are closed during neutral, stopping oil flow. Flow in this system is varied, but pressure remains constant.	*Mechanical, Process, and Operations*
Closed Center Valve	A valve in which inlet and outlet ports are closed in the neutral position, stopping flow from the pump.	*Mechanical, Process, and Operations*
Closed circuit	A loop in the milling process wherein a selected portion of the product of a machine is returned to the head of the machine for finishing to required specification.	*Mining*
Closed Control System (CCS)	This is a system used to regulate a process using feedback control (as opposed to an open control system, which relies on feed forward control). A closed system responds to actual system conditions with a range of responses. It is slower to react to changes in process conditions than an open system, but it is more specific in its responses and is able to deal with a broader range of conditions. An example of closed loop control is a driver steering a car. If the car veers to the left, the driver steers right to compensate.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Closed Crankcase Ventilation (CCV)	A system in which crankcase vapors are discharged into the engine intake system (usually via the intake manifold) where they are burned during the combustion process rather than being discharged into the atmosphere.	*Mechanical Engineering*
Closed loop	A system in which the output of one or more elements is compared to some other signal to provide an actuating signal to control the output of the loop.	*Mechanical, Process, and Operations*
Closed Loop Control	Responses are measured and fed back to the control system so as to refine or modify drive signals in order to bring responses closer to the reference or desired motions. See iterative closed loop control.	*Reliability Engineering*
Closed loop system	Generally refers to drillers operating with a water cycle that is never exposed to the open air, unlike containment ponds. Closed loop drillers might operate on a well pad that is too isolated or too small to allow for construction of a pond.	*Petroleum Drilling*
Closed Socket	A wire rope end termination consisting of basket and bail made integral.	*Wire Rope & Cable*
Closed State	The state a pinch valve is in when the tubing is pinched.	*Mechanical*
Closed Systems	See open systems. Closed systems are the opposite to open systems. In other words, they are proprietary.	*Control Engineering*
Closeness of Control	Total temperature variation from a desired set point of system. Expressed as "closeness of control" is ±2°C or a system bandwidth with 4°C, also referred to as "amplitude of deviation."	*Electrical*
Closer	Closer, a short link rail. Clump, -see 'Clunch'. (Lancs.).	*Mining*
Closing Line	Wire rope that performs two functions: 1) closes a clamshell or orange peel bucket, and 2) operates as a hoisting rope.	*Wire Rope & Cable*
Closure	The ends of a bolted construction ball valve, bolted to the body, which often contain the seat rings.	*General Mechanical*
Closure element	The moving part of a valve, positioned in the flow stream, which controls the flow through the valve, e.g., wedge, plug, clapper, ball.	*General Mechanical*
Closure Member	The movable part of the valve which is positioned in the flow path to modify the rate of flow through the valve. Some of the different types of closure members are the Ball, Disk, Gate, and Plug.	*Industrial Engineering*
Cloud condensation nuclei	Aerosol particles that provide a platform for the condensation of water vapor, resulting in clouds with higher droplet concentrations and increased albedo.	*Energy*
Cloud Point	The temperature at which a cloud of wax crystals appears when a lubricant or distillate fuel is cooled under standard conditions. Indicates the tendency of the material to plug filters or small orifices under cold weather conditions.	*Lubrication*
Clour	a small depression of roof into the coal, mostly in a post roof, (N. East).	*Mining*
CLR	Committee on Lubricants Research	*Petro-Chemical Abbreviations*
CLSI	Clinical Laboratory and Standards Institute, formerly National Committee for Clinical Laboratory Standards (NCCLS)	*Quality*
CLUG	See Cochrane Library Users' Group (CLUG)	*Quality Engineering*
Clunch	an unlaminated mudstone with rootlets, the fireclay floor or seatearth underclay of some coal seams, also known as 'spavin' - see Stone clunch.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cluster randomized trial	A trial in which clusters of individuals (e.g. clinics, families, geographical areas), rather than individuals themselves, are randomized to different arms. In such studies, care should be taken to avoid unit of analysis errors.	*Quality Engineering*
Clutch	A device to permit engagement or disengagement of equipment while in motion or at rest.	*Equipment*
Clutch Drive	Drive used to disengage motor from reducer and stop conveyor immediately without stopping the motor or cutting the power.	*Manufacturing*
Clutch-Starter Interlock	A safety device that prevents a truck from being started while it's in gear. The clutch must be depressed for the engine to start.	*Mechanical Engineering*
Clydesdale	A breed of heavy draft horse developed in Scotland by the farmers of Lanarkshire, through which the River Clyde flows. It was bred to meet the needs of agriculture, commerce for the Lanarkshire coalfields of Lanarkshire and for all types of heavy freight on the streets of Glasgow. The Clydesdale Breeders of the United States was formed in 1879. Although not the most popular work horse in America, the Clydesdale is the best known. It is the breed that pulls the famous Budweiser beer wagon.	*Agriculture*
cm	Centimeter	*Oil Analysis*
CMA	Chemical Manufacturers Association	*Petro-Chemical Abbreviations*
CMAG	See Feedback Management Advisory Group (FMAG) (formerly Criticism Management Advisory Group (CMAG))	*Quality Engineering*
CMAQ	Congestion Mitigation and Air Quality Improvement Program	*Petro-Chemical Abbreviations*
CMMS	See Computerized Maintenance Management System	*Plant Engineering*
CMMS	For computerized maintenance management system. A software package that houses a database of information related to an organization's maintenance operations and functions. Its functionality is tied to scheduling, tracking and monitoring departmental activities and providing a historical overview of cost, budgetary, inventory and personnel data.	*Reliability Engineering*
CMR (Common-Mode Rejection)	The ability of a panel meter to eliminate the effect of AC or DC noise between signal and ground. Normally expressed in dB at dc to 60 Hz. One type of CMR is specified between SIG LO and PWR GND. In differential meters, a second type of CMR is specified between SIG LO and ANA GND (METER GND).	*Electrical*
CMS	Centers for Medicare and Medicaid Services	*Quality*
CMSA	consolidated metropolitan statistical area	*Energy*
CMV (Common-Mode Voltage)	The AC or DC voltage which is tolerable between signal and ground. One type of CMV is specified between SIG LO and PWR GND. In differential meters, a second type of CMV is specified between SIG HI or LO and ANA GND (METER GND).	*Electrical*
CMV (Common-Mode Voltage)	The AC or DC voltage which is tolerable between signal and ground. One type of CMV is specified between SIG LO and PWR GND. In differential meters, a second type of CMV is specified between SIG HI or LO and ANA GND (METER GND).	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CN	cetane number	*Petro-Chemical Abbreviations*
CNC	Computer Numerical Control allows machines to be operated from PLCs by means of a numerical code.	*Control Engineering*
CNG	compressed natural gas	*Petro-Chemical Abbreviations*
CNPC	China National Petroleum Corporation	*Petro-Chemical Abbreviations*
CNPP	Center for Nutrition Policy and Promotion, a unit within the USDA.	*Agriculture*
cnt	Cent	*Energy*
CO	Carbon Monoxide	*Energy*
CO control period ("seasons")	The portion of the year in which a CO nonattainment area is prone to high ambient levels of carbon monoxide. This portion of the year is to be specified by the Environmental Protection Agency but is to be not less than 4 months in length.	*Energy*
CO nonattainment area	Areas with carbon monoxide design values of 9.5 parts per million or more, generally based on data for 1988 and 1989.	*Energy*
CO or Controller Output	Same as output.	*Process Control Engineering*
CO_2	Carbon Dioxide	*Energy*
Coal	A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.	*Energy*
Coal analysis	Determines the composition and properties of coal so it can be ranked and used most effectively.	*Energy*
Coal balls	nodular calcareous rounded inclusions in coal seams, often containing well preserved plant fragments.	*Mining*
Coal bed	A bed or stratum of coal. Also called a coal seam.	*Energy*
Coal bed degasification	This refers to the removal of methane or coal bed gas from a coal mine before or during mining.	*Energy*
Coal Blending	The process of combining two or more coals with different characteristics to obtain coal with a certain quality, such as low sulfur content.	*Energy*
Coal briquets	Anthracite, bituminous, and lignite briquets comprise the secondary solid fuels manufactured from coal by a process in which the coal is partly dried, warmed to expel excess moisture, and then compressed into briquets, usually without the use of a binding substance. In the reduction of briquets to coal equivalent, different conversion factors are applied according to their origin from hard coal, peat, brown coal, or lignite.	*Energy*
Coal carbonized	The amount of coal decomposed into solid coke and gaseous products by heating in a coke oven in a limited air supply or in the absence of air.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coal chemicals	Coal chemicals are obtained from the gases and vapor recovered from the manufacturing of coke. Generally, crude tar, ammonia, crude light oil, and gas are the basic products recovered. They are refined or processed to yield a variety of chemical materials.	*Energy*
Coal Classification	In the United States, coals are classified by rank progressively from lignite (least carbonaceous) to anthracite (most carbonaceous) based on the proximate analyses of various properties (fixed carbon, volatile matter, heating value, and agglomerating character), following methods prescribed by the American Society for Testing and Materials. The International Coal Classification of the Economic Commission for Europe recognizes two broad categories of coal, "brown coal" and "hard coal." In terms of U.S. coal classification, the international classification of brown coal includes lignite and lower-ranked subbituminous coal, whereas hard coal includes all higher rank coals. See Coal Rank.	*Energy*
Coal cleaning	a process that separates coal from other foreign material such as shale or sandstone etc. usually utilizing the difference in their specific gravities. The unwanted material is generally heavier than the coal.	*Mining*
Coal coke	Coal coke: See Coke (coal).	*Energy*
Coal consumption	The quantity of coal burned for the generation of electric power (in short tons), including fuel used for maintenance of standby service.	*Energy*
Coal cutter	Coal cutter, -see Cutter.	*Mining*
Coal delivered	Coal which has been delivered from the coal supplier to any site belonging to the electric power company.	*Energy*
Coal dust	Particles of coal that can pass a No. 20 sieve.	*Mining*
Coal exports	Amount of U.S. coal shipped to foreign destinations, as reported in the U.S. Department of Commerce, Bureau of Census, "Monthly Report EM 545."	*Energy*
Coal face	This is the exposed area from which coal is extracted.	*Energy*
Coal face working or weighting	movement of the coal due to strata pressure. –see Weight and Weighting.	*Mining*
Coal financial reporting regions	A geographic classification of areas with coal resources which is used for financial reporting of coal statistics.	*Energy*
Coal fines	Coal with a maximum particle size usually less than one-sixteenth inch and rarely above one-eighth inch.	*Energy*
Coal flour	very fine coal dust.	*Mining*
Coal Fly Ash	A by-product of coal burning at electricity plants. It is called "fly" ash because it is transported from the combustion chamber by exhaust gases.	*Environmental Engineering*
Coal gas	Substitute natural gas produced synthetically by the chemical reduction of coal at a coal gasification facility.	*Energy*
Coal gasification	The process of converting coal into gas. The basic process involves crushing coal to a powder, which is then heated in the presence of steam and oxygen to produce a gas. The gas is then refined to reduce sulfur and other impurities. The gas can be used as a fuel or processed further and concentrated into chemical or liquid fuel.	*Energy*
Coal Gasification	The conversion of coal into a gaseous fuel.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coal gate	the main gate or roadway leading away from a coalface along which the coal travels, either in tubs on a haulage road or by conveyor belt. Sometimes called the 'mothergate'. (Mids.). - see also Main gate.	*Mining*
Coal grade	This classification refers to coal quality and use.	*Energy*
Coal head	the working place in a coal heading.	*Mining*
Coal imports	Amount of foreign coal shipped to the United States, as reported in the U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."	*Energy*
Coal jig or Wash box	a plunger type of jig used to wash or separate coal from shale and other impurities, working on the principle of density difference. Principally consisting of a perforated plate upon which the run of mine coal rests and alternative upwards and downwards currents of water are passed through by the action of plungers causing the lighter coal to stratify in the upper layers of the bed and the heavier refuse to settle to the lower layers for removal.	*Mining*
Coal liquefaction	A chemical process that converts coal into clean-burning liquid hydrocarbons, such as synthetic crude oil and methanol.	*Energy*
Coal mine	An area of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, tunnels, excavations, and other property, real or personal, placed upon, under, or above the surface of such land by any person, used in extracting coal from its natural deposits in the earth by any means or method, and the work of preparing the coal so extracted, including coal preparation facilities. British term is "colliery".	*Mining*
Coal mining productivity	Coal mining productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees.	*Energy*
Coal pipe	the carbonized bark of a fossil plant; also a very thin seam or scare of coal, (N. East).	*Mining*
Coal plough	Coal plough, -see Plough.	*Mining*
Coal preparation	The process of sizing and cleaning coal to meet market specifications by removing impurities such as rock, sulfur, etc. It may include crushing, screening, or mechanical cleaning.	*Energy*
Coal preparation plant	the place on the surface of the mine that cleans the coal and prepares it for sale.	*Mining*
Coal Preparation Processes (Cleaning/ Beneficiation/Processing)	In its broadest sense, preparation is any processing of mined coal to prepare it for market, including crushing and screening or sieving the coal to reach a uniform size, which normally results in removal of some non-coal or waste material. The term coal preparation most commonly refers to processing, including crushing and screening, passing the material through one or more processes to remove impurities, sizing the product, and loading for shipment. Many of the processes separate rock, clay, and other minerals from coal in a liquid medium; hence, the term washing is widely used. In some cases, coal passes through a drying step before loading. See Coal Washing.	*Energy*
Coal producing districts	A classification of coal fields defined in the Bituminous Coal Act of 1937. The districts were originally established to aid in formulating minimum prices of bituminous and subbituminous coal and lignite. Because much statistical information was compiled in terms of these districts, their use for statistical purposes has continued since the abandonment of that legislation in 1943. District 24 was added for the anthracite-producing district in Pennsylvania.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coal production	The sum of sales, mine consumption, issues to miners, and issues to coke, briquetting, and other ancillary plants at mines. Production data include quantities extracted from surface and underground mines, and normally exclude wastes removed at mines or associated reparation plants.	*Energy*
Coal rank	The classification of coals according to their degree of progressive alteration from lignite to anthracite. In the United States, the standard ranks of coal include lignite, subbituminous coal, bituminous coal, and anthracite and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.	*Energy*
Coal reserves	Measured tonnages of coal that have been calculated to occur in a coal seam within a particular property.	*Mining*
Coal sampling	The collection and proper storage and handling of a relatively small quantity of coal for laboratory analysis. Sampling may be done for a wide range of purposes, such as: coal resource exploration and assessment, characterization of their serves or production of a mine, to characterize the results of coal cleaning processes, to monitor coal shipments or receipts for adherence to coal quality contract specifications, or to subject a coal to specific combustion or reactivity tests related to the customer's intended use. During pre-development phases, such as exploration and resource assessment, sampling typically is from natural outcrops, test pits, old or existing mines in the region, drill cuttings, or drilled cores. Characterization of a mine's reserves or production may use sample collection in the mine, representative cuts from coal conveyors or from handling and loading equipment, or directly from stockpiles or shipments (coal rail cars or barges). Contract specifications rely on sampling from the production flow at the mining or coal handling facility or at the loadout, or from the incoming shipments at the receiver's facility. In all cases, the value of a sample taken depends on its being representative of the coal under consideration, which in turn requires that appropriate sampling procedures be carefully followed. For coal resource and estimated reserve characterization, appropriate types of samples include:	*Energy*
Coal stocks	Coal quantities that are held in storage for future use and disposition. *Note*: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of this period.	*Energy*
Coal sulfur	Coal sulfur occurs in three forms: organic, sulfate, and pyritic. Organic sulfur is an integral part of the coal matrix and cannot be removed by conventional physical separation. Sulfate sulfur is usually negligible. Pyritic sulfur occurs as the minerals pyrite and marcasite; larger sizes generally can be removed by cleaning the coal.	*Energy*
Coal synfuel	Coal-based solid fuel that has been processed by a coal synfuel plant; and coal-based fuels such as briquettes, pellets, or extrusions, which are formed from fresh or recycled coal and binding materials.	*Energy*
Coal tar	A viscous residue formed in the manufacture of gas from coal, an important source for plastics, dyes, and other synthetics.	*Material Process*
Coal type	The classification is based on physical characteristics or microscopic constituents. Examples of coal types are banded coal, bright coal, cannel coal, and splint coal. The term is also used to classify coal according to heat and sulfur content. See Coal grade.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coal Washing	The treatment of coal to remove waste material such as: *Dense (heavy) medium processes* use a thick solution, usually a mixture of magnetite and water, to separate coal from impurities, such as sulfur, ash, and mercury, by gravity separation. *Flotation processes* treat fine-sized coal with an oil-based reagent that attracts air bubbles in a liquid medium; the coal floats to the surface as froth, leaving the refuse below. *Hydraulic processes* use currents of water to separate coal from impurities. *Pneumatic processes* use currents of air to separate coal from impurities.	*Energy*
Coal zone	A series of laterally extensive and (or) lenticular coal beds and associated strata that arbitrarily can be viewed as a unit. Generally, the coal beds in a coal zone are assigned to the same geologic member or formation.	*Energy*
Coal	A carbonaceous rock mined for use as a fuel.	*Mining*
Coalbed	A geological layer or stratum of coal parallel to the rock stratification.	*Petroleum Drilling*
Coalbed gas (CBG)	The natural gas found in most coal deposits; it is formed during coalification, a process that converts deposits of plant material into coal. It is also referred to as coalbed methane (CBM) or natural gas in coal (NGC).	*Petroleum Engineering*
Coalbed methane (CBM)	A form of natural gas extracted from coal beds. In recent decades it has become an important source of energy in United States, Canada, and other countries.	*Petroleum Drilling*
Coalbed Methane Well Gas	Methane produced from coal seams. Coalbed methane is formed during coalification, which is the geologic process that transforms organic material into coal.	*Energy*
Coal-cutting machine	A **coal-cutting machine** is used in conventional mining to undercut, top cut, or shear the coal face so that coal can be fractured easily when blasted. It cuts 9 to 13 feet into the bed.	*Energy*
Coal-derived liquid fuels	coal-derived liquid fuels	*Energy*
Coalescor	A separator that divides a mixture or emulsion of two immiscible liquids using the interfacial tension between the two liquids and the difference in wetting of the two liquids on a particular porous medium.	*Lubrication*
Coalification	The metamorphic processes of forming coal.	*Mining*
Coal-producing regions	A geographic classification of areas where coal is produced.	*Energy*
Coal-Producing States	The States where mined and/or purchased coal originates are defined as follows: Alabama, Alaska, Arizona, Arkansas, Colorado, Illinois, Indiana, Kansas, Kentucky Eastern, Kentucky Western, Louisiana, Maryland, Mississippi, Missouri, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania anthracite, Pennsylvania bituminous, Tennessee, Texas, Utah, Virginia, Washington, West Virginia Northern, West Virginia Southern, and Wyoming.	*Energy*
Coating	A material applied to the surface of a conductor to prevent environmental deterioration, facilitate soldering or improve electrical performance.	*Electrical*
Coating thickness	the thickness of the zinc coating, measured in mils (0.001 inches) or micrometers (10-6 meters)	*Materials Process*
Cob	the large round mass of an ear of corn where kernels grow	*Agriculture*
Cobbles	the market name for coal of the size of a double-fist, about 3 to 6 inches in dimensions.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coble Creep	a form of diffusion controlled creep. In Coble creep the atoms diffuse along grain boundaries to elongate the grains along the stress axis. This causes Coble creep to have a stronger grain size dependence than N-H creep. For Coble creep k is related to the diffusion coefficient of atoms along the grain boundary, Q = Qgrain boundary diffusion, m=1, and b=3. Because Qgrain boundary diffusion < Qself diffusion, Coble creep occurs at lower temperatures than N-H creep. Coble creep is still temperature dependent, as the temperature increases so does the grain boundary diffusion. However, since the number of nearest neighbors is effectively limited along the interface of the grains, and thermal generation of vacancies along the boundaries is less prevalent, the temperature dependence is not as strong as in Nabarro–Herring creep. It also exhibits the same linear dependence on stress as N-H creep.	*Metallurgy*
Cobs or Cobbles	large lumps of coal. Cobs were larger than cobbles. (Lancs).	*Mining*
COC	Cleveland open cup	*Petro-Chemical Abbreviations*
Cochrane Collaboration Steering Group (CCSG)	It has overall responsibility for overseeing the development and implementation of policy affecting The Cochrane Collaboration. The CCSG also has legal responsibility as the Board of Directors for The Cochrane Collaboration as a registered charity. Also called: CCSG	*Quality Engineering*
Cochrane Collaboration, The	An international organization that aims to help people make well-informed decisions about health care by preparing, maintaining, and ensuring the accessibility of systematic reviews of the effects of healthcare interventions.	*Quality Engineering*
Cochrane Consumer Network (CCNet)	A registered field in The Cochrane Collaboration, responsible for coordinating and facilitating consumer involvement. Also called: CCNet	*Quality Engineering*
Cochrane Database of Systematic Reviews (CDSR)	One of the databases in The Cochrane Library. It brings together all the currently available Cochrane Reviews and Protocols for Cochrane Reviews. It is updated quarterly, and is available via the Internet and CD-ROM. See also: Cochrane Library (CLIB) Also called: CDSR	*Quality Engineering*
Cochrane Editorial Unit (CEU)	The remit of the Cochrane Operations Unit (CEU) includes any function relevant to The Cochrane Library (the product). This covers both direct functions such as Cochrane Review preparation and editorial processes carried out by review groups and authors, but also those functions such as training, methods and ICT, which underpin The Cochrane Library. Also called: CEU, Editorial Unit	*Quality Engineering*
Cochrane Groups	See Entities	*Quality Engineering*
Cochrane Handbook for Systematic Reviews of Interventions (formerly Cochrane Reviewers' Handbook)	Document containing guidance and advice on how to prepare and maintain Cochrane reviews. Accessible on the Collaboration web site and in the RevMan software. Updated regularly. Also called: Handbook	*Quality Engineering*
Cochrane Library (CLIB)	A collection of regularly updated online databases containing the Cochrane Database of Systematic Reviews, the Cochrane Central Register of Controlled Trials, the Database of Abstracts of Reviews of Effects, the Cochrane Methodology Register, the HTA Database, NHSEED, and information about The Cochrane Collaboration. (Also available on DVD)See also: Cochrane Database of Systematic Reviews (CDSR) Also called: CLIB, The Cochrane Library	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cochrane Operations Unit (COU)	In order to provide clarity on the core functions of the Collaboration's centrally funded management infrastructure, the Steering Group approved the renaming of the Secretariat to the Cochrane Operations Unit (COU) with effect from November 2011. This matches the name of the Cochrane Editorial Unit (CEU), and denotes the diversity of the high-level executive functioning of the COU. The remit of the Cochrane Operations Unit includes financial, administrative and legal management, oversight of marketing and communications, partnership building, and consumer support for the Collaboration as a whole. The COU maintains a Secretariat function to the Collaboration, and general administrative and business enquiries should continue to be sent to secretariat@cochrane.org.See also: Secretariat Also called: COU, Operations Unit	*Quality Engineering*
Cochrane Policy Manual (previously called the Cochrane Manual)	Document describing the policies and operating procedures of The Cochrane Collaboration. Accessible via the Collaboration web site.	*Quality Engineering*
Cochrane Review	Cochrane Reviews are systematic summaries of evidence of the effects of healthcare interventions. They are intended to help people make practical decisions. For a review to be called a 'Cochrane Review' it must be in CDSR or CMR. The specific methods used in a Review are described in the text of the review. Cochrane Reviews are prepared using Review Manager (RevMan) software provided by the Collaboration, and adhere to a structured format that is described in the Cochrane Handbook for Systematic Reviews of Interventions. See also: Systematic review (synonym: systematic overview)	*Quality Engineering*
Cochrane Review Group (CRG)	CRGs are made up of individuals sharing an interest in a particular healthcare problem or type of problem. The main purpose of a CRG is to prepare and maintain systematic reviews of the effects of healthcare interventions within the scope of the CRG. Members participate in the CRG not only by preparing Cochrane Reviews but also by hand searching journals and other activities that help the CRG to fulfill its aim. Each CRG is coordinated by an editorial team, responsible for regularly updating and submitting an edited module of Cochrane Reviews and information about the CRG, for publication in The Cochrane Library. Also called: CRG, Review Group	*Quality Engineering*
Cochrane Review Methodology Database (CRMD)	See Cochrane Methodology Register (CMR, formerly the Cochrane Review Methodology Database [CRMD])	*Quality Engineering*
Cochrane, Archie	The Cochrane Collaboration is named in honor of Archie Cochrane, a British medical researcher who contributed greatly to the development of epidemiology as a science.	*Quality Engineering*
Cockelshell	black shale full of mussels (Particularly in the Adwalton Stone Coal, (Yorks.).	*Mining*
Cocker	roadway timber support consisting of two uprights and two bars forming the cross-member in the roof in the shape of a shallow inverted 'V'. (N. Staffs.); or inclined prop set against overhanging coal tops for safety reasons. (S. Staffs.).	*Mining*
Cockering, herring-bone supports	A method of support by which a centre support, of beams or bars of timber running longitudinally along the roof of the roadway is supported systematically by inclined struts or props with their base spragged in the side of the road. The whole structure having a herring-bone like appearance (N. Staffs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cockermegs or Cockersprags	a set of three sprags to hold the coal on the face during holing. One 6ft sprag is placed horizontally in the middle of the seam and the other two 3ft sprags are set at an angle up to the roof and down to the floor from this middle sprag (N. Staffs.).	*Mining*
Cockle Bed	fossil band comprising non-marine lamellibranches or 'mussels'.	*Mining*
Cockle-bed	a bed containing 'mussels' or non-marine lamellibranches.	*Mining*
Cockwood	an 8–10 inch offcut piece of wood taken home and used for firelighting (S. Staffs.).	*Mining*
Cocoon	A covering, composed partly or wholly of silk or other sticky fiber, spun or constructed by many larvae as a protection for the pupal stage.	*Forestry*
Cod	a bearing of cast iron, bolted to the underside of a tram, (N. East).	*Mining*
Codabar	Standard bar code symbology used principally by the blood products industry.	*Gears*
Code 39	Standard bar code symbology and one of the most widely used.	*Gears*
Code Division Multiple Access	A digital cellular technology that uses spread-spectrum techniques. Unlike GSM and other competing systems that use TDMA, CDMA does not assign a specific frequency to each user. Instead, every channel uses the full available spectrum.	*Electrical Engineering*
Code of federal regulations	A compilation of the general and permanent rules of the executive departments and agencies of the Federal Government as published in the Federal Register. The code is divided into 50 titles that represent broad areas subject to Federal regulation. Title 18 contains the FERC regulations.	*Energy*
Code of practice	ACC Petroleum Additives Product Approval Code of Practice - a set of practices that are used in the approval testing of an engine oil formulation.	*Mechanical, Process, and Operations*
Coefficient of expansion	The thermal expansivity, the increase in length per unit length per degree. Centigrade rise in temperature.	*Material Process*
Coefficient of Friction	A numerical expression of the ratio between the force of contact existing between two surfaces and the resistant force tending to oppose the motion of one with respect to the other. The coefficient of friction is used in determini	*Equipment*
Coefficient of Friction	The number obtained by dividing the friction force resisting motion between two bodies by the normal force pressing the bodies together.	*Lubrication*
coefficient of permeability	coefficient of permeability - see hydraulic conductivity.	*Chemical*
Coefficient of Storage	The volume of water an aquifer releases from or takes into storage per unit surface area of the aquifer, per unit change in head.	*Petroleum Engineering*
Coefficient of Transmissivity	The rate at which groundwater can flow through an aquifer section of unit width under a unit hydraulic gradient. It is the average permeability of a section of the entire aquifer at a given location multiplied by the thickness of the formation.	*Petroleum Engineering*
Coefficient of variation, CV	The relative standard deviation, i.e., the standard deviation expressed as a percentage of the mean [CV=100(s/x)].	*Quality*
Coercive field	Magnitude of a reverse electric field necessary to return a polarized ferroelectric to zero polarization.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cofferdam	A watertight enclosure placed or constructed in waterlogged soil or under water and pumped dry so that construction or repairs can proceed under normal conditions.	*Civil Engineering*
Coffering	Coffering, -see Tubbing.	*Mining*
Cofiring	The process of burning natural gas in conjunction with another fuel to reduce air pollutants.	*Energy*
Cog	Cog, -see Chock.	*Mining*
Cog and rung gin	an early form of winding plant operated by horses. This comprised a drum with spokes or rungs, working on a horizontal shaft and mounted directly over the mine shaft. The drum was driven by a crude horizontal cog wheel the vertical shaft of which was rotated by a long pole or lever to the outer end of which was harnessed a horse or horses, which ran in a circular track around the shaft top. –see Horse whim.	*Mining*
COGCC	Colorado Oil and Gas Conservation Commission	*Petroleum Drilling*
Cogeneration	Production of heat energy and electrical or mechanical power from the same fuel in the same facility. A typical cogeneration facility produces electricity and steam for industrial process use.	*Energy*
Co-generation	A particularly efficient method of electricity generation that diverts heat, produced as a by-product of the power generation process, to domestic and industrial heating systems. The heat is produced by combustion of fuel in the power station to create the steam that drives the generating turbines. It would otherwise be released to the atmosphere.	*Electrical*
Cogeneration system	A system using a common energy source to produce both electricity and steam for other uses, resulting in increased fuel efficiency.	*Energy*
Cogenerator	A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam), used for industrial, commercial, heating, or cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequential use of energy" and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC).(See the Code of Federal Regulations, Title 18, Part 292.)	*Energy*
Cogenerator	A facility that produces electricity and/or other energy for heating and cooling.	*Energy*
Cogger	a miner engaged on building cogs.	*Mining*
COGIS	Colorado Oil and Gas Information Systems	*Petroleum Drilling*
cognitive map	a sketch that presents a causal picture of the association of components within a complex dynamic system, for the primary purpose of better understanding dependency relationships and general cause/effect.	*Petroleum Drilling*
Coherence	A measure of the similarity of vibration at two locations, giving insight into possible cause and effect relations.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coherence Function	A frequency domain function computed to show the degree of a linear, noise-free relationship between a system's input and output. The value of the coherence function ranges between zero and one, where a value of zero indicates there is no causal relationship between the input and the output. A value of one indicates the existence of linear noise-free frequency response between the input and the output.	*General*
Coherent	Light source in which the light waves are in phase.	*Material Process*
Coherent interface	Interface between a matrix and precipitate at which the crystallographic structures maintain registry.	*Material Process*
Coherent Sampling	Describes the sampling of a periodic signal, where an integer number of its cycles fits into a predefined sampling window.	*Electrical Engineering*
Cohesion	Molecular attraction between grease particles contributing to its resistance to flow.	*Lubrication*
Cohort study	Follow-up of exposed and non-exposed defined groups, with a comparison of disease rates during the time covered.	*Analysis*
Coil	Circular bundle or package of wire rope that is not affixed to a reel.	*Wire Rope & Cable*
Coil Heat Exchanger	Heating coils are typically modified pipe with cross-flow, or looping arrangements, and are usually made from Finned-Tube. Also known as Tubulare heat exchangers.	*Industrial*
Coil shed	Portion of the tower structure housing atmospheric (tubular) heat exchangers.	*Facility Engineering*
Coil Springs	Suspension components that compress and respond to road inputs, permitting the up-and-down movement of a vehicle as it goes over road bumps and dips.	*Mechanical Engineering*
Coincidence Factor	The ratio of the coincident maximum demand of two or more loads to the sum of their noncoincident maximum demands for a given period. The coincidence factor is the reciprocal of the diversity factor and is always less than or equal to one.	*Energy*
Coincident site lattice (CSL)	Array of atomic sites common to both crystal lattice orientations of the grains adjacent to a given grain boundary.	*Material Process*
Coincidental Demand	Two or more demands that occur at the same time.	*Energy*
Coincidental Peak Load	Two or more peak loads that occur at the same time.	*Energy*
Co-interior Angles	They lie 'inside' the parallel lines and on the same side of the transversal. They are supplementary.	*Math*
Co-intervention	The application of additional diagnostic or therapeutic procedures to people receiving a particular program of treatment. In a controlled trial, members of either or both the experimental and the control groups might receive co-interventions.	*Quality Engineering*
Co-interventions	Interventions other than the treatment under study that are applied differently to the treatment and control groups. Cointervention is a serious problem when double blinding is absent or when the use of very effective non-study treatments is permitted.	*Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Coke	A hard, dry carbon substance produced by heating coal to a very high temperature in the absence of air.	*Mining*
Coke	A high carbon-content residue remaining from the destructive distillation of petroleum residue.	*Petroleum Engineering*
Coke (coal)	A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke from coal is grey, hard, and porous and has a heating value of 24.8 million Btu per ton.	*Energy*
Coke (petroleum)	A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton.	*Energy*
Coke Battery	A series of coke ovens stacked in rows into which coal is loaded and processed into coke.	*Energy*
Coke breeze	The term refers to the fine sizes of coke, usually less than one-half inch, that are recovered from coke plants. It is commonly used for sintering iron ore.	*Energy*
Coke button	A button-shaped piece of coke resulting from standard laboratory tests that indicates the coking or free-swelling characteristics of a coal; expressed in numbers and compared with a standard.	*Energy*
Coke Oven	A chamber of brick or other heat-resistant material in which coal is heated to separate the coal gas, coal water, and tar. The coal gas and coal water fuse together with carbon and the remaining ash, forming a hard residue commonly referred to as coke. Coke is primarily used in steel production. There are two types of coke ovens: (1) beehive ovens, which were originally built round with a spherical top like an old-fashioned beehive, and have an opening in the top and various small openings for draft at the base. The ovens were developed into banks (rows) of joining cubicles. During the heating process of the coal, tar, gas, and other byproducts are lost. (2) Byproduct ovens, which were built in rectangular form with the front and back removable, and which are arranged so that all volatile byproducts can be pumped out.	*Energy*
Coke oven gas	The mixture of permanent gases produced by the carbonization of coal in a coke oven at temperatures in excess of 1,000 degrees Celsius.	*Energy*
Coke plants	Plants where coal is carbonized for the manufacture of coke in slot or beehive ovens.	*Energy*
Coking	Thermal refining processes used to produce fuel gas, gasoline blendstocks, distillates, and petroleum coke from the heavier products of atmospheric and vacuum distillation. Includes:	*Energy*
Coking	The undesirable accumulation of carbon (coke) deposits in the internal combustion engine or in a refinery plant. The process of distilling a petroleum product to dryness	*Lubrication*
Coking coal	Bituminous coal suitable for making coke. See coke (coal).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
COLA	Originally, Commission for Office Laboratory Accreditation	*Quality*
Colback	A black hat of felt or sheepskin common to Asia Minor also known as a Calpac.	*Breakroom*
Cold Working	Deformation of a metal plastically. Although ordinarily done at room temperature, cold working may be done at the temperature and rate at which strain hardening occurs. Bending of steel piping at 1300°F (704°C) would be considered a cold-working operation.	*Maintenance and Repair*
Cold Bending	The bending of pipe to a predetermined radius at any temperature below some specified phase change or transformation temperature but especially at or near room temperature. Frequently, pipe is bent to a radius of 5 times the nominal pipe diameter.	*Maintenance and Repair*
Cold Cranking Amps (CCA)	A rating, measured in amperes. Used for comparing cranking strength of vehicles batteries during extremely cold (0 F or lower) weather.	*Mechanical Engineering*
Cold Cranking Simulator (CCS)	An intermediate shear rate viscometer that predicts the ability of an oil to permit a satisfactory cranking speed to be developed in a cold engine.	*Lubrication*
Cold flow	Distortion which takes place in plastics under lead at low temperatures (room temperature).	*Material Process*
Cold Flow	Any permanent deformation due to pressure or mechanical force, without the aid of eat softening.	*Electrical*
Cold Inflation	The pressure in a tire that has been driven less than 1 mile at moderate speed or has been standing for three hours or more.	*Mechanical Engineering*
Cold Joint	A soldered joint made with insufficient heat.	*Electrical*
Cold molding	A procedure in which a plastic composition is shaped by pressure at ordinary room temperature and hardened by subsequent baking.	*Material Process*
Cold Rating	The maximum pressure that a valve or fitting is designed to withstand at room temperature.	*Industrial Engineering*
Cold slug well	Space cut near the spruce opening in an injection mold to trap the cold slug.	*Material Process*
Cold slugs	Surface or body imperfection in a molded article caused by nonuniformity of temperature of the charge as it flows into the mold.	*Material Process*
Cold Spray (Cold Gas-dynamic Spraying)	A process that uses the energy stored in high pressure compressed gas to propel fine powder particles at very high velocities at a substrate to form a coating.	*Paint and Coatings*
Cold stretch	Stretching operation applied to filaments to improve physical properties through orientation of molecules.	*Material Process*
Cold Test	Any test to determine the performance of cables during or after subjection to a specified low temperature for a specified time.	*Electrical*
Cold vent	An area of the ocean floor where hydrogen sulfide, methane and other hydrocarbon-rich fluid seepage occurs, often in the form of a brine pool. Constitutes a biome supporting several endemic species. More commonly a “cold seep”	*Petroleum Drilling*
Cold water basin	A device underlying the tower to receive the cold water from the tower and direct its flow to the suction line or sump.	*Facility Engineering*
Cold water temperature (CWT)	Temperature of the water entering the cold water basin before addition of make-up.	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cold Welding	Cohesion between two surfaces of a metal, generally under the influence of externally applied pressure at room temperature.	*Paint and Coatings*
Cold Work	The hardening and embrittlement of metal by repeated flexing action.	*Electrical*
Cold-deck imputation	A statistical procedure that replaces a missing value of an item with a constant value from an external source such as a value from a previous survey. See Imputation.	*Energy*
Cold-galvanizing	Cold-galvanizing – See zinc-rich paint	*Materials Process*
Cold-rolled steel	steel that has been produced from a hot-rolled pickled coil and given substantial cold reduction at room temperature; cold-rolled steel is characterized by improved surface smoothness, greater uniformity in thickness and improved mechanical properties when compared to hot-rolled steel	*Materials Process*
Cold-Rolling (CR)	Rolling steel without first reheating it. This process reduces thickness of the steel, produces a smoother surface and makes it easier to machine.	*Metallurgy*
Cold-working	bending or forming ambient-temperature steel; this action induces stresses that may be released during the galvanizing process	*Materials Process*
Collaborative production management (CPM)	A method of unifying disparate yet interdependent production systems in order to optimize productivity. Computerized CPM solutions are software applications that enable process manufacturers to plan, track, analyze and direct their operations.	*Electrical*
Collaborative Trialists' Group	Investigators who conduct similar randomized controlled trials and agree to contribute individual patient data from their trials to a meta-analysis.	*Quality Engineering*
Collapse	An inward structural failure of a filter element which can occur due to abnormally high pressure drop (differential pressure) or resistance to flow.	*Oil Analysis*
Collapse pressure	The minimum differential pressure that an element is designed to withstand without permanent deformation.	*Oil Analysis*
Collapse pressure	The outside-iD differential pressure that causes Structural failure.	*Mechanical, Process, and Operations*
Collar	The term applied to the timbering or concrete around the mouth of a shaft; also used to describe the top of a drill hole.	*Mining*
Collaring buntons	buntons in a shaft for steadying the pumps and taking the vibration.	*Mining*
Collector Region	in a transistor that receives charge carriers.	*Material Process*
Colliery	British name for coal mine.	*Mining*
Collinear	When the rotational centers of two shafts form a single, straight line then the shafts are said to be collinear.	*Maintenance*
Colloid	Colloidal systems are stable dispersions of microscopic solid particles.	*Chemical*
Colloquia/Colloquium	The annual conferences of The Cochrane Collaboration, which usually take place in October. They last for five or six days, and have between 600 and 1200 participants. Colloquia take place in countries where there is a Cochrane Centre, which volunteers to host a Colloquium, and is responsible for organizing it.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Colloquium Policy Advisory Committee (CPAC)	The CPAC is an advisory group to the CCSG. Its remit is to maintain a record of policy decisions about Cochrane Colloquia, to move forward new policies after appropriate consultation, and to help ensure that hosts of future Colloquia know about and adhere to such policies. (Formerly the Colloquium Policy Advisory Group). Also called: CPAC	*Quality Engineering*
Color	The predominant hue of lubricating grease (such as amber, brown or perhaps green, red, or blue for dyed grease) and intensity (light, medium, or dark) when viewed to eliminate Bloom.	*Lubrication*
Color Visual	sensation associated with various portions of the electromagnetic spectrum with wavelengths between 400 and 700 nm.	*Material Process*
Color Code	The ANSI established color code for thermocouple wires in the negative lead is always red. Color Code for base metal thermocouples is yellow for Type K, black for Type J, purple for Type E and blue for Type T.	*General Engineering*
Color Code	A color system for circuit identification by use of solid colors tracers, braids surface Printing, etc.	*Electrical*
Color Subcarrier	A modulated carrier, added to a television signal, to carry the color components. Examples: In NTSC television, a 3.579545MHz color subcarrier is quadrature-modulated by two color-difference signals and added to the luminance signal. The PAL television standard uses a subcarrier frequency of 4.43362MHz.	*Electrical Engineering*
Colorant	Additive for a polymer for a purpose of providing color.	*Material Process*
Color Code	The ANSI established color code for thermocouple wires in the negative lead is always red. Color Code for base metal thermocouples is yellow for Type K, black for Type J, purple for Type E and blue for Type T.	*Electrical*
Columbia	A breed of sheep developed by the United States Department of Agriculture to replace cross breeding on the range. In 1912, long wool breed rams were crossed with Rambouillet ewes to produce large ewes that yielded more pounds of wool and more pounds of lamb.	*Agriculture*
Column	Framework member; a main vertical supporting member in the tower framework.	*Facility Engineering*
Column anchor	(See Anchor Casting).	*Facility Engineering*
Column flotation	A precombustion coal cleaning technology in which coal particles attach to air bubbles rising in a vertical column. The coal is then removed at the top of the column.	*Mining*
Column flotation	A milling process, carried out in a tall cylindrical column, whereby valuable minerals are separated from gangue minerals based on their wettability properties.	*Mining*
Column sample	a channel or drill core sample taken to represent the entire geologic coalbed; it includes all partings and impurities that may exist in the coalbed.	*Energy*
Colzaline	a petroleum spirit used to fuel safety lamps.	*Mining*
Combination Adaptor Ring Gasket	A custom Ring Gasket that allows two flanges with different ring grooves to join and seal when Made-up.	*Petroleum Engineering*
Combine	a machine used for harvesting grain	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
combine	Harvester and threshing equipment combined into one machine. A primitive horse-drawn combine was introduced in Michigan in 1836. Use grew slowly until the 1930s when tractor-drawn models became available.	*Agriculture*
Combined air and flue gas systems	Combined air and flue gas systems allow heating boilers to operate independently of the room air. The air required for combustion is drawn in directly from the outside atmosphere. Such combined systems operate on the basis of a pipe-in-pipe concept: the inner pipe serves as flue pipe, while the combustion air is delivered to the heating boiler via the shaft between inner and outer pipe.	*Thermal Management*
Combined Chlorine (new)	The amount of chloramine or chloro-organic compounds present in water.	*Chemical Engineering*
Combined Cycle	Similar to the combustion turbine simple cycle, but includes a heat recovery steam generator that extracts heat from the combustion turbine exhaust flow to produce steam. This steam in turn powers a steam turbine engine.	*Energy*
Combined Cycle Plant	An electric generating station that uses waste heat from its gas turbines to produce steam for conventional steam turbines.	*Energy*
Combined cycle unit	An electric generating unit that consists of one or more combustion turbines and one or more boilers with a portion of the required energy input to the boiler(s) provided by the exhaust gas of the combustion turbine(s).	*Energy*
Combined heat and power (CHP) plant	A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).	*Energy*
Combined household energy expenditures	The total amount of funds spent for energy consumed in, or delivered to, a housing unit during a given period of time and for fuel used to operate the motor vehicles that are owned or used on a regular basis by the household. The total dollar amount for energy consumed in a housing unit includes state and local taxes but excludes merchandise repairs or special service charges. Electricity, and natural gas expenditures are for the amount of those energy sources consumed. Fuel oil, kerosene, and LPG expenditures are for the amount of fuel purchased, which may differ from the amount of fuel consumed. The total dollar amount of fuel spent for vehicles is the product of fuel consumption and price.	*Energy*
Combined hydroelectric plant	A hydroelectric plant that uses both pumped water and natural streamflow for the production of power.	*Energy*
Combined pumped-storage plant	A pumped-storage hydroelectric power plant that uses both pumped water and natural stream flow to produce electricity.	*Energy*
Combined standard uncertainty	Standard uncertainty of the result of a measurement when that result is obtained from the values of a number of other quantities, equal to the positive square root of a sum of terms, the terms being the variances or covariances of these other quantities weighted according to how the measurement result varies with changes in these quantities. [ISO]	*Quality*
Combined-cycle power plant	conventional thermal power stations produce steam to drive turbines that generate electricity. In a combined cycle plant, two turbines are used. The first is driven by oil or gas, and waste heat from that process contributes to the production of steam to drive the second turbine	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Combustion	Chemical oxidation accompanied by the generation of light and heat.	*Energy*
Combustion chamber	An enclosed vessel in which chemical oxidation of fuel occurs.	*Energy*
Combustion Turbine	A fossil-fuel-fired power plant that uses the conversion process known as the Brayton cycle. The fuel, oil, or gas is combusted and drives a turbine-generator.	*Energy*
Come-Along	Device for making a temporary grip on a wire rope.	*Wire Rope & Cable*
cometabolism	the simultaneous metabolism of two compounds, in which the degradation of the second compound (the secondary substrate) depends on the presence of the first compound (the primary substrate). For example, in the process of degrading methane, some bacteria can degrade hazardous chlorinated solvents that they would otherwise be unable to attack.	*Chemical*
Command signal (Or input signal)	An external signal to which the servo must respond.	*Mechanical, Process, and Operations*
Commercial	Kerosene-type jet fuel intended for use in commercial aircraft.	*Energy*
Commercial building	A building with more than 50 percent of its floor space used for commercial activities. Commercial buildings include, but are not limited to, stores, offices, schools, churches, gymnasiums, libraries, museums, hospitals, clinics, warehouses, and jails. Government buildings are included except for buildings on military bases or reservations.	*Energy*
Commercial facility	An economic unit that is owned or operated by one person or organization and that occupies two or more commercial buildings at a single location. A university and a large hospital complex are examples of a commercial multi-building facility.	*Energy*
Commercial Field	An oil and/or gas field judged to be capable of producing enough net income to make it worth developing.	*Petroleum Drilling*
Commercial field	An oil and/or gas field judged to be capable of producing enough net income to make it worth developing.	*Petroleum Drilling*
Commercial Operation	Commercial operation occurs when control of the generator is turned over to the system dispatcher.	*Energy*
Commercial operation (nuclear)	The phase of reactor operation that begins when power ascension ends and the operating utility formally declares the nuclear power plant to be available for the regular production of electricity. This declaration is usually related to the satisfactory completion of qualification tests on critical components of the unit.	*Energy*
Commercial sector	An energy-consuming sector that consists of service-providing facilities and equipment of businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.	*Energy*
Commercialization	Programs or activities that increase the value or decrease the cost of integrating new products or services into the electric sector.	*Energy*

Term	Definition	*Industry*
Commingling	The mixing of one utility's generated supply of electric energy with another utility's generated supply within a transmission system.	*Energy*
Comminution	The breaking, crushing, or grinding of coal, ore, or rock.	*Mining*
Commissioned agent	An agent who wholesales or retails a refined petroleum product under a commission arrangement. The agent does not take title to the product or establish the selling price, but receives a percentage of fixed fee for serving as an agent.	*Energy*
Commodity	an agricultural good	*Agriculture*
Commodity Agreement	Primary source agreements designated for supply of goods or services to the University established as a result of a competitive quotation for indefinite quantities during a period of time at firm prices or with an established basis for price changes.	*Procurement*
Commodity Credit Corporation	A federally owned and operated corporation within USDA. It was created to stabilize, support, and protect agricultural prices and farm income through loans, purchases, payments, and other operations.	*Agriculture*
Commodity Manager	The Strategic Sourcing Manager assigned responsibility on a University-wide basis for coordinating standards and specification development covering specific commodities or groups of commodities commonly used by two or more campuses, and for developing, negotiating, and monitoring pool purchases, commodity agreements, and price schedules for assigned commodities.	*Procurement*
Common carrier	Truck or trucking company licensed and regulated by the Surface Transportation Board. (They are different from exempt haulers who are truckers not regulated by the Interstate Commerce Commission.)	*Agriculture*
Common Costs	A common cost is a cost that is common to a number of costing objects but cannot be traced to them individually. For example, the wage cost of the pilot of a 747 airliner is a common cost of all of the passengers on the aircraft. Without the pilot, there would be no flight and no passengers. But no part of the pilot's wage is caused by any one passenger taking the flight.	*Procurement*
Common equity (book value)	The retained earnings and common stock earnings plus the balances in common equity reserves and all other common stock accounts. This also includes the capital surplus, the paid-in surplus, the premium on common stocks, except those balances specifically related to preferred or preference stocks; less any common stocks held in the treasury.	*Energy*
Common Mode	The output form or type of control action used by a temperature controller to control temperature, i.e. on/off, time proportioning, PID.	*Electrical*
Common Mode Rejection Ratio	The ability of an instrument to reject interference from a common voltage at its input terminals with relation to ground. Usually expressed in db (decibels).	*General Engineering*
Common stock	Shares in a company which have full voting rights which the holders use to control the company in common with each other. There is no fixed or assured dividend as with preferred shares, which have first claim on the distribution of a company's earnings or assets.	*Mining*
Common Strand	Galvanized strand made of galvanized iron wire whose grade is common iron.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Commonly occurring in milk sugar or lactose. White crystals soluble in water and alcohol, slightly soluble in glycerol	commonly occurring in milk sugar or lactose. White crystals soluble in water and alcohol, slightly soluble in glycerol.	*Material Process*
Common-Mode Signals	Common-mode signals are identical signal components on both the + and - inputs of a differential amplifier or instrumentation amplifier. A common example is in a balanced pair, where a noise voltage is induced in both conductors. Another example is where a DC component is added (e.g. due to a difference in ground between the signal source and the receiver). In an ideal differential amp, the common-mode element is cancelled out, since the differential (+ and -) inputs should subtract out the identical components. A measurement of the actual ability to do this is called the Common Mode Rejection Ratio, or CMRR.	*Electrical Engineering*
Common-Mode Signals	Common-mode signals are identical signal components on both the + and - inputs of a differential amplifier or instrumentation amplifier. A common example is in a balanced pair, where a noise voltage is induced in both conductors. Another example is where a DC component is added (e.g. due to a difference in ground between the signal source and the receiver).	*Electrical Engineering*
Communication	Transmission and reception of data among data processing equipment and related peripherals.	*General Engineering*
Community Supported Agriculture (CSA)	a farm that is funded by a group of community members. Members pay an annual or quarterly fee in exchange for a weekly assortment of farm fresh produce or other farm products. Many CSAs are year round, but in the foothills, most provide produce from spring through fall. CSA helps local farmers increase cash flow and diversifies risk over multiple crops.	*Agriculture*
Co-morbidity	Coexistence of a disease or diseases in a study participant in addition to the index condition that is the subject of study.	*Analysis*
Compact fluorescent bulbs	These are also known as "screw-in fluorescent replacements for incandescent" or "screw-ins." Compact fluorescent bulbs combine the efficiency of fluorescent lighting with the convenience of a standard incandescent bulb. There are many styles of compact fluorescent, including exit light fixtures and floodlights (lamps containing reflectors). Many screw into a standard light socket, and most produce a similar color of light as a standard incandescent bulb. Compact fluorescent bulbs come with ballasts that are electronic (lightweight, instant, no-flicker starting, and 10to 15% more efficient) or magnetic (much heavier and slower starting). Other types of compact fluorescent bulbs include adaptive circulation and PL and SL lamps and ballasts. Compact fluorescent bulbs are designed for residential uses; they are also used in table lamps, wall sconces, and hall and ceiling fixtures of hotels, motels, hospitals, and other types of commercial buildings with residential-type applications.	*Energy*
Compact round conductor	A conductor constructed with a central core surrounded by one or more layers of helically laid wires and formed into final shape by rolling, drawing, or other means.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Compact Stranded Conductor	A unidirectional or conventional concentric conductor manufactured to a specified diameter, approximately 8 to 10% below the nominal diameter of a non-compact conductor of the same cross-sectional area.	*Electrical*
Compaction	the compression of air spaces in the soil by heavy machinery	*Agriculture*
Companion Flange	A pipe flange suited to connect with another flange or with a flanged valve or fitting. A loose flange which is attached to a pipe by threading, van stoning, welding, or similar method as distinguished from a flange which is cast integrally with a fitting or pipe.	*Maintenance and Repair*
Company	Company: See Firm.	*Energy*
Company automotive (retail) outlet	Any retail outlet selling motor fuel under the brand name of a company reporting in the EIA Financial Reporting System.	*Energy*
Company man	An operating company employee who supervises the well or drilling site operations. Also referred to as a company hand or operator's representative.	*Petroleum Drilling*
Company outlet	Company outlet: See Company-operated automotive outlet.	*Energy*
Company-lessee automotive outlet	One of three types of company automotive (retail) outlets. This type of outlet is operated by an independent marketer who leases the station and land and has use of tanks, pumps, signs, etc. A lessee dealer typically has a supply agreement with a refiner or a distributor and purchases products at dealer tank wagon prices. The term includes outlets operated by commissioned agents and is limited to those dealers who are supplied directly by a refiner or any affiliate or subsidiary company of a refiner.	*Energy*
Company-open automotive outlet	One of three types of company automotive (retail) outlets. This type of outlet is operated by an independent marketer who owns or leases (from a third party that is not a refiner) the station or land of a retail outlet and has use of tanks, pumps, signs, etc. An open dealer typically has a supply agreement with a refiner or a distributor and purchases products based on either rack or dealer tank wagon prices.	*Energy*
Company-operated automotive outlet	One of three types of company automotive (retail) outlets. This type of outlet is operated by salaried or commissioned personnel paid by the reporting company.	*Energy*
Company-operated outlet	See Company-operated retail outlet.	*Energy*
Company-operated retail outlet	Any retail outlet (i.e., service station) which sells motor vehicle fuels and is under the direct control of a firm that sets the retail product price and directly collects all or part of the retail margin. The category includes retail outlets operated by (1) salaried employees of the firm and/or its subsidiaries and affiliates, (2) licensed or commissioned agents, and/or (3) personnel services contracted by the firm.	*Energy*
Comparability	When a transmission owner provides access to transmission services at rates, terms and conditions equal to those the owner incurs for its own use.	*Energy*
Comparative method, comparative analytical method	Used here to indicate the analytical method to which the test method (the one under study) is compared in the comparison of methods experiment. This term make no inference about the quality of the method. Other terms such as definitive method, reference method, designated comparative method, or field method can be used to make some inference about the quality of the comparative method.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Comparison	A term applied to calibration (*e.g.* of an accelerometer) in which sensitivity is tested against a standard. See also absolute calibration.	*Reliability Engineering*
Comparison graph, comparison plot	Used here to refer to the display of paired test results in which the test method values are plotted on the y-axis versus the comparison method values on the x axis.	*Quality*
Comparison group	Any group to which the index group is compared. Usually synonymous with control group.	*Analysis*
Comparison of methods experiment	A method validation experiment in which a series of patient samples are analyzed both by the test method (the one under study) and a comparison method (an established method). The purpose is to assess whether a systematic difference (i.e., bias or inaccuracy) exists between the two methods. The differences in results by the two methods are interpreted as analytical errors between the methods.	*Quality*
Compatibility	The ability of two or more substances to mix with each other to form a homogeneous composition of useful properties.	*Material Process*
Compensated Connector	A connector made of thermocouple alloys used to connect thermocouple probes and wires.	*Electrical*
Compensating Alloys	Alloys used to connect thermocouples to instrumentation. These alloys are selected to have similar thermal electric properties as the thermocouple alloys (however, only over a very limited temperature range).	*Electrical*
Compensating Loop	Lead wire resistance compensation for RTD elements where an extra length of wire is run from the instrument to the RTD and back to the instrument, with no connection to the RTD.	*Electrical*
Compensation	An addition of specific materials or devices to counteract a known error.	*General Engineering*
Compensation	Procedure of providing a supplemental device, circuit, or special materials to counteract known sources of error (e.g., ambient temperature change). Compensation is often related to temperature compensation only.	*Electrical Engineering*
Compensator control	A displacement control for variable pumps and motors which alters displacement in response to pressure changes in the system as related to its adjusted pressure setting.	*Mechanical, Process, and Operations*
Competent rock	Rock which, because of its physical and geological characteristics, is capable of sustaining openings without any structural support except pillars and walls left during mining (stalls, light props, and roof bolts are not considered structural support).	*Mining*
Competing failure modes	A model whereby items that fail due to more than one failure mode can be represented as a series reliability system with each block representing a failure mode. The failure modes are considered to be "competing" amongst each other to see which one will cause the item to fail.	*Reliability Engineering*
Competition	The struggle between trees and other plant life to obtain sunlight, nutrients, water, and growing space.	*Forestry*
Competitive Bidding	This is a procedure that utilities use to select suppliers of new electric capacity and energy. Under competitive bidding, an electric utility solicits bids from prospective power generators to meet current or future power demands. When offers from independent power producers began exceeding utility needs in the mid-1908's, utilities and state regulators began using competitive bidding systems to select more fairly among numerous supply alternatives.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Competitive Franchise	A process whereby a municipality (or group of municipalities) issues a franchise to supply electricity in the community to the winner of a competitive bid process. Such franchises can be for bundled electricity and transmission/distribution, or there can be separate franchises for the supply of electricity services and the transmission and distribution function. Franchises can be, but typically are not, exclusive licenses.	*Energy*
Competitive Quotation	Responsive price quotations from a minimum of three qualified suppliers submitted in accordance with a solicitation from the Director of Business Services or Associate Director of Procurement Services.	*Procurement*
Competitive transition charge	A non-bypassable charge levied on each customer of the distribution utility, including those who are served under contracts with nonutility suppliers, for recovery of the utility's stranded costs that develop because of competition.	*Energy*
Competitive Transition Charge (CTC)	A "nonbypassable" charge generally placed on distribution services to recover utility costs incurred as a result of restructuring (stranded costs - usually associated with generation facilities and services) and not recoverable in other ways.	*Energy*
Compiler	A program that translates a high-level language, such as Basic, into machine language.	*General Engineering*
Complement	The angle that needs to be added to a given angle to give 90°.	*Math*
Complementary Output	Having both N.O. and N.C. outputs are available for use. A circuit that provides sink or source capability with a single input. Output that can be both light operated and dark operated. (Also known as 4: wire DC controls.)	*Electrical Engineering*
Complementary	Two angles that add up to 90°.	*Math*
Complete	Engineering noting a determinate truss having the least number of members required to connect the panel points so as to form a system of triangles.	*Civil Engineering*
Complete data	A data set consisting only of failure times.	*Reliability Engineering*
Complete solid solution	Binary phase diagram representing two components that can dissolve in all proportions.	*Material Process*
Completed well	A well that has had the necessary work done to enable production.	*Petroleum Engineering*
Completing wells	in additional zones	*Petroleum Drilling*
Completion	A generic term used to describe the events and equipment necessary to bring a wellbore into production once drilling operations have been concluded, including but not limited to the assembly of downhole tubulars and equipment required to enable safe and efficient production from an oil or gas well. Completion quality can significantly affect production from shale reservoirs.	*Petroleum Drilling*
Completion	The installation of permanent wellhead equipment for the production of oil and natural gas.	*Petroleum Drilling*
Completion (oil/gas production)	The term refers to the installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a "well" (classified as an oil well or gas well) and the definition of a "completion" are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a "well" is not synonymous with a "completion." (See Well.)	*Energy*

Term	Definition	*Industry*
Completion date (oil/gas production)	The date on which the installation of permanent equipment has been completed as reported to the appropriate regulatory agency. The date of completion of a dry hole is the date of abandonment as reported to the appropriate agency. The date of completion of a service well is the date on which the well is equipped to perform the service for which it was intended.	*Energy*
Completion	The installation of permanent wellhead equipment for the production of oil and gas.	*Petroleum Drilling*
Complex directional well	basically same as 3D directional well.	*Petroleum Drilling*
Complex failure	Material fracture involving the sequential operation of two distinct mechanism.	*Material Process*
Complex Function	Any mathematically defined relationship given by the following expression: y(x) = a(x) + ib(x), Where: x = the real variable, a(x) = the real part of y(x), b(x) = the imaginary part of y(x), Complex functions are usually expressed in terms of both their amplitude and phase.	*General*
Complex Grease	A lubricating grease thickened by a complex soap consisting of a normal soap and a complexing agent.	*Lubrication*
Complex instruction set computer	Computer hardware designed to support complex instructions, as opposed to RISC (reduced instruction set computer) architecture.	*Electrical Engineering*
Complex ore	An ore containing a number of minerals of economic value. The term often implies that there are metallurgical difficulties in liberating and separating the valuable metals.	*Mining*
Complex Soap	A soap crystal or fiber formed usually by co-crystallization of two or more compounds. Complex soaps can be a normal soap (such as metallic stearate or oleate), or incorporate a complexing agent which causes a change in grease characteristics usually recognized by an increase in dropping point.	*Lubrication*
Complex system	A block diagram that cannot be reduced to series and/or parallel systems.	*Reliability Engineering*
Complex Wave	The resultant form of a number of sinusoidal waves that are summed together forming a periodic wave. Such waves may be analyzed in the frequency domain to readily determine their component parts.	*General Engineering*
Complexation	a reaction in which a metal ion and one or more anionic ligands chemically bond. Complexes often prevent the precipitation of metals.	*Chemical*
Compliance coal	A coal or a blend of coals that meets sulfur dioxide emission standards for air quality without the need for flue gas desulfurization.	*Energy*
Compliance coal	a coal, or a blend of coal, that meets sulfur dioxide emission standards for air quality without the need for flue-gas desulfurization.	*Energy*
Compliance Steer	A steering effect caused by the deflection or compliance of bushings, joints, and other suspension components under loads and forces.	*Mechanical Engineering*
Compliance Test	Test used to show whether or not a characteristic or a property of an asset complies with state requirements.	*Maintenance*
Compliance.	The reciprocal of s*tiffness*, *i.e.* displacement divided by force.	*Reliability Engineering*
Component	A Subassembly Of An Asset, Usually Removable In One Piece And Interchangeable With Other, Standard Components (e.g., Truck Engine).	*Plant Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Component (of a vector)	Any vector can be expressed as a collection of vectors whose sum is equal to the original vector. Each vector in this collection is a component of the original vector. It is common to express a vector in terms of components which are parallel to the x and y axes.	*Engineering Physics*
Components	A single hydraulic unit.	*Mechanical, Process, and Operations*
Composite	A solid material made of two or more different substances, combined to produce a new substance whose properties are superior to the original components in a specific application.	*Chemical*
Composite	Material composed of a microscopic scale combination of individual materials from the categories of metals, ceramics, glasses, and polymers.	*Material Process*
Composite Coating	Mixture of two or more materials. Many thermal spray coatings could be considered as composites.	*Paint and Coatings*
Composite Headlamps	Usually manufactured with replaceable halogen bulbs and separate hard acrylic or glass lenses. This type of lamp provides superior illumination compared to the long-conventional sealed beam unit.	*Mechanical Engineering*
Composite Powder	A powder in which each particle consists of two or more distinct materials joined together.(Not the same as a powder blend.)	*Paint and Coatings*
Composite sample	a recombined coalbed sample produced by averaging together thickness-weighted coal analyses from partial samples of the coalbed, such as from one or more bench samples, from one or more mine exposures or outcrops where the entire bed could not be accessed in one sample, or from multiple drill cores that were required to retrieve all local sections of a coal seam.	*Energy*
Composites	complex materials, such as wood or fiberglass, in which two or more distinct, structurally complementary substances, especially metals, ceramics, glasses, and polymers, combine to produce structural or functional properties not present in any individual component. A material formed by blending two materials in distinct phases causing a new material with different properties than either parent	*Physics*
Composition	A process variable. Represents the amount of one material in a solution, or gas.	*Process Control Engineering*
Composition	A mix of two or more materials not chemically united.	*Material Process*
Compound	A compound (or molecule) is a combination of two or more different chemical elements (atoms) held together by chemical bonds.	*Chemical*
Compound	(1) chemically speaking, a distinct substance formed by the combination of two or more elements in definite proportions by weight and possessing physical and chemical properties different from those of the combining elements. (2) in petroleum processing, generally connotes fatty oils and similar materials foreign to petroleum added to lubricants to impart special properties.	*Lubrication*
Compound semiconductor	Semi conductor consisting of a chemical compound, rather than a single element.	*Material Process*
Compounded oil	A petroleum oil to which has been added other chemical substances.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Compounding	The addition of fatty oils and similar materials to lubricants to impart special properties. Lubricating oils to which such materials have been added are known as compounded oils.	*Lubrication*
Compounding (see Blending)	The mixing or otherwise combining lubricant components with other components for the purpose of securing chemical and/or physical properties not usually obtainable by blending of fluid lubricant components alone.	*Lubrication*
Compounds	Substances formed from the chemical bonding of two or more atoms.	*Chemical Engineering*
Compregnated wood	Proprietary term rapidly becoming generic to describe wood veneer material impregnated with resin and bonded under high pressure.	*Material Process*
Comprehensive National Energy Policy Act	Federal legislation in 1992 that opened the U.S. electric utility industry to increase competition at the wholesale level and left authority for retail competition to the states.	*Energy*
Compressed natural gas (CNG)	Natural gas compressed to a pressure at or above 200-248 bar (i.e., 2900-3600 pounds per square inch) and stored in high-pressure containers. It is used as a fuel for natural gas-powered vehicles.	*Energy*
Compressibility	The change in volume of a unit volume of a fluid when it is subjected to a unit change in pressure.	*Mechanical, Process, and Operations*
Compressible Fluid	A gaseous fluid such as steam, which has a significant change in volume and density as pressure increases.	*Industrial Engineering*
Compression molding	Processing technique for thermosetting species with distance. Process of molding in which a measured quantity of plastic is placed in the cavity of a heated open mold and the mold is closed under pressure to consolidate the compound and form to the shape of the mold. Thermosetting compounds are then hardened by further heat under pressure, thermoplastic compounds by chilling the mold.	*Material Process*
Compression Ratio	The volume of the combustion chamber and cylinder when the piston is at the bottom of its stroke, divided by the volume of the combustion chamber and cylinder when the piston is at the top of its stroke. Higher compression ratios tend to increase engine efficiency.	*Mechanical Engineering*
Compression train	In the oil and gas industry, the compression train is the entire line of equipment that contributes to process of compressing gas - It includes valves, scrubbers, coolers and recycling loops.	*Electrical*
Compressive strength	The crushing load at failure of piece divided by the number of square inches of resisting surface.	*Material Process*
Compressor	A machine used to boost natural gas pressure to move it through pipelines or other facilities.	*Petroleum Engineering*
Compressor	A device which converts mechanical force and motion into pneumatic fluid power.	*Lubrication*
Compressor (Air Conditioning)	The mechanism is an air conditioner that pumps vaporized refrigerant out of the evaporator, compresses it to a high pressure, and then delivers it to the condenser.	*Mechanical Engineering*
Compressor station	Any combination of facilities that supply the energy to move gas in transmission or distribution lines or into storage by increasing the pressure.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Computer-Aided Design (CAD)	Computer-based systems for product design that may incorporate analytical and "what if" capabilities to optimize product designs. Many CAD systems capture geometric and other product characteristics for engineering-data-management systems, production and cost analysis, and performance analysis. In many cases, CAD-generated data is used to generate tooling instructions for computer-numerical-control (CNC) systems.	*Maintenance*
Computer-aided manufacturing (CAM)	Computerized systems in which manufacturing instructions are downloaded to automated equipment or to operator workstations.	*Quality*
Computer-aided process planning (CAPP)	Software-based systems that aid manufacturing engineers in creating a process plan to manufacture a product whose geometric, electronic, and other characteristics have been captured in a CAD database. CAPP systems address such manufacturing criteria as target costs, target lead times, anticipated production volumes, availability of equipment, production routings, opportunity for material substitution, and test requirements.	*Quality*
Computer-integrated manufacturing (CIM)	A variety of approaches in which computer systems communicate or interoperate over a local-area network. Typically, CIM systems link management functions with engineering, manufacturing, and support operations. In the factory, CIM systems may control the sequencing of production operations, control operation of automated equipment and conveyor systems, transmit manufacturing instructions, capture data at various stages of the manufacturing or assembly process, facilitate tracking and analysis of test results and operating parameters, or a combination of these.	*Quality*
Computerized Maintenance Management System	A Computerized System To Assist With The Effective And Efficient Management Of Maintenance Activities Through The Application Of Computer Technology. It Generally Includes Elements Such As A Computerized Work Order System, As Well As Facilities For Scheduling Routine Maintenance Tasks, And Recording And Storing Standard Jobs, Bills Of Materials And Applications Parts Lists, As Well As Numerous Other Features.	*Plant Engineering*
Computerized Maintenance Management System (CMMS)	Hardware and software system used to track work orders, equipment histories, and preventive/predictive maintenance schedules; usually integrated with support systems such as inventory control, purchasing, accounting, and manufacturing; computerized system, to track, monitor, measure and control maintenance and warehouse activities. (McKenna T & Oliverson R, "Glossary of Reliability and Maintenance Terms", Gulf Publishing Company, ISBN 0-88415-360-6 (1997))	*Maintenance*
Computerized maintenance management systems (CMMS)	Software-based systems that analyze operating conditions of production equipment - vibration, oil analysis, heat, etc. - and equipment-failure data, and apply that data to the scheduling of maintenance and repair inventory orders and routine maintenance functions. A CMMS prevents unscheduled machine downtime and optimizes a plant's ability to process product at optimum volumes and quality levels.	*Quality*
Computerized process simulation	Use of computer simulation to facilitate sequencing of production operations, analysis of production flows, and layout of manufacturing facilities.	*Quality*
Computerized SPC	See "statistical process control."	*Quality*
CONCAWE	Conservation of Clean Air and Water-Europe	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Concealed Coalfield	the part of the coalfield where the coal measures are covered by younger rock strata such as the Permo-Trias. –See also 'Exposed Coalfield'.	*Mining*
Concealment of allocation	The process used to ensure that the person deciding to enter a participant into a randomized controlled trial does not know the comparison group into which that individual will be allocated. This is distinct from blinding, and is aimed at preventing selection bias. Some attempts at concealing allocation are more prone to manipulation than others, and the method of allocation concealment is used as an assessment of the quality of a trial. See also: Bias prevention Also called: Allocation concealment, Randomisation blinding	*Quality Engineering*
Concentrate	The retained sample after filtration is complete.	*Pollution Engineering*
Concentrate	The undiluted form of a dilutable cleaning product.	*Chemistry*
Concentrate	A fine, powdery product of the milling process containing a high percentage of valuable metal.	*Mining*
Concentrated force	A force considered to act along a single line in space. Concentrated forces are useful mathematical idealizations, but cannot be found in the real world, where all forces are either body forces acting over a volume or surface forces acting over an area.	*Engineering Physics*
Concentrated load	An external force which a concentrated force.	*Engineering Physics*
Concentrating solar power or solar thermal power system	A solar energy conversion system characterized by the optical concentration of solar rays through an arrangement of mirrors to generate a high temperature working fluid. Also see Solar trough, Solar power tower, or Solar dish. Concentrating solar power (but not Solar thermal power) may also refer to a system that focuses solar rays on a photovoltaic cell to increase conversion efficiency.	*Energy*
Concentration	The process of increasing solids per unit volume of solution, usually by evaporation of the liquid; also, the amount of material dissolved in a unit volume of solution. This occurs in a cooling tower due to evaporation that cools the water. It is normally expressed directly as ppm or indirectly as mhos conductivity.	*Chemical Engineering*
Concentration gradient	Change in concentration of a given diffusion species with distance.	*Material Process*
Concentration Polarization	The accumulation of retained solute on the surface of the membrane. This is caused by a combination of factors including transmembrane pressure, viscosity, solute concentration and crossflow velocity.	*Pollution Engineering*
Concentrator	A reflective or refractive device that focuses incident insolation onto an area smaller than the reflective or refractive surface, resulting in increased insolation at the point of focus.	*Energy*
Concentrator	A milling plant that produces a concentrate of the valuable minerals or metals. Further treatment is required to recover the pure metal.	*Mining*
Concentric	Having the same centers.	*Mechanical*
Concentric lay Conductor	Conductor constructed with a central core surrounded by one or more layers of helically laid wires. Several types are as follows:	*Electrical*
Concentric Reducer	A pipe fitting that reduces from a larger to a smaller size on each end. Available in threaded (swage nipple) or butt weld preparations, with the ends concentric along a common axis.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Concentric Stranding	A method of stranding, wherein a single conductor is formed from a central wire surrounded by one or more layers of helically laid wires. Each layer is applied with an opposite direction of lay. The first layer has six wires, and each additional layer has six more wires than does the previous one. Thus the second layer has twelve wires, the third layer has eighteen wires, etc.	*Electrical*
Concentricity	In a wire or cable, the measurement of the location of the center of the conductor with respect to the geometric center of the circular insulation.	*Electrical*
Concession	The operating right to explore for and develop petroleum fields in consideration for a share of production in kind (equity oil).	*Energy*
Concessionary purchases	The quantity of crude oil exported during a reporting period, which was acquired from the producing government under terms that arise from the firm's participation in a concession. It includes preferential crude where the reporting firm's access to such crude is derived from a former concessionary relationship.	*Energy*
Conclusion	Summing up of points and statements	*Management Discussion*
Concrete	A mixture of water, cement, and sand or gravel.	*Petroleum Engineering*
Concrete	a material of construction not usually used under severe corrosive conditions other than as a substrate. Composite of aggregate, cement, water, and, in some cases, admixtures.	*Material Process*
Concrete cooling tower	Cooling tower in which the structure is made of concrete.	*Facility Engineering*
Concurrent engineering	A cross-functional, team-based approach in which the product and the manufacturing process are designed and configured within the same time frame, rather than sequentially. Ease and cost of manufacturability, as well as customer needs, quality issues, and product-life-cycle costs are taken into account earlier in the development cycle. Fully configured concurrent-engineering teams include representation from marketing, design engineering, manufacturing engineering, and purchasing, as well as supplier - and even customer companies.	*Quality*
Condensate	the liquid that separates from a vapor during condensation.	*Chemical*
Condensate	Hydrocarbons which are in the gaseous state under reservoir conditions and which become liquid when temperature or pressure is reduced. A mixture of pentanes and higher hydrocarbons.	*Petroleum Drilling*
Condensate (lease condensate)	Light liquid hydrocarbons recovered from lease separators or field facilities at associated and non-associated natural gas wells. Mostly pentanes and heavier hydrocarbons. Normally enters the crude oil stream after production.	*Energy*
Condensate Recovery	Condensate recovery is the process of capturing, drainage, and resupply of the surplus condensate water that occurs after heat exchange. Typically the recovered condensate gets pumped into the feed water tank. Retaining this water not only save costs on input water, but minimizes loss due to cooling of the heat exchange device. See also Reticulation and Flashing	*Industrial*
Condensate	Liquid hydrocarbons recovered by surface separators from natural gas. It is also referred to as natural gasoline and distillate.	*Petroleum Drilling*
Condensate	Hydrocarbons which are in the gaseous state under reservoir conditions and which become liquid when temperature or pressure is reduced. A mixture of pentanes and higher hydrocarbons.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Condensation	The process of changing from a gaseous to a liquid, usually due to a drop in temperature or pressure.	*Industrial*
Condensation resins	Resins formed by chemical reaction in which water is separated. Examples urea resins.	*Material Process*
Condenser	A condenser is a water-cooled shell and tube heat exchanger installed on the exhaust steam system, which converts steam from its gaseous form to a liquid state at a pressure below atmospheric pressure.	*Industrial*
Condenser (Air Conditioning)	Air conditioning component used to remove heat from the inside of a vehicle.	*Mechanical Engineering*
Condenser cooling water	A source of water external to a boiler's feed system is passed through the steam leaving the turbine in order to cool and condense the steam. This reduces the steam's exit pressure and recaptures its heat, which is then used to preheat fluid entering the boiler, thereby increasing the plant's thermodynamic efficiency.	*Energy*
Condenser reflux	Condensate that is returned to the original unit to assist in giving increased conversion or recovery.	*Petroleum Engineering*
Condensing boiler	A condensing boiler operates with infinitely variable temperature; unlike conventional boilers, it additionally utilizes the condensation heat contained in the flue gas. The condensing boiler cools the flue gases so that the water vapor contained in the flue gas condenses. The heat liberated in the process is used for heating purposes. Gas-fired condensing boilers achieve standard efficiency values of up to 110 %.	*Thermal Management*
Condition Based Depreciation (CBD)	A form of depreciation that directly assesses and measures the run down in service potential of an asset. It is based on an auditable and cost-justified asset renewal plan. The cost of replacing lost service potential over the next 10-30 years (the exact period depends on the agency and the nature of the assets involved) is expressed as an annuity over the period. That annuity is the depreciation estimate. CBD is re-estimated on a continuous basis, based on a rolling future period. It is only used for assets which are essentially renewable rather than replaceable, i.e. infrastructure assets.	*Reliability Engineering*
Condition Based Maintenance	An Equipment Maintenance Strategy Based On Measuring The Condition Of Equipment In Order To Assess Whether It Will Fail During Some Future Period, And Then Taking Appropriate Action To Avoid The Consequences Of That Failure. The Condition Of Equipment Could Be Monitored Using Condition Monitoring, Statistical Process Control Techniques, By Monitoring Equipment Performance, Or Through The Use Of The Human Senses. The Terms Condition Based Maintenance, On-Condition Maintenance And Predictive Maintenance Can Be Used Interchangeably.	*Plant Engineering*
Condition Monitoring	The Use Of Specialist Equipment To Measure The Condition Of Equipment. Vibration Analysis, Tribology And Thermography Are All Examples Of Condition Monitoring Techniques.	*Plant Engineering*
Condition Monitoring	A component of predictive maintenance, it is the process of examining parameters of machinery health in order to identify the onset of developing failure. A deviation from a reference value triggers specified actions. Maintenance is scheduled or actions taken to avoid the consequence of failure before it occurs.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Condition monitoring (CM)	The measurement, recording and analysis of machinery parameters (such as acceleration) to determine machinery health. Today's condition is compared with earlier condition, as when a machine was new. Also called machinery health monitoring, MHM.	*Reliability Engineering*
Conditional Probability of Failure	The Probability That An Item Will Fail During A Particular Age Interval, Given That It Survives To Enter That Age.	*Management*
Conditionally effective rates	An electric rate schedule that has been put into effect by the FERC subject to refund pending final disposition or refiling.	*Energy*
Conditioning	The process of subjecting a material to a stipulated influence or combination of influences for a stipulated period of time. The influences may be relative humidity, temperature, light, pressure, air, composition or other factors used jointly or separately. Average room conditions: 40% relative humidity at 77 °F (25°C). Dry room conditions: 15% relative humidity at 85 °F (26.94°C). Most room conditions: 75% relative humidity at 77 °F (25°C).	*Material Process*
Conductance	The measure of the ability of a solution to carry an electrical current. (See Equivalent Conductance)	*Electrical*
Conduction	The conveying of electrical energy or heat through or by means of a conductor.	*Electrical*
Conduction band	A range of electron energies in a solid associated with an unoccupied energy level in an isolated atom. An electron in a semiconductor becomes a charge carrier upon promotion to this band.	*Material Process*
Conduction electron	A negative charge carrier in a semiconductor.	*Material Process*
Conductivity	The ability of water to conduct electricity. When measured with a standard apparatus, it is called specific conductivity and is a function of the total ionic dissolved solids. As a rule of thumb, TDS = 2/3 specific conductance measured as micromhos.	*Chemical Engineering*
Conductivity	a coefficient of proportionality describing the rate at which a fluid (e.g., water or gas) can move through a permeable medium. Conductivity is a function of both the intrinsic permeability of the porous medium and the kinematic viscosity of the fluid which flows through it.	*Chemical*
Conductor	An object or substance which conducts or leads electric current. A wire, cable, busbar, rod, or tube can serve as a path for electricity to flow. The most common conductor is an electrical wire.	*Energy*
Conductor	A wire or combination of wires not insulated from one another, suitable for carrying an electric current.	*Electrical*
Conductor Core	The center strand or member about which one of more layers of wires or members are laid helically to form a concentric:lay or rope:lay conductor.	*Electrical*
Conduits	Conduits—see Congates.	*Mining*
Cone crusher	A machine which crushes ore between a gyrating cone or crushing head and an inverted, truncated cone known as a bowl.	*Mining*
Cone of Depression	Cone of depression (or influence) is the drawdown of the water table or potentiometric surface (the level to which water will rise in a tightly cased, or sealed, well) that has the shape of an inverted cone and develops around a well when it	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	is pumped (water is being withdrawn). It defines the area of influence of a well. The drawdown cones of two wells close together may overlap so, if the wells are pumped simultaneously, they will compete with each other for available groundwater (well interference).	
Cone of depression	the area around a discharging well where the hydraulic head (potentiometric surface) in the aquifer has been lowered by pumping. In an unconfined aquifer, the cone of depression is a cone-shaped depression in the water table where the media has actually been dewatered.	*Chemical*
Cone Proof Load	This is an axial applied force applied to a nut when it is seated on a cone shaped washer which has an included angle of 120 degrees. Failure in this test is usually due to the nut splitting. The intention of the test is to introduce a nut dilation operation which will assess the potential detrimental effects of surface discontinuities. This type of test is sometimes applied to nuts which are intended for high temperature service.	*Maintenance*
Coneloc Nut	The Coneloc is an all metal prevailing torque type self-locking nut. The locking action is achieved by localized precision deformation of the thread in the cone section on top of the nut. When the nut is tightened onto the bolt, the thread is gripped on the flanks providing the locking action. Coneloc is a trade mark of NUTS BOLTS Limited	*Maintenance*
Conference abstracts/ proceedings	Short summaries of presentations at conferences, which may be published as proceedings. Abstracts from Cochrane Colloquia are available on the Collaboration web site.	*Quality Engineering*
Conference of the parties (COP)	The collection of nations that have ratified the Framework Convention on Climate Change(FCCC). The primary role of the COP is to keep implementation of the FCCC under review and make the decisions necessary for its effective implementation. Also see Framework Convention on Climate Change (FCCC).	*Energy*
Confidence bounds	A measure of the precision of a statistical estimate. This is represented by a range of values that the particular estimate should fall between a specified percentage of the time. For example, if we perform ten different reliability tests for our items and analyze the results, we will obtain slightly different parameters for the distribution each time, and thus slightly different reliability results. However, by employing confidence bounds, we obtain a range within which these reliability values are likely to occur a certain percentage of the time. This helps us gauge the utility of the data and the accuracy of the resulting estimates.	*Reliability Engineering*
Confidence interval	A measure of the uncertainty around the main finding of a statistical analysis. Estimates of unknown quantities, such as the odds ratio comparing an experimental intervention with a control, are usually presented as a point estimate and a 95% confidence interval. This means that if someone were to keep repeating a study in other samples from the same population, 95% of the confidence intervals from those studies would contain the true value of the unknown quantity. Alternatives to 95%, such as 90% and 99% confidence intervals, are sometimes used. Wider intervals indicate lower precision; narrow intervals, greater precision. Also called: CI, Logo, Cochrane	*Quality Engineering*

Term	Definition	*Industry*
Confidence interval (CI)	The range of numerical values in which we can be confident (to a computed probability, such as 90 or 95%) that the population value being estimated will be found. Confidence intervals indicate the strength of evidence; where confidence intervals are wide, they indicate less precise estimates of effect. See Precision	*Analysis*
Confidence interval, confidence range	The interval or range of values which will contain the population parameter with a specified probability.	*Quality*
Confidence Level	The range (with a specified value of uncertainty, usually expressed in percent) within which the true value of a measured quantity exists.	*General Engineering*
Configuration maps	Geographic information containing transmission line, substation, and terminal information. It shows the normal operating voltages and includes information about other operational and political boundaries.	*Energy*
confined aquifer	a fully saturated aquifer overlain by a confining layer. The potentiometric surface (hydraulic head) of the water in a confined aquifer is at an elevation that is equal to or higher than the base of the overlying confining layer. Discharging wells in a confined aquifer lower the potentiometric surface which forms a cone of depression, but the saturated media is not dewatered.	*Chemical*
Confined Aquifer (Artesian Aquifer)	An aquifer in which the water is confined by both an upper and lower impermeable layer, isolating the groundwater from the atmosphere at the point of discharge. Water is held under pressure and the water level in wells stands above the top of the aquifer. Confined groundwater is generally subject to pressure greater than atmospheric.	*Petroleum Engineering*
Confining layer	a geologic formation characterized by low permeability that inhibits the flow of water (see also aquitard).	*Chemical*
Confining Unit	A geological layer either of unconsolidated material, usually clay or hardpan, or bedrock, usually shale, through which virtually no water moves.	*Petroleum Engineering*
Confirmation	A form delivered by a broker to the client, setting forth the details of stock sales or purchases for the client.	*Mining*
Conflict Of Interest	A situation in which an individual has a personal interest (or responsibility as well as a job responsibility) and a clear possibly exists that there may be a conflict between the two. The individual's actions may be influenced by his/her personal interest to the detriment of performing the professional responsibility effectively (e.g., buying from a supplier owned by a family member).	*Procurement*
Conflict of interest declaration (or Competing interests declaration)	A statement by a contributor to a report or review of personal, financial, or other interests that could have influenced someone.	*Quality Engineering*
Conformity	Fulfillment by a product, process, or service of the specified requirements.	*Maintenance*
Conformity Error	For thermocouples and RTD's, the difference between the actual reading and the temperature shown in published tables for a specific voltage input.	*Electrical*
Conformity Error	For thermocouples and RTDs, the difference between the actual reading and the temperature shown in published tables for a specific voltage input.	*Electronic Process*
Confounded comparison	A comparison between two treatment groups that will give a biased estimate of the effect of treatment due to the study design. For a comparison to be unconfounded, the two treatment groups must be treated identically apart from the	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	randomized treatment. For instance, to estimate the effect of heparin in acute stroke, a trial of heparin alone versus placebo would provide an unconfounded comparison. However, a trial of heparin alone versus aspirin alone provides a confounded comparison of the effect of heparin. See also: Unconfounded comparison	
Confounder	A factor that is associated with both an intervention (or exposure) and the outcome of interest. For example, if people in the experimental group of a controlled trial are younger than those in the control group, it will be difficult to decide whether a lower risk of death in one group is due to the intervention or the difference in ages. Age is then said to be a confounder, or a confounding variable. Randomisation is used to minimize imbalances in confounding variables between experimental and control groups. Confounding is a major concern in non-randomized studies. See also: Adjusted analysis	*Quality Engineering*
Confounding variable, Confounder	A variable that can cause or prevent the outcome of interest, is not an intermediate variable, and is associated with the factor under investigation. A confounding variable may be due chance or bias. Unless it is possible to adjust for confounding variables, their effects cannot be distinguished from those of factor(s) being studied.	*Analysis*
Congates	near horizontal drivages driven cross-measures through a thick coal seam (S. Staffs.). Also called 'conduits'.	*Mining*
Congestion	A condition that occurs when insufficient transfer capacity is available to implement all of the preferred schedules for electricity transmission simultaneously.	*Energy*
Conglomerate	A sedimentary rock consisting of rounded, water-worn pebbles or boulders cemented into a solid mass.	*Mining*
Congruent melting	The case in which the liquid formed upon melting has the same composition as the solid from which it was formed.	*Material Process*
Conical Drum	Grooved hoisting drum of tapering diameter.	*Wire Rope & Cable*
CONK	The fruiting structure of a wood-rotting fungus, especially of one of the Polyporaceae.	*Forestry*
Connected load	The sum of the continuous ratings or the capacities for a system, part of a system, or a customer's electric power consuming apparatus.	*Energy*
Connecting Rod	The metal rod that connects a piston to the crankshaft.	*Mechanical Engineering*
Connection	The physical connection (e.g., transmission lines, transformers, switch gear, etc.) between two electric systems permitting the transfer of electric energy in one or both directions.	*Energy*
Connection Head	An enclosure attached to the end of a thermocouple which can be cast iron, aluminum or plastic within which the electrical connections are made.	*Electrical*
Connection	The connection between two electrical systems that permit the transfer of energy.	*Energy*
Connector	Pressure containing/pressure controlling wellhead equipment that allows a mechanical joint that can provide a pressure seal can be Flange, Hub, Union connection.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Consequence of Failure (CoF)	This is the usually negative effects that arise/occur as a result of failure of a system, equipment or product	*Reliability Engineering*
Conservation	A foregoing or reduction of electric usage for the purpose of saving natural energy resources and limiting peak demand in order to ultimately reduce the capacity requirements for plant and equipment.	*Energy*
Conservation	The protection, improvement, and wise use of natural resources for present and future generations.	*Forestry*
Conservation easement	A legally enforceable transfer of usage rights for the purposes of conserving land and prohibiting real estate development.	*Forestry*
Conservation feature	A feature in the building designed to reduce the usage of energy.	*Energy*
Conservation program	A program in which a utility company furnishes home weatherization services free or at reduced cost or provides free or low cost devices for saving energy, such as energy efficient light bulbs, flow restrictors, weather stripping, and water heater insulation.	*Energy*
Conservation Reserve Program	A federal program under which producers voluntarily retire environmentally sensitive crop land for 10 to 15 years in return for annual rental payments through which the government shares the cost of establishing approved conservation practices. Payments are through the USDA Commodity Credit Corporation.	*Agriculture*
Conservative	(a) in the case of a contaminant, one that does not degrade and the movement of which is not retarded; is unreactive. (b) in the case of an assumption, one that leads to a worst-case scenario, one that is most protective of human health and the environment.	*Chemical*
Consideration	compensation paid to hewers for unforeseen difficulties met with in their work.	*Mining*
Consistency	The degree to which a semisolid material such as grease resists deformation. (See ASTM designation D 217.) Sometimes used qualitatively to denote viscosity of liquids.	*Lubrication*
Consistency (Hardness)	The resistance of a lubricating grease to deformation under load. Usually indicated by ASTM Cone Penetration, ASTM D-217 (IP 50) or ASTM D-1403.	*Lubrication*
Console	A console is the term for the actual screen and keyboard used in the work stations.	*Control Engineering*
Consolidated entity	Consolidated entity: See Firm.	*Energy*
Consolidated Formations	Formations of relatively large, unmoving pieces of material, such as particles of limestone and fractured rock.	*Petroleum Engineering*
Consolidated Metropolitan Statistical Area (CMSA)	An area that meets the requirements of a metropolitan statistical area, has a population of one million or more, and consists of two or more component parts that are recognized as primary metropolitan statistical areas.	*Energy*
Constant percentage filter	A bandpass filter whose bandwidth relates (1/3 x, 1/10 x, etc.) to center frequency. May be synthesized digitally.	*Reliability Engineering*
Constant Speed Drive	A drive with no provisions for variable speed or a drive with the characteristics necessary to maintain a constant speed.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Constant systematic error, CE	An error that is always the same direction and magnitude even as the concentration of analyte changes.	*Quality*
Constantan	A copper–nickel alloy used as the negative lead in Type E, Type J, and Type T thermocouples.	*Electrical*
Constant-bandwidth filter	A bandpass filter whose bandwidth is independent of center frequency. Filters simulated digitally by an FFT process are constant bandwidth.	*Reliability Engineering*
Constituent	an essential part or component of a system or group (e.g., an ingredient of a chemical mixture). For instance, benzene is one constituent of gasoline.	*Chemical*
Construction	An energy-consuming subsector of the industrial sector that consists of all facilities and equipment used to perform land preparation and construct, renovate, alter, install, maintain, or repair major infrastructure or individual systems therein. Infrastructure includes buildings; industrial plants; and other major structures, such as tanks, towers, monuments, roadways, tunnels, bridges, dams, pipelines, and transmission lines.	*Energy*
Construction costs (of the electric power industry)	All direct and indirect costs incurred in acquiring and constructing electric utility plant and equipment and proportionate shares of common utility plants. Included are the cost of land and improvements, nuclear fuel and spare parts, allowance for funds used during construction, and general overheads capitalized, less the cost of acquiring plant and equipment previously operated in utility service.	*Energy*
Construction expenditures (of the electric power industry)	The gross expenditures for construction costs (including the cost of replacing worn out plants), and electric construction costs, and land held for future use.	*Energy*
Construction pipeline (of a nuclear reactor)	The various stages involved in the acquisition of a nuclear reactor by a utility. The events that define these stages are the ordering of a reactor, the licensing process, and the physical construction of the nuclear generating unit. A reactor is said to be "in the pipeline" when the reactor is ordered and "out of the pipeline" when it completes low power testing and begins operation toward full power.	*Energy*
Construction work in progress (CWIP)	The balance shown on a utility's balance sheet for construction work not yet completed butin process. This balance line item may or may not be included in the rate base.	*Energy*
Constructional Stretch	The stretch that occurs when the rope is loaded-it is due to the helically laid wires and strands creating a constricting action that compresses the core and generally brings all of the rope's elements into close contact.	*Wire Rope & Cable*
Constructive Case	Arguments that build (construct) your case	*Management Discussion*
Constructive surplus or deficit	The amounts representing the exchange of services, supplies, etc., between the utility department and the municipality and its other departments without charge or at a reduced charge. Charges to this account include utility and other services, supplies, etc., furnished by the utility department to the municipality or its other departments without charge, or the amount of the reduction, if furnished at a reduced charge. Credits to the account consist of services, supplies, office space, etc., furnished by the municipality to the utility department without charge on the amount of the reduction, if furnished at a reduced charge.	*Energy*

Term	Definition	*Industry*
Consumable Insert	Preplaced filler metal which is completely fused into the root of the joint and becomes part of the weld.	*Maintenance and Repair*
Consumer (energy)	Any individually metered dwelling, building, establishment, or location using natural gas, synthetic natural gas, and/or mixtures of natural and supplemental gas for feedstock or as fuel for any purpose other than in oil or gas lease operations; natural gas treating or processing plants; or pipeline, distribution, or storage compressors.	*Energy*
Consumer (healthcare consumer)	Someone who uses, is affected by, or who is entitled to use a health related service.	*Quality Engineering*
Consumer advocate or representative	Consumer who is actively involved with other consumers and able to represent the perspectives and concerns of that broader group of people. Consumer representatives work in Cochrane entities to ensure that consumers' views are taken account of when review questions are being decided and results presented.	*Quality Engineering*
Consumer charge	An amount charged periodically to a consumer for such utility costs as billing and meter reading, without regard to demand or energy consumption.	*Energy*
Consumer Education	Efforts to provide consumers with skills and knowledge to use their resources wisely in the marketplace.	*Energy*
Consumer Price Index (CPI)	These prices are collected in 85 urban areas selected to represent all urban consumers about 80 percent of the total U.S. population. The service stations are selected initially and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full, mini, and self service).	*Energy*
Consumption	Consumption: See Energy consumption.	*Energy*
Consumption (Fuel)	Amount of fuel used for gross generation.	*Energy*
Consumption per square foot	The aggregate ratio of total consumption for a particular set of buildings to the total floorspace of those buildings.	*Energy*
Contact	The place or surface where two different kinds of rocks meet. Applies to sedimentary rocks, as the contact between a limestone and a sandstone, for example, and to metamorphic rocks; and it is especially applicable between igneous intrusions and their walls.	*Mining*
Contact Bounce	The intermittent opening of relay contacts during closure.	*Reliability Engineering*
Contact Diameter	The smallest diameter on a gear tooth with which the mating gear makes contact.	*Mechanical Engineering*
Contact Discharge	An ESD test method where the ESD generator makes direct contact with the device under test (DUT).	*Electrical Engineering*
Contact metamorphism	Metamorphism of country rocks adjacent to an intrusion, caused by heat from the intrusion.	*Mining*
Contact Patch	The part of the tire in contact with the road surface.	*Mechanical Engineering*
Contact Ratio	The ratio of the arc of action to the circular pitch. It is sometimes thought of as the average number of teeth in contact. For involute gears, the contact ration is obtained most directly as the ration of the length of action to the base pitch.	*Mechanical Engineering*
Contact Stress	The maximum compressive stress within the contact area between mating gear tooth profiles. It is also called Hertz stress.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Contact Vein	A vein along the contact plane of, or between, two dissimilar rock masses.	*Mining*
Contact	A geological term used to describe the line or plane along which two different rock formations meet.	*Mining*
containerization	Shipping method in which standardized containers are packed in the field, sealed and transported by truck and/or train to ships. They aren't opened until they reach their receiver.	*Agriculture*
Containment	the act, process, or means to keep within prescribed limits	*Materials Process*
Containment ponds (also called reserve pits)	Man-made ponds intended to capture waste from power plants, industrial complexes, and drilling sites. Challenges in using this conventional method include managing the volume of waste product; installation and maintenance costs; contamination of land and/or water due to pit failure and associated cleanup costs; potential for pollution due to leaching.	*Petroleum Drilling*
Contaminant	An impurity not intended to be present in the product that may be introduced through such things as poor cleaning, processing, lack of appropriate environmental and personnel controls during the manufacturing process, handling and distribution.	*Chemical*
Contaminant (Dirt, ACFTD) capacity	The weight of a specified artificial contaminant that must be added to the influent to produce a given differential pressure across a filter at specified conditions. Used as an indication of relative service life.	*Oil Analysis*
Contaminant Capacity (Dirt, ACFTD)	The weight of a specified artificial contaminant which must be added to the influent to produce a given differential pressure across a filter at specified conditions. Used as an indication of relative service life.	*Lubrication*
Contaminant Failure	Any loss of performance due to the presence of contamination. Two basic types of contamination failure are: Perceptible -- gradual loss of efficiency or performance, and Catastrophic -- dramatic, unexpected failure.	*Oil Analysis*
Contaminant Failure	Any loss of performance due to the presence of contamination. Two basic types of contamination failure are: Perceptible	*Lubrication*
Contaminant Lock	A particle or fiber-induced jam caused by solid contaminants.	*Lubrication*
Contaminant, Artificial	Contaminant of known composition and particle size distribution which is introduced into fluid systems or fluid systems components for test purposes. The most commonly used artificial contaminants include standardized fine air cleaner test dust, standardized coarse air cleaner test dust, carbonyl iron, glass beads, cotton linters, red iron oxide and black iron oxide.	*Mechanical, Process, and Operations*
Contaminant, Built-in	Initial residual contamination in a component, fluid, or system. Typical built-in contaminants are burrs, chips, flash, dirt, dust, fiber, sand moisture, pipe dope, weld spatter, paints and solvents, flushing solutions, incompatible fluids and operating fluid impurities.	*Mechanical, Process, and Operations*
Contaminants	Any element or natural substance whose concentration locally exceeds the background concentration or any substance that does not occur naturally in the environment. These include point source contaminants, where potential contaminants are concentrated or stored in one spot (e.g. manure piles, fuel storage, etc.), and nonpoint, where potential contamination spreads out over a greater area (e.g. pesticide or fertilizer applied to fields).	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Contamination	The degradation of natural water quality.	*Petroleum Engineering*
Contamination	Entry of undesirable organisms into some material or object.	*Chemistry*
Contamination Control	A broad subject which applies to all types of material systems (including both biological and engineering). It is concerned with planning, organizing, managing, and implementing all activities required to determine, achieve and maintain a specified contamination level.	*Lubrication*
Contamination level	A quantitative term specifying the degree of contamination.	*Mechanical, Process, and Operations*
Contango	Market condition where the spot price is less than the three-month delivery price. This is considered the "normal" market state because the costs of storing and shipping metal are assumed to be higher in three months than at present (See Backwardation).	*Metallurgy*
Context	The conditions and circumstances that are relevant to the application of an intervention, for example the setting (in hospital, at home, in the air); the time (working day, holiday, night-time); type of practice (primary, secondary, tertiary care; private practice, insurance practice, charity); whether routine or emergency.	*Quality Engineering*
Contingency table	A table of frequencies or counts. In a two-way contingency table, sub-categories of one characteristic are indicated horizontally (in rows) and subcategories of another characteristic are indicated vertically (in columns). Tests of association between the characteristics can be readily applied. The simplest two-way contingency table is the 2x2 table, which is used in clinical trials to compare dichotomous outcomes, such as death, for an experimental intervention and control group.	*Quality Engineering*
Continuity equation	The mass rate of fluid flow into a fixed space is equal to the mass flow rate out. Hence, the mass flow rate of fluid past all cross sections of a conduit is equal.	*Mechanical, Process, and Operations*
Continuity generated	Contamination created by the operation of a fluid system or component. Generated contaminants are products of erosion, fretting, scouring, wear, corrosion, decomposition, oxidation, and fluid-breakdown. Air bubbles may also be generated under some operating conditions.	*Mechanical, Process, and Operations*
Continuous	Symbologies in which intercharacter gaps are treated as characters.	*Gears*
Continuous auger machine	used in mining coalbeds less than 3 feet thick. The auger has a cutting depth of about 5 feet and is 20 to 28 inches in diameter. Continuous auger mining usually uses a conveyor belt to haul the coal to the surface.	*Energy*
Continuous Chlorination	Involves the continuous addition of low levels of chlorine to a water supply.	*Petroleum Engineering*
Continuous cogs	a chock devised and used in N. Staffs., (Talk O' th' Hill Colliery), erected along the roadside forming a good air-tight packing. The timbers were side-lapped at their ends.	*Mining*
Continuous data	Data with a potentially infinite number of possible values within a given range. Height, weight and blood pressure are examples of continuous variables. See also: Categorical data	*Quality Engineering*
Continuous delivery energy sources	Those energy sources provided continuously to a building.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Continuous Duty	Energizing a solenoid valve at a constant level of power for its entire on-time.	*Mechanical*
Continuous fiber	Composite reinforcing fiber without a break within the dimensions of the matrix.	*Material Process*
Continuous Improvement	Reduction to maintenance input (hours, materials, management time) to provide a given level of maintenance service. Increases in the number of assets, or use of assets with fixed or decreasing inputs.	*Maintenance*
Continuous Improvement	A structured, measurement-driven process that continually reviews and improves performance. Actions are taken to eliminate waste and anything that is deemed to be non-value-added. It is a key tenet of lean manufacturing and the Toyota Production System.	*Reliability Engineering*
Continuous miner	A machine that constantly extracts coal while it loads it. This is to be distinguished from a conventional, or cyclic, unit which must stop the extraction process in order for loading to commence.	*Mining*
Continuous mining	A form of room pillar mining in which a continuous mining machine extracts and removes coal from the working face in one operation; no blasting is required.	*Energy*
Continuous mining machine	used during continuous mining, cuts or rips coal from the face and loads it into shuttle cars or conveyors in one operation. It eliminates the use of blasting devices and performs many functions of other equipment such as drills, cutting machines, and loaders. A continuous mining machine typically has a turning "drum" with sharp bits that cut and dig out the coal for 16 to 22 feet before mining stops so that the mined area can be supported with roof bolts. This machine can mine coal at the rate of 8 to 15 tons per minute.	*Energy*
Continuous reactor	Reactor that operates without interruption. This type of reactor is characterized by its steady-state operation.	*Chemical*
Continuous Replenishment Programs	Arrangement with supplier companies in which the supplier monitors the customer's inventory and automatically replaces used materials, eliminating the need for purchase orders and related paperwork.	*Maintenance*
Continuous Spectrum	A frequency spectrum that is characterized by non-periodic data. The spectrum is continuous in the frequency domain and is characterized by an infinite number of frequency components.	*Electrical*
Continuous Spectrum	A frequency spectrum that is characterized by non-periodic data The spectrum is continuous in the frequency domain and is characterized by an infinite number of frequency components.	*Electronic Process*
Continuous Stirred Tank Reactor	This may be thought of as a tank to which reactants flow in, and products flow out. In an ideal CSTR the contents of the reactor are uniformly distributed.	*Chemical*
continuous surface miner	used in some lignite mines, is equipped with crawlers, a rotating cutting head, and a conveyor. It travels over the bed, excavating a swath up to 13 feet wide and 2 feet deep.	*Energy*
Continuous Vulcanization	Simultaneous extrusion and vulcanization of wire coating materials. It is abbreviated CV.	*Electrical*
Continuously Variable Transmission (CVT)	Operates like an automatic transmission, with no need for a clutch pedal, but contains no gears. Instead, power is transmitted in a continuous flow from the engine to the drive wheels.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Continuous-Welded Pipe, Furnace	welded pipe produced in continuous lengths from coiled skelp and subsequently cut into individual lengths, having its longitudinal butt joint forge-welded by the mechanical pressure developed in rolling the hot-formed skelp through a set of round pass welding rolls.	*Maintenance and Repair*
Continuous Bend	Reeving of wire rope over sheaves and drums so that it bends in the same direction, as opposed to reverse bend.	*Wire Rope & Cable*
Contour	To build (a road, railroad track, etc.) in conformity with the contour of the land.	*Civil Engineering*
Contour mining	practiced when the coal is mined on hillsides. The mining follows the contour of the hillside until the overburden becomes uneconomical to remove. This method creates a shelf, or bench, on the hillside. Several variations of contour mining have been developed to control environmental problems. These methods include slope reduction (overburden is spread so that the angle of the slope on the hillside is reduced), head-of-hollow fill (overburden is placed in narrow V-shaped valleys to control erosion), and block-cut (overburden from current mining is backfilled into a previously mined cut).	*Energy*
Contour plot	This is a graphical representation of the possible solutions to the likelihood ratio equation. This is employed to determine confidence bounds as well as comparisons between two different data sets	*Reliability Engineering*
Contour	An imaginary line that connects all points on a surface having the same elevation.	*Mining*
Contraband	matches, lighters, cigarettes, etc. banned in the mine.	*Mining*
Contract	A written or oral agreement between two or more competent parties that defines a job or service to be performed and that is legally enforceable.	*Procurement*
Contract Acceptance Sheet	A Document That Is Completed By The Appropriate Contract Supervisor And Contractor To Indicate Job Completion And Acceptance. It Also Forms Part Of The Appraisal Of The Contractors Performance.	*Management*
Contract for Differences	A financial instrument used to hedge against the daily or hourly fluctuating prices that would be offered by an ISO or a "power exchange." A customer would be able to purchase a financial hedge from another party who may or may not have contractual rights to any specific generation.	*Energy*
Contract Management	Contract management is a niche within the procurement profession. It ranges from administrative aspects to the excitement and challenge of major contract negotiation. Both procurement and contract management demand competence in such areas as contract law, administration, accounting, psychology, management, and planning. (From National Contract Management Association, Vienna, Virginia, USA).	*Maintenance*
Contract Path	The most direct physical transmission tie between two interconnected entities. When utility systems interchange power, the transfer is presumed to take place across the "contract path", notwithstanding the electric fact that power flow in the network will distribute in accordance with network flow conditions. This term can also mean to arrange for power transfer between systems.	*Energy*
Contract Price	Price marketed on a contract basis for one or more years.	*Energy*
Contract Production	Natural gas liquids accruing to a company because of its ownership of liquids extraction facilities that it uses to extract liquids from gas belonging to others, thereby earning a portion of the resultant liquids.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Contract Receipts	Purchases that cover at least one year.	*Energy*
Contract Reserves	Natural gas liquid reserves corresponding to the contract production defined above.	*Energy*
Contracted gas	Any gas for which Interstate Pipeline has a contract to purchase from any domestic or foreign source that cannot be identified to a specific field or group. This includes tailgate plant purchases, single meter point purchases, pipeline purchases, natural gas imports, SNG purchases, and LNG purchases.	*Energy*
Contracting Officer	The government contracting officer, often at an installation other than the one making the contract, who handles the business administration of the contract.	*Procurement*
Contraction	the shrinkage of steel due to cooling of the part after removal from the galvanizing kettle	*Materials Process*
Contrahelical	A term meaning the application of two or more layers of spirally twisted, served, or wrapped materials where each successive layer is wrapped in the opposite direction to the preceding layer.	*Electrical*
Contribution to net income	The FRS (Financial Reporting System survey) segment equivalent to net income. However, some consolidated items of revenue and expense are not allocated to the segments, and therefore they are not equivalent in a strict sense. The largest item not allocated to the segments is interest expense since this is regarded as a corporate level item for FRS purposes.	*Energy*
Control	Including the terms "controlling," "controlled by," and "under common control with," means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting shares, by contract, or otherwise.	*Energy*
Control Piping	All piping, valves, and fittings used to interconnect air, gas, or hydraulically operated control apparatus or instrument transmitters and receivers.	*Maintenance and Repair*
Control Action	The nature of the change of the output affected by the input of a controller or a controlling system.	*Process Control*
Control Action	Feedback Control action in which a measured variable is compared to its desired value to produce an actuating error signal which is acted upon in such a way as to reduce the magnitude of the error.	*Process Control*
Control Action, Adaptive Control	Control Action, Adaptive Control action whereby automatic means are used to change the type or influence (or both) of control parameters in such a way as to improve the performance of the control system.	*Process Control*
Control Action, Cascade Control	Control Action, Cascade Control action where the output of one controller is the setpoint for another controller.	*Process Control*
Control Action, Derivative (Rate)	Control action in which the controller output is proportional to the rate of change of the input.	*Electrical Engineering*
Control Action, Derivative (Rate) Control	Control Action, Derivative (Rate) Control action in which the output is proportional to the rate of change of the input.	*Process Control*
Control Action, Direct Digital Control	Control Action, Direct Digital Control action in which control is performed by a digital device, which establishes the signal to the final controlling element.	*Process Control*
Control Action, Integral (Reset)	Control action in which the controller output is proportional to the time integral of the error signal.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Control Action, Proportional	Control action in which the controller output has a linear relationship to the error signal. Controller - A device which receives a measurement of the process variable, compares that measurement with a set- point representing the desired control point, and adjusts its output based on the selected control algorithm to minimize the error between the measurement and the setpoint. If an increase in the measured process variable above the setpoint causes an increase in the magnitude of the controller output, the controller is said to be "direct acting." If a process variable increase above the setpoint causes a decrease in the magnitude of the controller output, the controller is "reverse	*Electrical Engineering*
Control Area	A power system or systems to which an automatic control is applied.	*Energy*
Control Arm	A suspension element that has one joint at one end and two joints at the other end, typically on the chassis side. Also known as a wishbone or an A-arm.	*Mechanical Engineering*
Control Base	The unit remote from sensor in which amplification and conditioning of the input signal takes place. Usually contains a power supply and an output device.	*Electrical Engineering*
Control Character	A character whose occurrence in a particular context starts, modifies or stops an operation that affects the recording, processing, transmission or interpretation of data.	*Electrical*
Control Character	A character whose occurrence in a particular context starts, modifies or stops an operation that effects the recording, processing, transmission or interpretation of data.	*Electronic Process*
Control chart	"A graphical method for evaluating whether a process is or is not in a 'state of statistical control.' The determinations are made through comparison of the values of some statistical measure(s) for an ordered series of samples, or subgroups, with control limits" [ASQ]. In healthcare laboratories, the Levey–Jennings chart is commonly used to plot the result observed for a stable control material versus time, usually the day or run number.	*Quality*
Control Enclosure	The type of construction of the housing or case which encloses a control component or assembly of components. The common types of enclosures are designated by NEMA.	*Equipment*
Control Engineering	Control engineering is the area of method and technique to automatically control industrial processes. A commonly used industry method is the PID (Proportional, Integrative and Differential) control algorithm, implemented in PLCs (Programmable Logic Controllers).	*Maintenance*
Control event rate	See Risk	*Quality Engineering*
Control group	1. [In a controlled trial:] The arm that acts as a comparator for one or more experimental interventions. 2. [In a case-control study:] The group without the disease or outcome of interest. See also: Aggregate data, Control Also called: Comparison group	*Quality Engineering*
Control Joints	grooves that are tooled or cut into the surface of wet concrete to make it crack in straight lines at planned locations, rather than cracking rather than cracking randomly.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Control limits	"Limits on a control chart which are used as criteria for signaling the need for action, or for judging whether a set of data does or does not indicate a 'state of control'" [ASQ]. Used here to refer to the defined limits or ranges of results expected due to the random error of the method, and beyond which some course of action should be taken. It is common in clinical laboratories to use Levey-Jennings control charts with limits set as either the mean plus or minus 2 standard deviations, or the mean plus or minus 3 standard deviations.	*Quality*
Control material, control product	A control solution that is available, often commercially, liquid or lyophilized, and packaged in aliquots that can be prepared and used individually.	*Quality*
Control measurements, Control observations	The analytical results obtained for control solutions or control materials (that are analyzed for purposes of quality control).	*Quality*
Control Mode	The output form or type of control action used by a temperature controller to control temperature, i.e., on/off, time proportioning, PID.	*Electrical*
Control parameters	numeric values that are internal to a controller, but directly affect the output of the controller. Control parameters must be "tuned", that is, determined by iterative experience, in conjunction with a subjective goal or a quantitative metric about system performance.	*Petroleum Drilling*
Control Point	The temperature at which a system is to be maintained.	*General Engineering*
Control procedure, QC procedure	The protocol and materials that are necessary for an analyst to assess whether the method is working properly and patient test results can be reported - that part of an analytical process that is concerned with testing the quality of the analytical results, in contrast to the measurement procedure, which produces the result. A control procedure can be described by the number of control measurements and the decision criteria (control rules) used for judging the acceptability of the analytical results.	*Quality*
Control program	[In communicable (infectious) diseases:] Programs aimed at reducing or eliminating the disease.	*Quality Engineering*
Control Room	the main communications centre for the colliery.	*Mining*
Control rule	A decision criterion for interpreting control data and making a judgment on the control status of an analytical run. Symbolized here by AL, where A is the abbreviation for a particular statistic or states the number of control measurements, and L is the control limit. An analytical run is rejected when the control measurements fulfill the stated conditions, i.e., when a certain statistic or number of control measurements exceeds the specified control limits.	*Quality*
Control System	A system in which deliberate guidance or manipulation is used to achieve a prescribed value of a variable. Note: It is subdivided into a controlling system and a controlled system.	*Process Control*
Control System, Multi-Element (Multi-Variable)	A control system utilizing input signals derived from two or more process variables of the purpose of jointly affecting the action of the control system.	*Process Control*
Control System, Non-Interacting	A multi-element control system designed to avoid disturbances to other controlled variables due to the process-input adjustments, which are made for the purpose of controlling a particular process variable.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Control total	The number of elements in the population or a subset of the population. The sample weights for the observed elements in a survey are adjusted so that they add up to the control total. The value of a control total is obtained from an outside source. The control totals are given by the number of households in one of the 12 cells by categorizing households by the four Census regions and by three categories of metropolitan status (Metropolitan Statistical Area central city, Metropolitan Statistical Area outside central city, and non Metropolitan Statistical Area). The control totals are obtained from the Current Population Survey.	*Energy*
Control Valve	Control valves are used to control flow, pressure, temperature, and liquid level by fully or partially opening or closing in response to signals received from controllers. The opening or closing of control valves is done by means of electrical, hydraulic or pneumatic systems. See also Actuator	*Industrial*
Control Valve Gain	The relationship between valve travel and the flow rate through the valve. It is described by means of a curve on a graph expressed as an installed or inherent characteristic.	*Industrial Engineering*
Control, Outside temperature-based control	The feed temperature of the heating medium is controlled in accordance with the outside temperature. The relationship between momentarily prevailing outside temperature and the feed temperature to be selected is reflected in the heating characteristic set on the controller.	*Thermal Management*
Control, Room-temperature-based control	The feed temperature of the heating medium is controlled in accordance with the existing and desired room temperature of a selected reference room All factors acting on the room, such as additional heat due to sunlight, are included when measuring the temperature of the room and taken into account accordingly when determining the feed temperature.	*Thermal Management*
CONTROL, SERVO	CONTROL, SERVO - A control actuated by a feedback system which compares the output with the reference signal and makes corrections the reduce the difference.	*Mechanical, Process, and Operations*
Controllable	a general term given to a system component for which the control thereof is direct. For example, consider driving an automobile with an automatic transmission. Gear selection, the gas pedal (accelerator), and the brake pedal are examples of controllables, while speed is an observable.	*Petroleum Drilling*
Controlled (clinical) trial (CCT)	See clinical trial. This is an indexing term used in MEDLINE and CENTRAL. Within CENTRAL it refers to trials using quasi-randomisation, or trials where double blinding was used but randomisation was not mentioned.	*Quality Engineering*
Controlled atmosphere, (CA)	Controlled atmosphere storage. This technology controls gases in the atmosphere of cold storage facilities in a way that greatly prolongs the life of fruit, such as apples.	*Agriculture*
Controlled before and after study	A non-randomized study design where a control population of similar characteristics and performance as the intervention group is identified. Data are collected before and after the intervention in both the control and intervention groups.	*Quality Engineering*
Controlled blasting	Blasting patterns and sequences designed to achieve a particular objective. Cast blasting, where the muck pile is cast in a particular direction, and deck blasting, where holes are loaded once but blasted in successive blasts days apart, are examples.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CONTROLLED BURN	CONTROLLED BURN — (See Prescribed Burn.)	*Forestry*
Controlled Cooling	A process of cooling from an elevated temperature in a predetermined manner to avoid hardening, cracking, or internal damage or to produce a desired metallurgical microstructure. This cooling usually follows the final hot-forming or postheating operation.	*Maintenance and Repair*
Controlled devitrification	Processing technique for glass ceramics in which a glass is transformed to a fine grained, crystalline ceramic.	*Material Process*
Controlled trial	A clinical trial that has a control group. Such trials are not necessarily randomized. See also: Aggregate data	*Quality Engineering*
Controller	A device which controls another machine in the process directly, usually being wired to it directly.	*Control Engineering*
Controller, Direct–Acting	A controller in which the absolute value of the output signal increases, as the absolute value of the input (measured variable) increases.	*Process Control*
Controller, Integral (Reset) (I)	A controller which produces integral control action only. Note: may also be referred to as controller, proportional speed floating.	*Process Control*
Controller, Multi-position	A controller having two or more discrete values of output.	*Process Control*
Controller, On-off	A multi-position controller having two discrete values of output, fully on, or fully off.	*Process Control*
Controller, Proportional (P)	A controller which produces proportional control action only.	*Process Control*
Controller, Proportional Plus Derivative (Rate), (PD)	A controller which produces proportional plus derivative (rate) control action.	*Process Control*
Controller, Proportional Plus Integral (Reset), (PI)	A controller which produces proportional plus integral (reset) control action.	*Process Control*
Controller, Proportional Plus Integral (Reset), Plus Derivative (Rate), (PID)	A controller which produces proportional plus integral (reset) plus derivative (rate) control action.	*Process Control*
Controller, Ration	A controller that maintains a predetermined ration between two or more variables.	*Process Control*
Controller, Reverse-Acting	A controller in which the absolute value of the output signal decreases, as the absolute value of the input (measured variable) increases.	*Process Control*
Controller, Sampling	A controller using intermittently observed values of a signal such as the setpoint signal, the actuating error signal, or the signal representing the controlled variable, to effect control action.	*Process Control*
Controller, Self-Operated (Regulator)	A controller in which all the energy to operate the final controlling element is derived from the controlled system, through the sensing element.	*Process Control*
Controller, Time Proportioning	A controller whose output consists of periodic pulses whose duration is varied to relate, in some prescribed manner, the time average of the output to the actuating error signal.	*Process Control*
Controller, Time Schedule	A controller in which the setpoint (or reference input signal) automatically adheres to a predetermined time schedule.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Controllers	The temperature band where heat is turned off upon rising temperature and turned on upon falling temperature expressed in degrees. The area where no heating (or cooling) takes place.	*Electrical*
Controlling System	1. Of a feedback control system, that portion which compares functions of a directly controlled variable and a setpoint; and adjusts a manipulated variable as a function of the difference. It includes the reference input elements; summing point; forward and final controlling elements; and feedback elements (including sensing element). 2. Of an automatic control system without feedback, that portion of the control system which manipulates the controlled system.	*Process Control*
Convection	1. The circulatory motion that occurs in a fluid at a nonuniform temperature owing to the variation of its density and the action of gravity. 2. The transfer of heat by this automatic circulation of fluid. Counts: The number of time intervals counted by the dual-slope A/D converter and displayed as the reading of the panel meter, before addition of the decimal point.	*Electrical*
Convection	1. The circulatory motion that occurs in a fluid at a non-uniform temperature owing to the variation of its density and the action of gravity. 2. The transfer of heat by this automatic circulation of fluid.	*Electronic Process*
Convection Heating	The transfer of heat through a fluid (liquid or gas) caused by molecular motion. See also Radiation Heating	*Industrial*
Convenience sample	A group of individuals being studied because they are conveniently accessible in some way. This could make them particularly unrepresentative, as they are not a random sample of the whole population. A convenience sample, for example, might be all the people at a certain hospital, or attending a particular support group. They could differ in important ways from the people who haven't been brought together in that way: they could be more or less sick, for example.	*Quality Engineering*
Conventional Agriculture	the modern form of industrialized agriculture which emphasizes maximum productivity and profitability, practiced on the majority of US farms. Conventional agriculture is characterized by mechanization, monocultures, and the use of synthetic fertilizers and pesticides. Conventional agriculture may also use genetically modified organisms. This form of industrialized agriculture has become "conventional" only within the last 60 years or so.	*Agriculture*
Conventional blendstock for oxygenate blending (CBOB)	Motor gasoline blending components intended for blending with oxygenates to produce finished conventional motor gasoline.	*Energy*
Conventional concentric conductor	Conductor constructed with a central core surrounded by one or more layers of helically laid wires. The direction of lay is reversed in successive layers and generally with an increase in length of lay for successive layers.	*Electrical*
Conventional gasoline	Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.	*Energy*
Conventional hydroelectric plant	A plant in which all of the power is produced from natural streamflow as regulated by available storage.	*Energy*
Conventional mill (uranium)	A facility engineered and built principally for processing of uraniferous ore materials mined from the earth and the recovery, by chemical treatment in the mill's circuits, of uranium and/or other valued coproduct components from the processed one.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Conventional mining	The oldest form of room pillar mining, which consists of a series of operations that involve cutting the coal bed, so it breaks easily when blasted with explosives or high pressure air, and then loading the broken coal.	*Energy*
Conventional natural gas	Natural gas consisting of a mixture of hydrocarbon compounds, primarily methane, and small quantities of various non-hydrocarbons.	*Petroleum Engineering*
Conventional oil and natural gas production	Crude oil and natural gas that is produced by a well drilled into a geologic formation in which the reservoir and fluid characteristics permit the oil and natural gas to readily flow to the wellbore.	*Energy*
Conventional treatment	Whatever the standard or usual treatment is for a particular condition at that time. Also called: Standard treatment	*Quality Engineering*
Conventionally fueled vehicle	A vehicle that runs on petroleum-based fuels such as motor gasoline or diesel fuel.	*Energy*
Convergent Beam	A variation of the diffuse scanning mode. A photoelectric control whose optical system is key to its operation. It simultaneously focuses and converges a very small, intense beam to a fixed-focal point in front of the control. The control is essentially blind a short distance before and beyond this focal point. Convergent beam scanning is used to detect the presence or absence of small objects while ignoring nearby background surfaces.	*Electrical Engineering*
Converging	A section of roller or wheel conveyor where two conveyors meet and merge into one conveyor.	*Manufacturing*
Conversion company	An organization that performs vehicle conversions on a commercial basis.	*Energy*
Conversion Cost	Direct labor cost plus manufacturing overhead cost.	*Procurement*
Conversion factor	A factor for converting data between one unit of measurement and another (such as between short tons and British thermal units, or between barrels and gallons). (See Appendices (heat rates, conversion factors, and more) for further information on conversion factors.) See Btu Conversion Factor and Thermal Conversion Factor.	*Energy*
Conversion of a service well to an oil or gas well in a different zone	Conversion of a service well to an oil or gas well in a different zone	*Petroleum Drilling*
Conversion of an oil or gas well to a service well in a different zone	Conversion of an oil or gas well to a service well in a different zone	*Petroleum Drilling*
Converted (alternative-fuel) vehicle	A vehicle originally designed to operate on gasoline/diesel that was modified or altered to run on an alternative fuel after its initial delivery to an end-user.	*Energy*
Converter	An electrical device, comprising a rectifier and inverter, used to alter the voltage and frequency of incoming alternating current in an electrical system. The term may also refer to inverters, rectifiers or frequency converters. (See also Converter station, Inverter, Rectifier, Frequency converter).	*Electrical*
Converter station	Special equipment is needed to convert electricity from alternating current (AC) to direct current (DC), or vice versa. High-voltage DC (HVDC) converter stations use power electronic devices called thyristors to make these conversions. (See also HVDC and HVDC Light.)	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Convertible Output	The output that can be wired either as Normally Open or Normally Closed, but not at the same time.	*Electrical Engineering*
Conveying Surface	Normal working surface of the conveyor.	*Manufacturing*
Conveyor	A horizontal, inclined, or vertical device for moving or transporting bulk materials, packages or objects in a path predetermined by the design of the device and having points of loading and discharge fixed, or selective; included are skip hoist	*Equipment*
Conveyor Belt	A belt used to carry materials and transmit the power required to move the load being conveyed.	*Equipment*
Conveyor track	the part of a longwall face occupied by the face conveyor.	*Mining*
Conveyor Width	(1) In unit handling, the dimension inside to inside of frame rails; (2) In belt conveyors for bulk materials, the width of the belt; (3) In vibrating conveyors, distance between side walls; (4) In slat conveyors, the length of the slat.	*Equipment*
Convoy	the brake formerly applied to one of the wheels of a coal.	*Mining*
Coolant	The mixture of water and anti-freeze that picks up heat from the engine and transfers it to the air passing through the radiator. This transfer of heat keeps the engine operating within its optimum temperature and preventing premature engine wear.	*Mechanical Engineering*
Cooler	A heat exchanger in which hot liquid hydrocarbon is passed through pipes immersed in cool water to lower its temperature.	*Petroleum Engineering*
Cooler	A heat exchanger which removes heat from a fluid. (See "Heat Exchanger.")	*Mechanical, Process, and Operations*
Cooling	Conditioning of room air for human comfort by a refrigeration unit (such as an air conditioner or heat pump) or by circulating chilled water through a central cooling or district cooling system. Use of fans or blowers by themselves, without chilled air or water, is not included in this definition of cooling.	*Energy*
Cooling fixture	Fixture used to maintain shape or dimensional accuracy of a molding or casting after it is removed from the mold, until it is cool enough to retain its shape.	*Material Process*
Cooling Bed	The leveler ensures uniformly flat material.	*Steel*
Cooling Degree Days (CDD)	A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree days are summed to create a cooling degree day measure for a specified reference period. Cooling degree days are used in energy analysis as an indicator of air conditioning energy requirements or use.	*Energy*
Cooling loss	The cooling loss is that portion of the thermal energy that the heating boiler loses into the ambient air in an uncontrolled manner. A warm	*Thermal Management*
Cooling pond	A natural or manmade body of water that is used for dissipating waste heat from power plants.	*Energy*
Cooling range	(See Range).	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cooling system	An equipment system that provides water to the condensers and includes water intakes and outlets; cooling towers; and ponds, pumps, and pipes.	*Energy*
Cooling water	Water circulated through a cooling system to remove heat from certain areas.	*Chemical Engineering*
Cooperative (Co-Op)	Rural electric cooperatives generate and/or purchase wholesale power, arrange for the transmission of that power, and then distribute the power to serve the demand of rural customers. Co-ops typically become involved in ancillary services such as energy conservation, load management and other demand-side management programs in order to serve their customers at the least cost. (All Co-ops do not necessarily generate electricity.)	*Energy*
Cooperative Electric Utility	A utility established to be owned by and operated for the benefit of those using its services.	*Energy*
Coordinating Editor (of a Cochrane Review Group)	This member of the CRG's editorial team has the primary responsibility for ensuring that the CRG is productive and efficient, and operates according to the principles of The Cochrane Collaboration.	*Quality Engineering*
Coordination number	Number of adjacent ions (or atoms) surrounding a reference ion (or atom).	*Material Process*
Coordination service	The sale, exchange, or transmission of electricity between two or more electric utilities that typically have sufficient generation and transmission capacity to supply their load requirements under normal conditions.	*Energy*
Coordination service pricing	The typical price components of a bulk power coordination sale are an energy charge, a capacity, or reservation charge, and an adder. The price for a particular sale may embody some or all of these components. The energy charge is made on a per-kilowatt basis and is intended to recover the seller's system incremental variable costs of making a sale. Because the nonfuel expenses are usually hard to quantify, and small relative to fuel expense, energy charges quoted are usually based on fuel cost. A capacity charge is set at a certain level per kilowatt and is normally paid whether or not energy is taken by the buyer. An adder is added to that energy charge to recover the hard quantify nonfuel variable costs. There are three types of adders percentage, fixed, and split savings. A percentage adder increases the energy charge by a certain percentage. A fixed adder adds a fixed amount per kilowatt hour to the energy charge. Split savings adders are used only in economy energy transactions. They split production costs savings between the seller and the buyer by adding one half of the savings to the energy cost.	*Energy*
COP	Code of Practice	*Petro-Chemical Abbreviations*
Copal	A natural resin of vegetable origin, occurring largely as fossilized material. Used in adhesives and finishes, especially varnishes.	*Material Process*
Coplanar Line	A line which is in the same plane as another line. Any two intersecting lines must lie in the same plane, and therefore be coplanar.	*Electrical Engineering*
Copolymer Resin	formed by simultaneous polymerization of two or more dissimilar substances. Has properties different from those of either polymer alone. Alloylike results of polymerization of an intimate solution of different types of monomers.	*Material Process*
Copolymerization	The polymerization of two or more substances in admixture. Also, used synonymously with inter polymerization, the polymerization of two or more substances together to yield a product which is not the same as a mixture of the respective separate polymers, as vinyl chloride acetate copolymer.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Copper alloy	Metal alloy composed of predominantly copper.	*Material Process*
Copper alloys	Metals made from a mixture of copper and another metal (Example brass = copper + zinc).	*Chemical Engineering*
Copper Cake	A by-product of electolytic zinc refining, usually containing a fair amount of cobalt.	*Metallurgy*
Copper Plating	The electrolytic deposition of copper to provide either a corrosion barrier (often as an undercoat for hard chrome plate) or for reclamation of worn parts.	*Paint and Coatings*
Copper strip corrosion	A qualitative measure of the tendency of a petroleum product to corrode pure copper.	*Oil Analysis*
Copper Strip Corrosion	The gradual eating away of copper surfaces as the result of oxidation or other chemical action. It is caused by acids or other corrosive agents.	*Lubrication*
Copper, No. 1 and No. 2	Generally, No. 1 copper consists of copper clippings, punchings and so on that are clean and unalloyed, whereas the lesser-priced No. 2 should have a minimum 94-percent copper content. These items are known as "candy" and "cliff" when traded internationally by wire. Comp solids refers to composition or red brass scrap, solids being one thing and borings/turnings another (the latter typically comes from machine shop production). It should be noted that ingot makers often have their own specs for these scrap items, so what one could be buying as a No. 1 could be downgraded to a No. 2 by another consumer. The trading community uses these specs based on the Institute of Scrap Recycling Industries, Washington, which publishes its definitions and is available from any member of ISRI.	*Metallurgy*
Cord	Fabric or steel wire strands forming plies and belts in tires.	*Mechanical Engineering*
Cord	Small, flexible insulated cable usually size l0AWG or smaller.	*Electrical*
Cord of Ore	128 cubic feet of broken ore; about seven tons in quartz rock.	*Mining*
Cord of wood	A cord of wood measures 4 feet by 4feet by 8 feet, or 128 cubic feet.	*Energy*
Cordillera	The continuous chain of mountain ranges on the western margin of North and South America.	*Mining*
Corduroy	Constructed of logs laid together transversely, as a road across swampy ground.	*Civil Engineering*
Core	The long cylinder of rock, about one inch or more in diameter, that is recovered by the diamond drill.	*Mining*
Core	Any portion of a cable over which some other cable component, such as a shield, jacket, sheath or armor, is applied.	*Electrical*
Core barrel	That part of a string of tools in diamond drilling in which the core specimen collects.	*Mining*
Core barrel	That part of a string of tools in a diamond drill hole in which the core specimen is collected.	*Mining*
Core competency	The processes, functions, and activities in a plant or company that are its "life blood" - typically those activities for which the enterprise derives the greatest return for its investments or those that intrinsically align the enterprise with its core market.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Core Damage	When a normally re-buildable component is damaged so badly that it cannot be repaired.	*Reliability Engineering*
Core pin	A pin for forming a hole or opening in a molded piece. Also, called core or core piece.	*Material Process*
Core sample	A cylinder sample generally 1-5" in diameter drilled out of an area to determine the geologic and chemical analysis of the overburden and coal.	*Mining*
Core Size	The core size is the measurement of the diameter of the cardboard tube that contains the labels.	*Gears*
Cored structure	Microstructure in which concentration gradients occur in individual grains.	*Material Process*
Core plugs	Coreplugs, -see Stemming.	*Mining*
Corf, Corfe, or Corve, (Dutch Korf)	a large wicker basket, usually made of hazel, used for transporting coal from the workings underground to the surface. The corf held about 4 to 7 cwt. of coal; or a shallow wooden box on runners like a sled used for hauling coal out of low workings. (Derbys.); or a measure of capacity for coal used throughout the British coalfields. The weight of the corf varied from area to area and over a period of time. Also called 'pit boxes'.	*Mining*
Coring	Taking rock samples from a well with a special tool referred to as a core barrel.	*Petroleum Drilling*
Coring Line	Wire rope used to operate the coring tool for taking core samples during the drilling of a well.	*Wire Rope & Cable*
Coring	Taking rock samples from a well by means of a special tool -- a "core barrel".	*Petroleum Drilling*
Coriolis Force	A result of centripetal force on a mass moving with a velocity radially outward in a rotating plane.	*General Engineering*
Corn Ears	the part of a corn plant containing the corn cob, husk, and kernels	*Agriculture*
Corn Husk	the leaf like layer on the outside of corn ears, also known as a "shuck"	*Agriculture*
Corner Frequency	For first order time constants, the "corner frequency" is the frequency where the amplitude ratio starts to turn and the phase lag equals 45 degrees. Also: corner frequency = 1/(time constant) radians/time	*Process Control*
Corner Joint	A joint between two members located approximately at right angles to each other in the form of an L.	*Maintenance and Repair*
Corner rackings	triangular beams of wood used at the corners of rectangular shafts.	*Mining*
Corner weights	This refers to the distribution of a car's weight among the four wheels. Management of corner weights is very important to handling. This weight is usually adjusted through raising and lowering each corner by rotating a threaded spring perch on each shock absorber or at some other point in the suspension linkage.	*NASCAR*
Cornering	As the car leans in a turn, the anti-roll bar resists this leaning by transferring more weight to the outside tire. It provides a means to achieve good handling from stiff roll resistance while maintaining a comfortable ride through soft springs.	*Mechanical Engineering*
Cornering Force	The force that turns a vehicle around a corner. The opposite of lateral or centrifugal force.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cornicles	The posterior dorsal erect or semi-erect tubules of aphids which secrete a waxy defensive liquid to protect the insect against enemies; short, blunt horns or rounded projections occurring on the abdomen.[1]	*Forestry*
Cornish Pump	A type of pump developed in Cornwall, England, and commonly used in deep mines of the nineteenth century to raise underground water.	*Mining*
Corona	A luminous discharge due to ionization of the gas surrounding a conductor around which exists a voltage gradient exceeding a certain critical value.	*Electrical*
Corona Resistance	The time that insulation will withstand a specified level field-intensified ionization that does not result in the immediate complete breakdown of the insulation. Also called voltage endurance.	*Electrical*
Corona Test	A test to determine the ability of a cable to withstand the formation of corona under an increasing applied voltage, and to extinguish corona when a corona-producing voltage is reduced.	*Electrical*
Correction (Balancing) Plane	A plane perpendicular to the shaft axis of a rotor in which correction for unbalance is made.	*General Engineering*
Corrective Factor	The mathematical factor that, when multiplied by the sensing distance of a given sensor, will adjust sensing distance for the different metals being used as targets.	*Electrical Engineering*
Corrective Maintenance	Any planned or unplanned maintenance activity required to correct a failure that has occurred or is in the process of occurring. This activity may consist of repair, restoration, or replacement of components.	*Maintenance*
Correl Percentage	The percentage of peaks in the used oil infrared spectrum which match those in the reference oil. A sudden decrease in this value usually means that the oil was mixed with a different type.	*Oil Analysis*
Correlation	1. See association. (Positive correlation is the same as positive association, and negative correlation is the same as negative association.) 2. [In statistics:] Linear association between two variables, measured by a correlation coefficient. A correlation coefficient can range from -1 for perfect negative correlation, to +1 for perfect positive correlation (with perfect meaning that all the points lie on a straight line). A correlation coefficient of 0 means that there is no linear relationship between the variables. See also: Association, Test of association	*Quality Engineering*
Correlation (statistical term)	In its most general sense, correlation denotes the interdependence between quantitative or qualitative data. It would include the association of dichotomized attributes and the contingency of multiple classified attributes. The concept is quite general and may be extended to more than two variates. The word is most frequently used in a somewhat narrower sense to denote the relationship between measurable variates or ranks.	*Energy*
Correlation coefficient, r	A statistic that estimates the degree of association between two variables, such as the measurement result by a test method and the measurement result by a comparison method. A value of 1.000 indicates perfect association, i.e., as one variable increases, the other increases proportionately. A value of 0.000 indicates no correlation, i.e., as one variable changes, the other may or may not change. A value of -1.000 indicates perfect negative correlation, i.e., as one variable increases, the other decreases proportionately. For data from a comparison of methods experiment, the correlation coefficient is often calculated along	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	with regression statistics to assess whether the range of concentrations is wide and, therefore, whether the estimates of the slope and intercept from ordinary regression analysis will be reliable.	
Correlative Rights Theory	The theory adopted by the courts in several states that all landowners whose tracts overlay a producing formation have correlative rights in the formation. This theory is termed the "qualified ownership" theory.	*Petroleum Drilling*
Corresponding Angles	These are in corresponding or matching positions relative to the transversal and a parallel line. They are equal if the lines are parallel. There are 4 pairs in the diagrams above.	*Math*
Corrity, cross-bedded.	Corrity, cross-bedded.	*Mining*
Corrode	Lose material to a surrounding solution in an electrochemical process.	*Material Process*
Corrosion	To be dissolved away, usually by oxidation or acidification. This usually refers to metal loss in cooling systems, often recognized by the local reaction of the dissolved metal with oxygen, carbon dioxide, acids or galvanic action. May result in general (widespread) or pitting loss of the metal.	*Chemical Engineering*
Corrosion	Process of gradual eating away by chemical action.	*Chemistry*
Corrosion (Moisture)	Corrosion (rust) is a chemical reaction on metal surfaces. When steel is in contact with moisture, such as water or acid, oxidation takes place, and subsequently, the formation of corrosion pits and flaking occur.	*Maintenance*
Corrosion coupon	A small piece of metal that is inserted into a circulating system that can be analyzed to find the corrosive nature of the system's water.	*Chemical Engineering*
Corrosion fatigue	The weakening of a pipe or similar piece of metal due to corrosion acting on it.	*Chemical Engineering*
Corrosion Fatigue	The process in which a metal fractures prematurely under conditions of simultaneous corrosion and repeated cyclic loading at lower stress levels or fewer cycles than would be required in the absence of the corrosive environment.	*Paint and Coatings*
Corrosion fatigue failure	Metal fracture due to the combined action of a cyclic stress and corrosive environment.	*Material Process*
Corrosion inhibitor	Chemical used in a system to prevent corrosion.	*Chemical Engineering*
Corrosion Potential	The potential of a corroding surface in an electrolyte relative to a reference electrode measured under open circuit conditions.	*Paint and Coatings*
Corrosion Resistant Alloy	Non ferrous alloys where the total sum of the specified amount one or more of the following alloy elements exceeds 50%: cobalt, chromium, titanium, molybdenum, Nickel often used in critical service applications for flanges, spools, valves etc.	*Petroleum Engineering*
Corrosion Resistant Material	Nonferrous or Ferrous alloys, more corrosion resistant than low alloy steels. Examples:- Stainless Steels, Duplex Steel, CRA's etc.	*Petroleum Engineering*
Corrosion Resistant Ring Grooves	(CRA) Ring Grooves can be lined (overlaid) with corrosion resistant material such as either CRA (Like 410SS) or an austenitic stainless steel.	*Petroleum Engineering*
Corrosion-Resisting Steel	Chrome-nickel steel alloys designed for increased resistance to corrosion.	*Wire Rope & Cable*
Corrosive medium	Aqueous corrosive media are electrolyte solutions, and hence by far the greatest proportion of damage arising through corrosion is due to electrochemical processes.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Corrosive Wear	Wear caused by chemical reaction.	*Lubrication*
Corrosive Wear	Wear in which chemical or electrochemical reaction with the environment is significant.	*Paint and Coatings*
Corrugated	Term used to describe the grooves of a SHEAVE or DRUM after these have been worn down to a point where they show an impression of a wire rope.	*Wire Rope & Cable*
Corundum	Compound crystal structure.	*Material Process*
Cost Avoidance	A purchasing action by means of which certain material/supplier increases are not incurred by the purchasing firm. Since it is not always possible to reduce existing costs, cost "avoidances" often are reported as savings when measuring or evaluating purchasing performance.	*Procurement*
Cost Behavior	The way in which a cost reacts or responds to changes in the level of business activity.	*Procurement*
Cost iron	Ferrous alloy with greater than 2 wt% carbon.	*Material Process*
Cost model for undiscovered resources	A computerized algorithm that uses the uranium endowment estimated for a given geological area and selected industry economic indexes to develop random variables that describe the undiscovered resources ultimately expected to be discovered in that area at chosen forward cost categories.	*Energy*
Cost Object	Anything for which cost data are desired. Examples of possible cost objects are products, product lines, customers, jobs, and organizational subunits such as departments or divisions of a company.	*Procurement*
Cost of capital	The rate of return a utility must offer to obtain additional funds. The cost of capital varies with the leverage ratio, the effective income tax rate, conditions in the bond and stock markets, growth rate of the utility, its dividend strategy, stability of net income, the amount of new capital required, and other factors dealing with business and financial risks. It is a composite of the cost for debt interest, preferred stock dividends, and common stockholders' earnings that provide the facilities used in supplying utility service.	*Energy*
Cost of debt	The interest rate paid on new increments of debt capital multiplied by 1 minus the tax rate.	*Energy*
Cost of Goods Manufactured	The manufacturing costs associated with the goods that were finished during the period.	*Procurement*
Cost of Goods Sold (COGS)	Total (annual) cost of material, labor, and utilities to produce the product.	*Maintenance*
Cost of preferred stock	The preferred stock dividends divided by the net price of the preferred stock.	*Energy*
Cost of quality	The sum of all costs associated with conformance and nonconformance. Cost of conformance includes prevention costs (employee training, tooling maintenance, planned preventive maintenance, suggestion awards) and appraisal costs (inspection, testing, gages and instrumentation, audit expenses). The cost of nonconformance includes internal costs (unscheduled maintenance, pre-shipment scrap and rework, workers' compensation) and external costs (warranty, customer complaint investigation, rework of returned goods, and product liability insurance.)	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cost of Quality	The costs that are generated as a result of producing defective material.	*Reliability Engineering*
Cost of retained earnings	The residual of an entity's earnings over expenditures, including taxes and dividends, that are reinvested in its business. The cost of these funds is always lower than the cost of new equity capital, due to taxes and transactions costs. Therefore, the cost of retained earnings is the yield that retained earnings accrue upon reinvestment.	*Energy*
Cost of service	A ratemaking concept used for the design and development of rate schedules to ensure that the filed rate schedules recover only the cost of providing the electric service at issue. This concept attempts to correlate the utility's costs and revenue with the service provided to each of the various customer classes.	*Energy*
Cost of Un-Reliability (CoUR)	This is the cost of lost opportunity. CoUR programs study plants as links in a chain for a reliability system, and the costs incurred when the plant, or a series of plants, fail to produce the desired result. The cost can be categorized in maintainability and reliability cost.	*Reliability Engineering*
Cost, insurance, freight (CIF)	A type of sale in which the buyer of the product agrees to pay a unit price that includes the f.o.b. value of the product at the point of origin plus all costs of insurance and transportation. This type of transaction differs from a "delivered" purchase in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Lading and Quality Report) rather than pay on the basis of the quantity and quality ascertained at the unloading port. It is similar to the terms of an f.o.b. sale except that the seller, as a service for which he is compensated, arranges for transportation and insurance.	*Energy*
Cost-based rates (electric)	A ratemaking concept used for the design and development of rate schedules to ensure that the filed rate schedules recover only the cost of providing the service. FERC definition	*Energy*
Cost-benefit analysis	An economic analysis that converts effects into the same monetary terms as costs and compares them. See also: Economic analysis (economic evaluation)	*Quality Engineering*
Cost-effectiveness analysis	An economic analysis that views effects in terms of overall health specific to the problem, and describes the costs for some additional health gain (e.g. cost per additional stroke prevented).See also: Economic analysis (economic evaluation)	*Quality Engineering*
Cost-of-service regulation	A traditional electric utility regulation under which a utility is allowed to set rates based on the cost of providing service to customers and the right to earn a limited profit.	*Energy*
Costs (imports of natural gas)	All expenses incurred by an importer up to the U.S. point of delivery for the reported quantity {of natural gas} imported.	*Energy*
Cost-share assistance	An assistance program offered by various state and federal agencies that pays a fixed rate or percentage of the total cost necessary to implement some forestry or agricultural practice.	*Forestry*
Cost-utility analysis	An economic analysis that expresses effects as overall health improvement and describes how much it costs for some additional utility gain (e.g. cost per additional quality-adjusted life-year). See also: Economic analysis (economic evaluation)	*Quality Engineering*
Cottered	a term applied to stone or coal when hard or tough, (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cotton	The fiber of plants of the genus Gossypium as a chemical raw material it is a source of cellulose derivatives including cellulose acetate, pyroxylin, cellulose ethers, and regenerated cellulose.	*Material Process*
Cotton flock	Minutely divided cotton fiber, used as filler.	*Material Process*
cotyledon	An embryo or seed leaf that usually serves as a food reserve.	*Agriculture*
COU	See Cochrane Operations Unit (COU)	*Quality Engineering*
Coulisse	Of or using runners or slides as a guiding mechanism; as in a "Coulisse" style gate valve.	*Mechanical*
Coulomb	A measurement of the quantity of electrical charge, usually expressed as pico coulomb (10-12 coulombs).	*Electronic Process*
Coulomb Sensitivity	Charge/unit acceleration, expressed in Pc/g (charge sensitivity).	*General Engineering*
Coulombic attraction	Tendency toward bonding between oppositely charged species.	*Material Process*
Coumarone-Indene	Coumarone-indene is mixed with other products to meet commercial applications. They are mostly used as extenders and plasticizers, as processing aids, and in asphalt floor tile.	*Material Engineering*
Counter Weight	A weight added to a body so as to reduce a calculated unbalance at a desired place.	*General Engineering*
Counterbalance Pressure Control Valve	A pressure control valve which maintains back pressure to prevent a load from falling.	*Mechanical, Process, and Operations*
Counterflow tower	One in which air, drawn in through the louvers (induced draft) or forced in (forced draft) at the base by the fan, flows upward through the fill material and interfaces counter currently with the falling hot water.	*Facility Engineering*
Counterfort	A buttress, esp. one for strengthening a basement wall against the pressure of earth. A cantilevered weight, as in a retaining wall, having the form of a pier built on the side of the material to be retained.	*Civil Engineering*
Countershaft	An intermediate or secondary shaft between the drive shaft of a conveyor and the source of power.	*Equipment*
Counting calibration factor	Ratio of the effective filtration area on the test pad membrane to the area counted, SAE-ARP-598.	*Mechanical, Process, and Operations*
Countries no longer members of OPEC include	Countries no longer members of OPEC include:	*Energy*
Country rock	Loosely used to describe the general mass of rock adjacent to an orebody. Also known as the host rock.	*Mining*
Counts	The number of time intervals counted by the dual-slope A/D converter and displayed as the reading of the panel meter, before addition of the decimal point.	*General Engineering*
County agent	A government specialist in agriculture or home economics. County agents work in the Cooperative Extension Service of USDA, with additional funding from states and counties. In recent years some states have adopted other nomenclature, such as county faculty.	*Agriculture*
Coup, an exchange of cavils, (N. East).	Coup, an exchange of cavils, (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Couple	A system of forces composed of two equal forces of opposite direction, offset by a distance. A couple is statically equivalent to a moment whose magnitude equals the magnitude of the force times the offset distance.	*Engineering Physics*
Coupler	a man or boy who coupled tubs together; the term also applied to the coupling device. Course, -see Strike.	*Mining*
Coupling	A coupling connects two pipes to each other. If the material and size of the pipe are not the same, the fitting may be called a 'reducing coupling' or reducer, or an adapter. A coupling is similar to a union. See also Pipe Fittings and Quick Couplings	*Industrial*
Coupling	A straight connector for fluid lines.	*Lubrication*
Coupling transformer	A coupling transformer is a device that permits two (usually) separate circuits to influence one another. Such a setup can be desirable for control purposes. It can also be used, for example, to inject high frequency signals into power lines for communications purposes.	*Electrical*
Coupling, quick disconnect	A coupling which can quickly join or separate lines.	*Oil Analysis*
Coursing or Pillar airing	a method of ventilation in gassy pits where the ventilation current is channeled or 'coursed' (or 'shethed' in the N. East) through the waste.	*Mining*
Covalent bond Primary	chemical bond involving at a relatively high temperature under constant load over a long time period.	*Material Process*
Covalent Bonding	sharing of electron pairs between two atoms	*Physics*
Cover	Any plant that intercepts rain drops before they reach the soil or that holds soil in place.	*Forestry*
Cover crop	A crop grown to protect soil from erosion or nutrient leaching, rather than for production of food or fiber.	*Agriculture*
Cover mold	Stationary half of an injection mold.	*Material Process*
Cover or Cover rock	the strata overlying a coal seam, or the earth and soft material from the surface down to the first layer of rock.	*Mining*
Cover	The overburden of any deposit.	*Mining*
Covered Electrode	A filler metal electrode, used in arc welding, consisting of a metal core wire with a relatively thick covering which provides protection for the molten metal from the atmosphere, improves the properties of the weld metal, and stabilizes the arc. Covered electrodes are extensively used in shop fabrication and field erection of piping of carbon, alloy, and stainless steels.	*Maintenance and Repair*
Cow	a safety device attached to the back tub of a 'run' on a steep inclined road. (N. East). - see Backstay, Devil and Monkey.	*Mining*
Cowl	a type of hudge for winding water from the sump to the surface. Often fitted with a valve that opened automatically for filling and emptying. (Som.).	*Mining*
Cox model	See Proportional hazards model	*Quality Engineering*
Coyote	The process of digging in river-borne gravels by tunneling until bedrock is hit. The tunnel is dug in hopes of finding a rich bedrock deposit deep in the gravel bar.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
CPAC	See Colloquium Policy Advisory Committee (CPAC)	*Quality Engineering*
CPC	Chinese Petroleum Corporation	*Petro-Chemical Abbreviations*
CPG	Through the Comprehensive Procurement Guideline (CPG), EPA designates items that must contain recycled content when purchased by federal, state, and local agencies, or by government contractors using appropriated federal funds. Under E.O. 13101 EPA is required to update the CPG every 2 years.	*Environmental Engineering*
CPI Consumer Price Index	CPI: Consumer Price Index	*Energy*
C-Pillar	The roof support between a vehicle's rearmost side window and its rear window. Also known as a C-Post. On a vehicle with four side pillars, the rearmost roof support may be called a D-pillar.	*Mechanical Engineering*
Cpk	A statistical calculation of process capability based on the relationship between process variability and design specifications. A good Cpk value indicates that the process is consistently under control, i.e., within specification limits-and is also centered on the target value. A Cpk value of 1.33 is typically considered a minimum acceptable process capability; as the Cpk value approaches 2.0, the process approaches Six Sigma capability (3.4 defective units per million). The ability to achieve high Cpk values is often related to how tight the specifications are set.	*Maintenance*
CPPI	Canadian Petroleum Products Institute	*Petro-Chemical Abbreviations*
CPS	Cycles per second; the rate or number of periodic events in one second, expressed in Hertz (Hz).	*General Engineering*
CPU	Central processing unit. The part of the computer that contains the circuits that control and perform the execution of computer instructions.	*General Engineering*
CQI	Continual Quality Improvement.	*Maintenance*
CR Competitive Retailer	CR: Competitive Retailer	*Energy*
Crab or Ground crab	a type of windlass used underground near the face. (Lancs.); or a type of capstan usually worked by horses and used for raising and lowering heavy weights such as pumps etc. in the shaft.	*Mining*
Crack	A fracture-type imperfection characterized by a sharp tip and high ratio of length and depth to opening displacement.	*Maintenance and Repair*
Cracket	a low wooden stool or seat used by the hewer when under-cutting the coal (N. East)—see also Cratch and Stool.	*Mining*
Cracking	The breaking of plastics materials that have been molded around inserts. Chemical process by which a complex compound is broken down into simpler ones.	*Material Process*
Cracking (concrete)	the breaking of concrete due to the expansive forces caused by the formation of iron-oxide corrosion products on unprotected reinforcement bars	*Materials Process*
Cracking pressure	The pressure at which a pressure actuated valve begins to pass fluid. CUSHION - A device sometimes built into the end of a cylinder which restricts outlet flow and thereby slows down the Piston.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cracking Pressure	The pressure at which a pressure operated valve begins to pass fluid.	*Lubrication*
CRADA	Cooperative Research and Development Agreement	*Petro-Chemical Abbreviations*
Cradle	a tool used for gathering a crop once it is finished growing	*Agriculture*
Cradling	the stone walling in a shaft.	*Mining*
Craftsperson	Alternative To Tradesperson. A Skilled Maintenance Worker Who Has Typically Been Formally Trained Through An Apprenticeship Program.	*Management*
Cramp	a device for bending tub rails to set the track around a curve on the haulage road. - see also Jim Crow and Rail bender.	*Mining*
Crampet	a bracket used in a pumping shaft to hold the pumps and pipes in place. (Derbys.).	*Mining*
Crane	used to hoist the corves of coal from the tram and swing them on to the rolley, the coals being put by the barrow-man from the working places to the crane, and drawn thence by horses to the shaft, (N. East).	*Mining*
Crane Barge	A large barge, capable of lifting heavy equipment onto offshore platforms. Also known as a derrick barge.	*Petroleum Drilling*
Crane barge	A large barge, capable of lifting heavy equipment onto offshore platforms. Also known as a "derrick barge".	*Petroleum Drilling*
Crane boards	a return airway connected directly with the furnace. (N. East).	*Mining*
Crane brae	a short incline in steep working. (Scot.).	*Mining*
Crane place	the place in the pit where baskets of coal are transferred from the inbye rollies, using cranes, to the railway wagons for onward transport to the shaft, (N. East).	*Mining*
Craneman or Crane-hoister	a boy managing the crane by which the corves are transferred from the tram to the rolleys and for 'chalking-on', i.e. keeping an account of the number transferred (N. East)—see Flatman.	*Mining*
Crank, small coals (S. Wales)	Crank, small coals. (S. Wales).	*Mining*
Crankcase	A case that encloses the crankshaft. In most engines, the oil pan and the lower portion of the cylinder block form the crankcase.	*Mechanical Engineering*
Crankcase Oil	Lubricant used in the crankcase of the internal combustion engine.	*Lubrication*
Crankshaft	A shaft with one or more cranks, or "throws," that are coupled by connecting rods to the engine's pistons. The combustion process creates reciprocating motion in the rods and pistons which in turn is converted to a rotating motion by the crankshaft.	*Mechanical Engineering*
Crapply, friable	Crapply, friable.	*Mining*
Crash packing	a technique which allows the roof to cave in under its own weight as the face advances, thus filling in the waste. Also known as 'cropping', 'drawing the wood' or 'total caving'.	*Mining*
Cratch or Cratcher	a small stool of varying design used by colliers when holing-out under the coal particularly when working inclined seams. (Lancs.). - see also Cracket and Stool.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Craw coal, Craws or Crow	a thin seam of inferior coal. (Scot.).	*Mining*
Craw picker	a person who picked stone from coal or shale at the pit top. (Scot.).	*Mining*
Crawler	The first instar motile nymphal stage of scale insects and mealybugs, which moves to a new feeding site before settling down to a sessile existence for the rest of its developmental life.[1]	*Forestry*
Crawley	a short chain conveyor connecting the face conveyor with belt road conveyor.	*Mining*
Crazing	Minute lines appearing in or near the surface of materials, such as ceramics and plastics usually resulting as a response to environment. Crazing cannot be felt by running a fingernail across it. If the fingernail catches, it is a crack, not crazing.	*Electrical*
CRC	Co-ordinating Research Council, Incorporated	*Petro-Chemical Abbreviations*
CRD	See Centre for Reviews and Dissemination (CRD)	*Quality Engineering*
CRDPF	continuously regenerating diesel particulate filter	*Petro-Chemical Abbreviations*
Crease	a wooden tramway on inclines down which iron shod sledges slide. (Som.).	*Mining*
Credit Memo	A document used to correct an overcharge, pay a rebate, or credit the value of goods returned.	*Procurement*
Creel	a wicker basket used by 'bearers' for carrying coal on their back with a head strap for steadying. (Scot.); or a large wicker basket used for winding coal up the shaft. (Scots.).	*Mining*
Creep	Creep is deformation with time when a part is subjected to constant stress. Metals creep can occur at elevated temperature however with gasket materials it can occur at normal ambient temperatures. Creep resistance is an important property of gasket materials. Gasket materials are designed to flow under stress to fill any irregularities in the flange surface. The amount of creep sustained tends to increase with temperature. . However once the tightening is completed it is important that no further flow occurs since such deformation will lead to a reduction in bolt extension and subsequently the stress acting on the gasket. If this stress is reduced to below a certain minimum, which depends upon the type and construction of the gasket and the operating temperature, a high rate of leakage can be anticipated to occur.	*Maintenance*
Creep	The dimensional change with time of a material under load. At room temperature, it is sometimes called cold flow.	*Electrical*
Creep or Plastic Flow of Metals	At sufficiently high temperatures, all metals flow under stress. The higher the temperature and stress, the greater the tendency to plastic flow for any given metal.	*Maintenance and Repair*
Creep and Thrust	The gradual lifting of the floor or the gradual caving of the roof and sides caused by the weight of the surrounding strata.	*Mining*
Creep curve	Characteristic plot of a strain versus time for a material undergoing creep deformation.	*Material Process*
Creep rupture failure	Material fracture following plastic deformation at a relatively high temperature, under constant load over a long time period.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Creepage	Electrical leakage on a solid dielectric surface.	*Electrical*
Creeper	a mechanical device, such as a powered chain drive, placed between the rails to assist tubs or mine cars, by engaging the axles of the mine cars, up short inclines or to advance mine cars at a loader or in the pit bottom.	*Mining*
Cresols	A series of three different (ortho-, meta-, para) hydroxyl derivatives of toluene obtained from coal tar or wood tar.	*Material Process*
Cresylic acid	A term used especially to denote a crude mixture of the three cresols.	*Material Process*
Cresyl-p-toluene sulfonate ($CH_3C_6H_4SO_2OC_6H_4CH_3$)	A common plasticizer, known also as Santicizer.	*Material Process*
Crevice	A narrow opening, resulting from a crack; a fissure.	*Mining*
Crevice Corrosion	Localized corrosion of a metal surface at, or immediately adjacent to, an area that is shielded from the full exposure to the environment because of close proximity between the metal and the surface of another material.	*Paint and Coatings*
Crevices corrosion	Crevices corrosion are also created by deposits of corrosion products on the surface, scratches in the paint film, etc. The environmental conditions in the crevice can change with time from those of the nearby clean surface.	*Material Process*
CRG	See Cochrane Review Group (CRG)	*Quality Engineering*
CRG module	See Module	*Quality Engineering*
Crib	A barrier projecting part of the way into a river and then upward, acting to reduce the flow of water and as a storage place for logs being floated downstream. A lining for a well or other shaft.	*Civil Engineering*
Cribbing	A timber or plank lining of a shaft; the confining of a wall-rock.	*Mining*
Cribs	segments of timber, iron or concrete, encircling a shaft to form a foundation for the walling or tubbing, also known as a 'curb'. They were supported at intervals, generally of about 3ft, by a few vertical props and were hung together by planks, termed 'stringing deals', which were nailed against them.	*Mining*
Crimp Termination	A wire termination that is applied by physical pressure of terminal to wire.	*Electrical*
Crinkling	Bending or twisting of foliage without breaking; wrinkling.	*Forestry*
Criteria for acceptability	CLIA's term for the decision criteria applied to assess the validity of an analytical run. Another name for QC procedure, with emphasis on definition of the decision criteria or control rules for interpreting control measurements.	*Quality*
Criteria pollutant	A pollutant determined to be hazardous to human health and regulated under EPA's National Ambient Air Quality Standards. The 1970 amendments to the Clean Air Act require EPA to describe the health and welfare impacts of a pollutant as the "criteria" for inclusion in the regulatory regime.	*Energy*
Critical appraisal	The process of assessing and interpreting evidence by systematically considering its validity, results, and relevance.	*Quality Engineering*
Critical current density	Current flow at which a material stops being superconducting.	*Material Process*
Critical Damping	Critical damping is the smallest amount of damping at which a given system is able to respond to a step function without overshoot.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	Industry
Critical Diameter	Diameter of the smallest bend for a given wire rope which permits the wires and strands to adjust themselves by relative movement while remaining in their normal position.	*Wire Rope & Cable*
Critical Flow	See the definition for choked flow.	*Industrial Engineering*
Critical frequency	A particular resonant frequency (see ***resonance***) at which damage or degradation in performance is likely.	*Reliability Engineering*
Critical machines	Machines (in a plant) that are vital to continued operation. Vibration should be monitored continuously.	*Reliability Engineering*
Critical magnetic field	Field above which a material stops being superconducting.	*Material Process*
Critical random error, REcrit	The size of random error that causes a 5% maximum defect rate for the analytical process. Calculated as (TEa- biasmeas)/1.65smeas, where TEa is the allowable total error, biasmeas is the inaccuracy, and smeas is the imprecision (standard deviation) of the measurement procedure.	*Quality*
Critical resolved shear stress	Stress operating on a slip system and great enough to produce slip by dislocation motion.	*Material Process*
Critical Speed	The rotational speed of the rotor or rotating element at which resonance occurs in the system. The shaft speed at which at least one of the "critical" or natural frequencies of a shaft is excited.	*General Engineering*
Critical speeds	Any rotating speed which results in high vibration amplitudes. Often these are speeds which correspond to system natural frequencies.	*Reliability Engineering*
Critical systematic error, Secrit	The size of the systematic error that needs to be detected to maintain a defined quality requirement. Calculated as [(TEa - biasmeas)/smeas] - 1.65, where TEa is the allowable total error, biasmeas is the inaccuracy, and smeas is the imprecision (standard deviation) of the measurement procedure.	*Quality*
Critical-error graph	A power function graph on which is imposed the critical-error that needs to be detected. Facilitates the estimation and comparison of the probability for error detection by different QC procedures.	*Quality*
Criticality	The Priority Rank Of A Failure Mode Based On Some Assessment Criteria.	*Plant Engineering*
Criticality Analysis	A method for identifying product or process criticality for the purpose of prioritizing activities like design and maintenance. It is a process of decomposing product or process into hierarchical components, followed by study of their failure modes and effects, and (where appropriate) their causes. Criticality is the combined measure of the failure mode probability and the severity of its effects.	*Reliability Engineering*
Criticality matrix	This is a matrix in which each element represents the number of failures of a certain severity within a certain probability interval of occurrence.	*Reliability Engineering*
Crop	where a seam of coal rises to and is exposed at the surface, short for 'outcrop'; or to leave a portion of coal at the bottom of a seam in working; also to set out, (N. East). – see also Basset.	*Mining*
Crop coal	Coal at the outcrop of the seam. It is usually considered of inferior quality due to partial oxidation, although this is not always the case.	*Mining*
Crop residue	Organic residue remaining after the harvesting and processing of a crop.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Crop tree	Tree selected for quality, species, size, timber potential, or wildlife value that is favored for growing to final harvest.	*Forestry*
Croppers	shots place around the sides of a sinking shaft after the 'sumping shots' have been fired.	*Mining*
Cropping	see crash packing; also a fine for not sending out a full tub.	*Mining*
Cross	A Fitting with four connections in the same plan with two of these connections forming an in-line run. Crosses can also be 5 Way and 6 Way.	*Petroleum Engineering*
Cross banding	Placing veneers in transverse order. Sometimes called face crossing.	*Material Process*
Cross Bracing	Rods and turnbuckles placed diagonally across roller bed or live roller type conveyors to aid in squaring frames, necessary for tracking purposes.	*Manufacturing*
Cross Cut	A level driven across the course of a vein.	*Mining*
Cross entry	An entry running at an angle with the main entry.	*Mining*
Cross Functional Teams	Teams of employees representing different functional disciplines and/or different process segments who tackle a specific problem or perform a specific task, frequently on an ad hoc basis.	*Maintenance*
Cross linking	Joining of adjacent, linear polymeric molecules by chemical bonding. For example, vulcanization of rubber.	*Material Process*
Cross Linking	The establishment of chemical bonds between polymer molecule chains. It may be accomplished by heat, vulcanization, irradiation or the addition of a suitable chemical agent.	*Electrical*
Cross pack	packs arranged across from one roadside pack to another or from one longitudinal pack to another to check the leakage of air through the waste.	*Mining*
Cross Pattern	The sequential torquing of the lug nuts in a pattern across from one another.	*Mechanical Engineering*
Cross Sectional Area	The area of the cut surface of an object cut at right angles to the length of the object.	*Electrical*
Cross Sectional Area of a Conductor	The sum of cross sectional areas of all the individual wires composing the conductor. It is generally expressed in circular mils.	*Electrical*
Cross street	A street crossing another street. A short street connecting main streets.	*Civil Engineering*
Cross struts	Framework that holds up the hyperbolic shell of a natural draft tower. The number of cross struts varies according to shell size.	*Facility Engineering*
Cross Ties	Structural members which maintain frame rail spacing on unit handling conveyors.	*Equipment*
Cross Contamination	The process of transferring bacteria from one person or an object to another person or object. Similar term to cross-infection.	*Chemistry*
Cross-axis sensitivity	**Cross-axis sensitivity**. See transverse sensitivity.	*Reliability Engineering*
Crossbar	The horizontal member of a roof timber set supported by props located either on roadways or at the face.	*Mining*
Crosscut	A horizontal opening driven across the course of a vein or structure, or in general across the strike of the rock formation; a connection from a shaft to an ore structure.	*Mining*

Term	Definition	*Industry*
Cross-cut or crut	a roadway connecting two other more important roads; or a double-handled saw; or a roadway driven through the strata from one seam to another where the seams are steeply inclined, also called a 'cross measures drivage.'	*Mining*
Crosscut	A horizontal opening driven from a shaft and (or near) right angles to the strike of a vein or other orebody.	*Mining*
Crossflow	Flow of solution adjacent or parallel to the surface of the membrane. This contrasts with direct flow seen in traditional filters, in which the liquid flows perpendicular to the surface of the filter. In crossflow, only a fraction of the crossflow solution passes through the membrane.	*Pollution Engineering*
Crossflow tower	One in which air, drawn or forced in through the air intakes by the fan, flows horizontally across the fill section and interfaces perpendicularly with the falling hot water.	*Facility Engineering*
Cross-functional teams	Teams of employees representing different functional disciplines and/or different process segments that tackle a specific problem or perform a specific task, frequently on an ad hoc basis.	*Quality*
Crossgate	a roadway driven at approximately 30-45º to the main gate roads, also known as a 'slant', used to eliminate the need to maintain long lengths of gate roads and to facilitate the removal of coal from the face and gates to the main haulage in longwall working. Can be driven in the goaf and is then known as a 'scour'.	*Mining*
Crossmember	One of several horizontal members in a vehicle frame which join the side members and add to overall strength and stability.	*Mechanical Engineering*
Crossover	A bridge or other structure for crossing over a river, highway, etc.	*Civil Engineering*
Cross-over Fitting	Any pipe fitting, or component, having two different end connection types such as, e.g. line pipe one end X 8 Round Tubing Threads other end, male or female, and various sizes and combinations of male or female connectors, in various connection types.	*Petroleum Engineering*
Crossover frequency	In sinusoidal vibration testing, the unique forcing frequency at which the required displacement yields the desired acceleration and *vice versa*.	*Reliability Engineering*
Cross-over trial	A type of clinical trial comparing two or more interventions in which the participants, upon completion of the course of one treatment, are switched to another. For example, for a comparison of treatments A and B, the participants are randomly allocated to receive them in either the order A, B or the order B, A. Particularly appropriate for study of treatment options for relatively stable health problems. The time during which the firs interventions is taken is known as the first period, with the second intervention being taken during the second period. See also: Carry over, Period effect	*Quality Engineering*
Cross-piece	Cross-piece, -see Collar, Bar and Crowntree.	*Mining*
Cross-Section Width	External sidewall-to-sidewall measurement of inflated tire, exclusive of ornamental ribs and lettering. Sometimes called section width.	*Mechanical Engineering*
Cross-sectional study	A study measuring the distribution of some characteristic(s) in a population at a particular point in time. Also called: Survey	*Quality Engineering*

Term	Definition	*Industry*
Cross-subsidization	This refers to the transfer of assets or services from the regulated portion of an electric utility to its unregulated affiliates to produce an unfair competitive advantage. Also, cross-subsidization can refer to one rate class (such as industrial customers) subsidizing the rates of another class (such as residential customers).	*Energy*
Cross-talk	Interference or noise in a sensor or channel, coming from another sensor or channel.	*Reliability Engineering*
Cross-training	Skill-development practices that require or encourage production workers and other employees to master multiple job skills, thus enhancing workforce flexibility.	*Quality*
Crosswalk	A lane marked off for pedestrians to use when crossing a street, as at an intersection.	*Civil Engineering*
Crow coal	a term sometimes used for anthracite due to its shiny black appearance.	*Mining*
Crow picker	Crow picker, -see Craw picker and Batt-picker.	*Mining*
Crowbar Circuit	A crowbar circuit is a power supply protection circuit that rapidly short-circuits ("crowbars") the supply line if the voltage and/or current exceeds defined limits. In practice, the resulting short blows a fuse or triggers other protection, effectively shutting down the supply.	*Electrical Engineering*
Crowd Rope	A wire rope used to drive or force a power shovel bucket into the material that is to be handled.	*Wire Rope & Cable*
Crown	The highest point of any construction of convex section or outline, as an arch, vault, deck, or road.	*Civil Engineering*
Crown	The branches and foliage at the top of a tree.	*Forestry*
Crown (or Kerf)	the cutting edge.	*Petroleum Drilling*
Crown Block	The set of pulleys or sheaves at the top of a mast on a rig.	*Petroleum Drilling*
Crown down	an old term for ripping or taking down the roof of a roadway to make more headroom. (Bris., Som.).	*Mining*
Crown Lace Pulley	A pulley with greater diameter at the center than at the ends.	*Equipment*
Crown land	Land and land covered by water owned by the Province.	*Petroleum Engineering*
Crown or Crowntree	a flat bar or 'cross-piece' used in roof support, (Mids.); or the centre section of a metal arched roof support. Also known in other coalfields as a 'bow'; or an iron socket on the end of the winding rope that was attached to the cage chains. It was in use before the development of safety devices to prevent overwinding. (Som.).	*Mining*
Crown-class	A tree classification system based on the tree's relative height, foliage density, and ability to intercept light. Classifications include dominant, co-dominant, intermediate, and suppressed.	*Forestry*
Crowned	when the roof lids and posts all fit well together (N. Staffs.).	*Mining*
Crowned Pulley	A pulley which tapers equally from both ends toward the center, the diameter being the greatest at the center.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Crowned Road	A road design with a slope or pitch from its center to the curb or shoulder in order to facilitate water drainage.	*Mechanical Engineering*
Crown-in	collapse at the surface due to subsidence forming a 'crown hole', a circular depression or hole.	*Mining*
Crowntrees	half-round lengths of timber fixed under a roof of a working place. (Scot.).	*Mining*
Crow-stone	Crow-stone, a term used for 'ganister'.	*Mining*
Crozle	to cake or harden, e.g., crozzling—the aggregation of coal when burning, usually in coke making. (Derbys.).	*Mining*
CRP	CRP—Conservation Reserve Program.	*Agriculture*
CRR	Clinically Reportable Range	*Quality*
CRT	constantly regenerating trap	*Petro-Chemical Abbreviations*
Crude assay	A procedure for determining the general distillation and quality characteristics of crude oil.	*Petroleum Engineering*
Crude oil	A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include 1. Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casing head) gas in lease separators and are subsequently comingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2. Small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; 3. Drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.	*Energy*
Crude oil	A naturally occurring mixture of hydrocarbons that usually includes small quantities of sulfur, nitrogen, and oxygen derivatives of hydrocarbons as well as trace metals.	*Petroleum Engineering*
Crude Oil (acquisition stock)	Crude oil that has not been added by a refiner to inventory and that is thereafter sold or otherwise disposed of without processing for the account of that refiner shall be deducted from its crude oil purchases at the time when the related cost is deducted from refinery inventory in accordance with accounting procedures generally applied by the refiner concerned. Crude oil processed by the respondent for the account of another is not a crude oil acquisition.	*Energy*
Crude oil acquisitions (unfinished oil acquisitions)	The volume of crude oil either:	*Energy*
Crude oil f.o.b. price	The crude oil price actually charged at the oil producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.	*Energy*
Crude oil input	The total crude oil put into processing units at refineries.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Crude oil landed cost	The price of crude oil at the port of discharge, including charges associated with purchasing, transporting, and insuring a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).	*Energy*
Crude oil less lease condensate	A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Such hydrocarbons as lease condensate and natural gasoline recovered as liquids from natural gas wells in lease or field separation facilities and later mixed into the crude stream are excluded. Depending upon the characteristics of the crude stream, crude oil may also include: 1. Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently comingled with the crude stream without being separately measured; 2. Small amounts of on hydrocarbons produced with the oil, such as sulfur and various metals.	*Energy*
Crude oil losses	Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses.	*Energy*
Crude oil production	The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BSw).	*Energy*
Crude oil qualities	Refers to two properties of crude oil, the sulfur content, and API gravity, which affect processing complexity and product characteristics.	*Energy*
Crude oil stocks	Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.	*Energy*
Crude oil stream	Crude oil produced in a particular field or a collection of crude oils with similar qualities from fields in close proximity, which the petroleum industry usually describes with a specific name, such as West Texas Intermediate or Saudi Light.	*Energy*
Crude oil used directly	Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.	*Energy*
Crude Oil	Liquid petroleum as it comes out of the ground as distinguished from refined oils manufactured out of it.	*Petroleum Drilling*
Crude oil, refinery receipts	Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.	*Energy*
Crumb Rubber	Fine granular or powdered rubber capable of being used to make a variety of products. It is recovered from scrap tires using thermal and/or mechanical processing techniques. Crumb rubber also is derived from the tire retreading process, when worn tire tread is removed during a buffing process before the new tread is affixed.	*Environmental Engineering*
Crump	Crump, - see Bump or Weight.	*Mining*

Term	Definition	*Industry*
Crush	the crumbling of pillars or the sides of roadways due to strata pressures.	*Mining*
Crush Resistance Test	A test to determine the ability of a cable to resist damage from radial compression, such as might be encountered in service.	*Electrical*
Crushed Powder	Powder formed from a solid which is then crushed to the appropriate size for spraying.	*Paint and Coatings*
CRUSHER	A machine for crushing rock, such as a gyratory crusher, jaw crusher, stamp mill, etc.	*Mining*
Crusher	A machine for crushing rock or other materials. Among the various types of crushers are the ball mill, gyratory crusher, Handsel mill, hammer mill, jaw crusher, rod mill, rolls, stamp mill, and tube mill.	*Mining*
Crust	The outermost layer of the Earth; includes both continental and oceanic crust.	*Mining*
Crut	a cross-measure tunnel or drift.	*Mining*
Cryogenic plant	A type of natural gas processing plant that uses low temperatures to condense the collected natural gas to a liquid state, making it easier to separate the component hydrocarbons and transport the gas.	*Petroleum Drilling*
Cryogenic Temperature	Any temperature below about -240°F.	*Mechanical*
Cryogenic Valve	A term used to describe valves designed to operate below –40°C.	*Industrial Engineering*
Cryogenics	Measurement of temperature at extremely low values, i.e., below -200°C.	*Electronic Process*
Cryptic	Hidden or concealed.	*Forestry*
Crystal (Bravais) lattice	The 14 possible arrangements of points (with equivalent environment) in 3D-three dimension space.	*Material Process*
Crystal system	The seven, unique unit cell shapes that can be stacked together to fill three dimension space.	*Material Process*
Crystalline	Having constituent atoms stacked together in a regular, repeating pattern.	*Material Process*
Crystalline fully refined wax	A light colored paraffin wax having the following characteristics:	*Energy*
Crystalline other wax	A paraffin wax having the following characteristics:	*Energy*
Crystallite	Trade name for a methyl methacrylate plastics material.	*Material Process*
Crystals	soluble in alcohol, benzene, ether, insoluble in water.	*Material Process*
Crystobalite	Compound crystal structure.	*Material Process*
CSA	Canadian Standards Administration.	*General Engineering*
CSA	CSA - Canadian Standards Administration.	*Electronic Process*
CSG (coal seam gas) or CBM (coal bed methane)	Methane that forms in the gaps between coal molecules.[1] (not to be confused with csg, an abbreviation for the well casing)	*Petroleum Drilling*
CSREES	Cooperative State Research Education & Extension Service, an agency of the USDA.	*Agriculture*
cSt	Centistokes	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
C-stage resins	State of the resins in the final molded articles, usually applied to cast resins.	*Material Process*
CSTCC	continuously slipping torque converter clutch	*Petro-Chemical Abbreviations*
cu in	Cubic inch	*General*
Cube or Cupola	a shaft sunk near to the top of a furnace upcast, and holed into the shaft a few fathoms below the surface, with a wide chimney erected over it, rising 30 or 40 feet above the surface. It relieves the pit top from smoke. Called also a tube.	*Mining*
Cubic	Simplest of the seven crystal systems.	*Material Process*
Cubic Foot	A standard unit used to measure quantity of gas (at atmospheric pressure); 1 cubic foot = 0.0283 cubic meters.	*Petroleum Drilling*
Cubic foot (cf), natural gas	The amount of natural gas contained at standard temperature and pressure (60 degrees Fahrenheit and 14.73 pounds standard per square inch) in a cube whose edges are one foot long.	*Energy*
Cubic foot	A standard unit used to measure quantity of gas (at atmospheric pressure); 1 cubic foot = 0.0283 cubic meters.	*Petroleum Drilling*
Cuddie or Cuddy	a bogie loaded with weights, as in: 'Cuddie brae'- a self-acting incline where the cuddie was used to counter balance the weight of the full hutches being lowered down the steep inclined road. (Scots.).	*Mining*
CULL	A tree or log of marketable size that is useless for all but firewood or pulpwood because of crookedness, rot, injuries, or damage from disease or insects.	*Forestry*
Cull wood	Wood logs, chips, or wood products that are burned.	*Energy*
Culm	Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton.	*Energy*
Culm and silt	**Culm and silt** are waste materials from preparation plants. In the anthracite region, culm consists of coarse rock fragments containing as much as 30 percent small-sized coal. Silt is a mixture of very fine coal particles (approximately 40 percent) and rock dust that has settled out from waste water from the plants. The terms culm and silt are sometimes used interchangeably and are sometimes called refuse. Culm and silt have a heat value ranging from 8 to 17 million Btu per ton.	*Energy*
Cultivar	A horticulturally or agriculturally derived variety of a plant.	*Energy*
Cultivate	to improve the land by plowing and fertilizing	*Agriculture*
Culvert	A drain or channel crossing under a road, sidewalk. Example: sewer, conduit.	*Civil Engineering*
Cumarone, or Benzofuran	Cumarone is a liquid. A constituent of high boiling naphtha, which will polymerize alone or with indene to form a resin with properties suited for use as a binder or coating material.	*Material Process*
Cum-dividend	Buyer entitled to pending dividend payment.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cumulative control limits	Control limits calculated from estimates of the mean and standard deviation that represent a time period longer than a month. Common practice is for laboratories to calculate monthly control statistics. Cumulative statistics can be easily calculated from monthly statistics that tabulate the sum of the individual values and the sum of the squares of those values. See the lesson QC - The Calculations for more detailed discussion, equations, and examples.	*Quality*
Cumulative damage model	An accelerated life testing model used to model accelerated tests where the stress levels vary with time.	*Reliability Engineering*
Cumulative density function (cdf)	A function obtained by integrating the failure distribution pdf. In life data analysis, the cdf is equivalent to the unreliability function.	*Reliability Engineering*
Cumulative depletion	The sum in tons of coal extracted and lost in mining as of a stated date for a specified area or a specified coal bed.	*Energy*
Cumulative meta-analysis	A meta-analysis in which studies are added one at a time in a specified order (e.g. according to date of publication or quality) and the results are summarized as each new study is added. In a graph of a cumulative meta-analysis, each horizontal line represents the summary of the results as each study is added, rather than the results of a single study.	*Quality Engineering*
Cundie or Cundy	a low narrow passage cut between two roadways to allow supplies to pass through or for ventilation - see also Slit, Sniggett and Snicket; or a water culvert, or the unfilled space between two packwalls; or, in steep longwall workings, a long narrow roadway without rails down which the coal was rolled to be loaded into 'hutches' at the bottom. (Scot.).	*Mining*
Cupola	a chimney erected above or close to the upcast shaft to carry away the smoke from the ventilation furnace; or another name for the ventilation furnace.	*Mining*
Cupriferous - Containing copper	Cupriferous - Containing copper.	*Mining*
Curb	A rim, especially of joined stones or concrete, along a street or roadway, forming an edge for a sidewalk.	*Civil Engineering*
Curb Guard	A rubber protrusion running circumferentially around some tires just above the whitewall to prevent curb scuffing on the whitewall area of a tire.	*Mechanical Engineering*
Curb Weight	The total weight of a vehicle with no passengers and a full tank of gas.	*Mechanical Engineering*
Curbing	The material forming a curb, as along a street.	*Civil Engineering*
Curbstone	One of the stones, or a range of stones forming a curb as along a street.	*Civil Engineering*
Cure	(See Vulcanization.)	*Electrical*
Cure Point	The temperature at which a normally magnetic material goes through a magnetic transformation and becomes non-magnetic.	*General Engineering*
Curing	The change of a binder from a soluble fusible condition to an insoluble-infusible condition by chemical reaction.	*Material Process*
Current	The rate at which electrons flow through a circuit is defined as the current. If an electric circuit is likened to water flowing through a system of pipes, the current is analogous to the rate at which the water is flowing. Electric current is measured in amps.	*Electrical*

Term	Definition	*Industry*
Current	Time value of movement of free electrons. One ampere equals one coulomb per second. Conventional reference is opposite to direction of actual electron movement.	*Electrical Engineering*
Current (Electric)	Flow of electrons in an electric conductor.	*Energy*
Current Asset Value (CAV)	See Estimated Replacement Value	*Maintenance*
Current assets	Cash and other assets that are expected to be turned into cash, sold, or exchanged within the normal operating cycle of the utility, usually one year. Current assets include cash, marketable securities, receivables, inventory, and current prepayments.	*Energy*
Current assets	Assets of company which can and are likely to be converted into cash within a year. Includes cash, marketable securities, accounts receivable and supplies.	*Mining*
Current Consumption	The amount of current required to power a sensor or control (excluding load). See supply current.	*Electrical Engineering*
Current Contents	Electronic database that provides access to the tables of contents and bibliographic data from current issues of the world's leading scholarly research journals in the sciences, social sciences, arts, and humanities.	*Quality Engineering*
Current liabilities	A debt or other obligation that must be discharged within one year or the normal operating cycle of the utility by expending a current asset or the incurrence of another short-term obligation. Current liabilities include accounts payable, short-term notes payable, and accrued expenses payable such as taxes payable and salaries payable.	*Energy*
Current Proportioning	An output form of a temperature controller which provides a current proportional to the amount of control required. Normally, a 4 to 20 milliamp current proportioning band.	*Electrical*
Current ratio	The ratio of current assets divided by current liabilities that shows the ability of a utility to pay its current obligations from its current assets. A measure of liquidity, the higher the ratio, the more assurance that current liabilities can be paid.	*Energy*
Current Sinking	An output type such that when it is On, current flow is from the load into the device's output, then to ground. Output is Normally High. The sensor "sinks" current from the load through the sensor to ground. The load is connected between the positive lead of the supply and the output lead of the sensor.	*Electrical Engineering*
Current Sourcing	An output type such that when it is On, current flow is from the device into the load. Output is Normally Low. The sensor "sources" current to the load. The load is connected between the output lead and the negative ground lead of the supply.	*Electrical Engineering*
Current Transformers	These are used in conjunction with metering equipment. They are designed to permit measurement of currents beyond the range of a meter.	*Energy*
Current carrying Capacity	The maximum current an insulated conductor or cable can continuously carry without exceeding its temperature rating. It is also called ampacity.	*Electrical*
Current-Mode Controller	A DC-DC switching regulator which regulates its output voltage by varying the peak inductor current on a cycle-by-cycle basis to output a regulated voltage despite variations in load-current and input-voltage.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Current-Sense Amplifier	An amplifier that measures current by measuring the voltage drop across a resistor placed in the current path. The current sense amp outputs either a voltage or a current that is proportional to the current through the measured path.	*Electrical Engineering*
Curry pit	a hole, or shallow shaft, between two coal seams, used as a return airway. (Leics.).	*Mining*
Curtain Side Airbags	Designed to cushion and protect occupants' heads. Located on both the left and right sides of the vehicle, curtain side airbags deploy from above the front and rear side windows in a side-impact collision. Advanced systems deploy the bags when sensors detect an impending rollover. The bags inflate within a fraction of a second and deflate after a few seconds. They also help shield occupants from broken side glass. In some vehicles with three rows of seats, the curtain airbags do not reach backseat occupants. Curtain-side airbags deploy from above the side windows during a side-impact collision or when a rollover situation is sensed.	*Mechanical Engineering*
Curve	This is the point in a directional well where it turns from a vertical hole to a horizontal hole. You may hear directional drillers speaking of "building the curve." This is the process of using an mud motor with a specific bend in it to gently create a curve in the wellbore over a distance of several hundred feet. Once the curve has been built, mud motors more suited for horizontal drilling, and made only for applying slight corrections are typically used.	*Petroleum Drilling*
Curve Conveyor	Any skatewheel, roller, or belt conveyor which is produced with a degree of bend so as to convey products away from the straight flow.	*Manufacturing*
Curve Fitting	Curve fitting is the process of computing the coefficients of a function to approximate the values of a given data set within that function. The approximation is called a "fit". A mathematical function, such as a least squares regression, is used to judge the accuracy of the fit.	*General Engineering*
Curved Belt Conveyor	Belt Conveyor: Unit load belt conveyor usually operating horizontally through various angle turns, usually 30, 45, 60, 90, or 180 degrees.	*Equipment*
Curving	cutting into the whole coal as the preparatory course to blasting or wedging it down.	*Mining*
Cushion pack	a pack formed with loose dirt without walls.	*Mining*
Cushion, Cylinder	A cushion built into a cylinder to restrict flow at the outlet port thereby arresting the motion of the piston rod.	*Mechanical, Process, and Operations*
Custom smelter	A smelter which processes concentrates from independent mines. Concentrates may be purchased or the smelter may be contracted to do the processing for the independent company.	*Mining*
Custom Wheel	An aftermarket wheel designed to improve performance and enhance appearance and comprised of one, two, or three different pieces.	*Mechanical Engineering*
Customer Assistance Programs	Alternative collection program set up between a utility company and a customer that allows customers to pay utility bills on a percentage-of-the-bill they owe or percentage-of-customer-income instead of paying the full amount owed. These programs are for low-income people who can't pay their bills. These customers must agree to make regular monthly payments based on their new payment plans.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Customer Charge	Part of the monthly basic distribution charge to partially cover costs for billing, meter reading equipment, service line maintenance and equipment. This charge is the same no matter how much electricity you use.	*Energy*
Customer choice	The right of customers to purchase energy from a supplier other than their traditional supplier or from more than one seller in the retail market.	*Energy*
Customer Class	A distinction between users of electric energy. Customer class is usually defined by usage patterns, usage levels, and conditions of service. Classes are usually categorized generically by customer activity (e.g. residential, commercial, industrial, agricultural, street lighting).	*Energy*
Customer Costs	Costs that are related to and vary with the number of customers. Customer costs include meters, meter readers, or service equipment costs.	*Energy*
Customer Lead-Time	The time elapsed from receipt of an order until the finished product is either shipped or delivered to the customer.	*Maintenance*
Customer reject rate	A quality measure - expressed in parts per million - reflecting the number of completed units rejected or returned by external customers. Calculation should include parts reworked by customers. Applies to all shipped units, including parts.	*Quality*
Customer retention rate	The number of customers active three years ago and still active, divided by the total number of customers active three years ago.	*Quality*
Customer Service Charge	That portion of the customer's bill which remains the same from month to month. The charge is determined separately from the amount of energy used. It is based on the costs associated with connecting a customer to the company's distribution system, including the service connection and metering equipment. This charge also recovers expenses such as meter reading, billing costs, customer accounting expenses records and collections, and a portion of general plant items such as office space for customer service personnel.	*Energy*
Customer Service Protection	The rules governing grounds for denial of service, credit determination, deposit and guarantee practices, meter reading and accuracy, bill contents, billing frequency, billing accuracy, collection practices, notices, grounds for termination of service, termination procedures, rights to reconnection, late charges, disconnection/reconnection fees, access to budget billing and payment arrangements, extreme weather, illness or other vulnerable customer disconnection protections, and the like. In a retail competition model, would include protections against "slamming" and other hard-sell abuses.	*Energy*
Customs district (coal)	Customs districts, as defined by the Bureau of the Census, U.S. Department of Commerce, " Monthly Report EM 545, " are as follows:	*Energy*
Customs import value (C.I.V.)	The price for a one-time open market transaction for near-term delivery of a specific quantity of product at a specific location where the commodity is purchased LDQUO; on the spot RDQUO; at current market rates. See also spot market terms associated with specific energy types.	*Energy*
Cut	a shaft underground from one seam to another. – see Drop Shaft and Staple.	*Mining*
Cut Thread	Threads are cut or chased; the unthreaded portion of shank will be equal to major diameter of thread.	*Fastening*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cut value	Applies to assays that have been reduced to some arbitrary maximum to prevent erratic high values from inflating the average.	*Mining*
Cut through	Through:Resistance of solid material to penetration by an object under conditions of pressure, temperature, etc.	*Electrical*
Cut through Resistance	The ability of a given material to withstand penetration by a solid object of specified dimensions and weight, which is permitted to free fall onto this material from a specified height.	*Electrical*
Cut-and-cover	A method for digging a tunnel, laying pipe, etc., by cutting a trench, constructing the tunnel or laying the pipe in it, and covering with the excavated material.	*Civil Engineering*
Cut-and-fill	A method of stopping in which ore is removed in slices, or lifts, and then the excavation is filled with rock or other waste material (backfill), before the subsequent slice is extracted.	*Mining*
Cut-chain inclines	inclines using chains with links where tubs can be attached at intermediate points. (Scot.).	*Mining*
Cut-off	a break in the roof next to the face.	*Mining*
Cut-off	The line where the several sections of a mold are joined, sometimes called flash ridge.	*Material Process*
Cut-off grade (uranium)	The lowest grade, in percent U3O8, of uranium ore at a minimum specified thickness that can be mined at a specified cost.	*Energy*
Cut-out	A defect of laminated plastics consisting of a depressed area caused by material cut out of the body material.	*Material Process*
Cutter loader	a machine that cuts coal from the face and loads it on to a conveyor.	*Mining*
Cutter or Coal cutter	a name given to several different types of coal	*Mining*
Cutter pick	a replaceable cutting tool in a machine used for mining coal or for ripping.	*Mining*
Cutter; Cutting machine	A machine, usually used in coal, that will cut a 10- to 15-cm slot. The slot allows room for expansion of the broken coal. Also applies to the man who operates the machine and to workers engaged in the cutting of coal by prick or drill.	*Mining*
Cutting Torch	A device used in oxygen, air, or powder cutting for controlling and directing the gases used for preheating and the oxygen or powder used for cutting the metal.	*Maintenance and Repair*
Cutting contract	A written, legally binding document used in the sale of standing timber specifying the provisions covering the expectations and desires of both buyer and seller.	*Forestry*
Cutting cycle	The planned time interval between timber harvest operations within the same stand. For example, on a 10year cutting cycle some trees are harvested every 10 years.	*Forestry*
Cutting fluid	Any fluid applied to a cutting tool to assist in the cutting operation by cooling, lubricating or other means.	*Oil Analysis*
Cutting horizon	a level, usually predetermined, at which a cut is made in the coal on the coalface. This will often be a line in the seam at some distance below the roof or above the floor.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cutting machines	cutting machines, but particularly one that has a flat jib fitted with a chain and cutter picks, used mainly to undercut the coal prior to firing down with explosives.	*Mining*
Cutting Oil	A lubricant used in machining operations for lubricating the tool in contact with the workpiece, and to remove heat. The fluid can be petroleum based, water based, or an emulsion of the two. The term "emulsifiable cutting oil" normally indicates a petroleum-based concentrate to which water is added to form an emulsion which is the actual cutting fluid.	*Lubrication*
Cutting side	Cutting side, -see Fast side.	*Mining*
Cutting through, or removing a core of material	Example - to bore a tunnel through the	*Civil Engineering*
Cuttings	Rock chips cut from the formation by the drill bit, and brought to the surface with the mud. Used by geologists to obtain formation data.	*Petroleum Drilling*
Cuttings	Rock chips cut from the formation by the drill bit, and brought to the surface with the mud. Used by geologists to obtain formation data.	*Petroleum Drilling*
Cutwater	Civil Engineering a sharply pointed upstream face of a bridge pier, for resisting the effects of moving water or ice.	*Civil Engineering*
Cv	The valve flow coefficient is the number of US gallons per minute of 60°F water that will flow through a valve at a specified opening with a pressure drop of 1psi across the valve.	*Industrial Engineering*
Cv	Flow coefficient expressed as the number of gallons of water that would flow through an opening, such as a valve port, in 1 minute under a differential pressure of 1 psi.	*Mechanical*
CV (Continuous Vulcanization)	Simultaneous extrusion and vulcanization of wire coating materials.	*Electrical*
Cv Flow	A coefficient expressed as the number of gallons of water that would flow through an opening, such as a valve port, in 1 minute under a differential pressure of 1 psi.	*General Mechanical*
CVD	See Chemical Vapor Deposition	*Paint and Coatings*
CVMA	Canadian Vehicle Manufacturers Association	*Petro-Chemical Abbreviations*
CVS	constant volume sampling	*Petro-Chemical Abbreviations*
CVT	continuously variable transmission	*Petro-Chemical Abbreviations*
Cwar	Cwar, another word for sandstone. (S. Wales).	*Mining*
CWIP	Construction Work In Progress	*Energy*
CWP	Cold working pressure - the maximum allowable pressure under non-shock conditions at ambient temperature (-20° F to +100° F).	*Mechanical*
CWP Cold working pressure	The maximum allowable pressure under non-shock conditions at ambient temperature (-20° F to +100° F).	*General Mechanical*

Term	Definition	*Industry*
Cwt	Abbreviation for hundredweight. A Cwt weighs 100 pounds in the United States and 112 pounds in Great Britain .	*Agriculture*
Cyanidation	A method of extracting gold or silver by dissolving it in a weak solution of sodium cyanide.	*Mining*
Cyanide	A chemical species containing carbon and nitrogen used to dissolve gold and silver from ore.	*Mining*
Cycle	The time period running from the startup of one reactor cycle to the startup of the following cycle.	*Energy*
Cycle	One complete sequence of variations in an alternating current. The number of cycles occurring in one second is called the frequency.	*Electrical*
Cycle gas oil	Cracked gas oil returned to a cracking unit.	*Petroleum Engineering*
Cycle mining	A system of mining in more than one working place at a time, that is, a miner takes a lift from the face and moves to another face while permanent roof support is established in the previous working face.	*Mining*
Cycle test	A procedure whereby a product is put through an interval of time during which a phenomena is completed. This can be a set number of events or it can be a continuous operation until something in the product fails.	*Mechanical*
Cycle Time	The time usually expressed in seconds for a controller to complete one on/off cycle.	*General Engineering*
Cycle/reactor history	A group of assemblies that have been irradiated in the same cycles in an individual reactor and are said to have the same cycle/reactor history.	*Energy*
Cycles of Concentration	Compares dissolved solids in makeup water with solids concentrated through evaporation in the circulating water. Since chlorides are soluble in water, for example, the cycles of concentration are equal to the ratio of chlorides in circulating water to chlorides in makeup water.	*Chemical Engineering*
Cyclic Redundancy Check	A check value calculated from the data, to catch most transmission errors. A decoder calculates the CRC for the received data and compares it to the CRC that the encoder calculated, which is appended to the data. A mismatch indicates that the data was corrupted in transit. Depending on the algorithm and number of CRC bits, come CRCs contain enough redundant information that they can be used to correct the data.	*Electrical Engineering*
Cycling (natural gas)	The practice of producing natural gas for the extraction of natural gas liquids, returning the dry residue to the producing reservoir to maintain reservoir pressure and increase the ultimate recovery of natural gas liquids. The reinjected gas is produced for disposition after cycling operations are completed.	*Energy*
Cyclohexane	A solvent-hydrocarbon.	*Material Process*
Cyclohexanol	A solvent alcohol.	*Material Process*
Cyclohexanone	A solvent-ketone.	*Material Process*
Cyclohexyl-p-toluene sulfonamide	Cyclohexyl-p-toluene sulfonamide (CH3C6H4SO2NHC6H11) A plasticizer known as Santicizer.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Cycloid	The curve formed by the path of a point on a circle as it rolls along a straight line. When this circle rolls along the outer side of another circle, the curve is called an Epicycloid; when it rolls along the inner side of another circle it is called a Hypocycloid. These curves are used in defining the former American Standard composite tooth form.	*Gears*
cyclone	a type of separator for removal of larger particles from an exhaust gas stream. Gas laden with particulates enters the cyclone and is directed to flow in a spiral causing the entrained particulates to fall out and collect at the bottom. The gas exits near the top of the cyclone.	*Chemical*
Cylinder	(See Fan Stack).	*Facility Engineering*
Cylinder Block	The basic part of the engine to which other engine parts are attached. It is usually a casting and includes engine cylinders and the upper part of the crankcase.	*Mechanical Engineering*
Cylinder Head	The removable part of the engine that attaches to the cylinder block directly above the cylinders. The head is cast from aluminum or iron and houses the combustion chambers, the intake and exhaust ports, spark plugs or injectors and much or all of the valve train. It has oil and water passages for cooling and lubrication.	*Mechanical Engineering*
Cylinder Oil	A lubricant for independently lubricated cylinders, such as those of steam engines and air compressors; also for lubrication of valves and other elements in the cylinder area. Steam cylinder oils are available in a range of grades with high viscosities to compensate for the thinning effect of high temperatures; of these, the heavier grades are formulated for super-heated and high-pressure steam, and the less heavy grades for wet, saturated, or low-pressure steam. Some grades are compounded for service in excessive moisture; see compounded oil. Cylinder oils lubricate on a once-through basis.	*Lubrication*
Cylinder operator	A power-piston valve operator using either hydraulic or pneumatic pressure. A sealed piston converts applied pressure into a linear piston rod (stem) motion. See "Power Operators."	*Mechanical*
Cylindrical Drum	Hoisting drum of uniform diameter.	*Wire Rope & Cable*
D/A converter	A device that converts a digital signal (discrete values) into an analog voltage.	*Reliability Engineering*
DA	Day Ahead	*Energy*
DAC	Digital to Analogue Convertor	*Control Engineering*
Dacromet	A high performance surface coating that can be applied to fasteners. The coating consists of passivated zinc flakes that are stoved onto the metal surface. The coating can be colored and eliminates the risk of hydrogen embrittlement associated with electroplated metal. DACROMET is a registered trademark of Metal Coatings International, Inc. of Chardon Ohio	*Maintenance*
Dadd	to dash out a small fire of gas, or a small accumulation of gas with a jacket, (N. East).	*Mining*
DAG	Acronym for "Data Acquisition Geek," a computer expert who maintains a team's Data Acquisition system and analyzes the data.	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dago	American slang used to denote contempt for common laborers or Italian, Spanish, or Portuguese extraction.	*Industrial Relations*
Dailey Commission	a commission set up in 1921 to investigate the building trades in Chicago and the collusion going on in the handling of labor in the building industry.	*Industrial Relations*
Daily Labor Report	one of the special labor services of the Bureau of National Labor Affairs, Inc.	*Industrial Relations*
Daily Peak	The greatest amount of electricity used during a certain period in a day, such as an hour, half-hour or quarter hour.	*Energy*
Daily Peak	The maximum amount of energy or service demanded in one day from a company or utility service.	*Energy*
Daily Rate	the amount of pay received for a standard or fixed number of hours per day, exclusive of overtime or premium pay.	*Industrial Relations*
Daisy Chain	A method of propagating signals along a bus in which the devices are connected in series and the signal passed from one device to the next. The daisy chain scheme permits assignment of device priorities based on the electrical position of the device on the bus.	*Electrical Engineering*
Daitler—see Dataller	Daitler—see Dataller.	*Mining*
Dam	A barrier to obstruct the flow of water, esp. one of earth, masonry, etc., built across a stream or river. A body of water confined by a dam. To furnish with a dam; obstruct or confine with a dam.	*Civil Engineering*
Damage	Something that reduces the value, effectiveness, or usefulness of the thing affected.	*Maintenance*
Damage Suits	civil claims for alleged injury resulting from actions violation of law.	*Industrial Relations*
Damaged Work	Provisions found in some agreements which seek to protect the employee when damage results to the product or equipment because of a mistake.	*Industrial Relations*
Dammar (dammar gum)	A resin of vegetable origin used in the manufacture of rubber and lacquer composition and as a modifier for plastics, a yellowish-white amorphous solid m.p. 120 °C (248 °F).	*Material Process*
Damp	any noxious gas met with in mines.	*Mining*
Damp (not dampen)	To reduce the "Q" or maximum resonant response, by extracting energy, usually by converting motion into heat. Your automobile's shock absorbers damp body motion.	*Reliability Engineering*
Damper	One form adheres or is sprayed onto relatively thin metal panels so as to extract energy when panels flex. Lowers "Q" of each panel mode. Goal: to reduce air flow (over the panel)-induced vibration and radiated noise.	*Reliability Engineering*
Damping	The reduction of vibratory movement through dissipation of energy. Types include viscous, coulomb, and solid.	*General Engineering*
Damping parameter	A measure of the time required as a function of the maximum pressure excursion of the power supply output to attain essentially steady state operation after an abrupt disturbance. Specifically, it is the transient recovery time divided by the maximum excursion.	*Mechanical, Process, and Operations*
Dampsheet	a piece of brattice cloth fixed across a roadway to divert the air current (S. Staffs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dams	'stoppings' constructed to prevent air entering and gas escaping from old workings. A more solid and thicker type of dam was built to hold back accumulated water.	*Mining*
Dan	a small wagon used for hauling dirt—see also Horned danny; or a small shallow box mounted on a sled for drawing coal out of the workings; or a tub or barrel used to convey water out of the workings to be tipped in the sump or wound up the shaft. (Mids.); or a small flatbed tub, wagon or tram used for supplies.	*Mining*
Dan tin	a sheet metal box used to convey coal where there were no rails. Also called a 'Duck tin'.	*Mining*
Dander	ash or clinker. (Scot.).	*Mining*
Dandered coal	coal burned and generally mixed with 'trap'. (Scot.).	*Mining*
Dandies	impure coal forming the top and bottom layers of the Parkgate Seam, (Yorks.).	*Mining*
Dandy	a wagon used on the surface for carting pit dirt and rubble to the tip. (Radstock, Som.).	*Mining*
Danger Zone Bonus	a premium or bonus paid to workers for working in an area which is unusually hazardous.	*Industrial Relations*
Danny	a flat truck used for hauling materials. - see also Bogie and Horned danny; or a small truck, running on rails along the face, hauled by a hand rope to transport the coal from the stall to the gate end.	*Mining*
Dant	small coals, wet slack (Lancs.); or soft, sooty coal (N. East).—see also Smut.	*Mining*
Danty	a soft structureless variety of coal devoid of cleats and having the appearance of having been crushed. (N. East).	*Mining*
DAP	Detroit Advisory Panel of API	*Petro-Chemical Abbreviations*
Darcy's formula	A formula used to determine the pressure drop due to flow friction through a conduit.	*Mechanical, Process, and Operations*
Darcy's law	Equation that gives the velocity vector as proportional to the pressure gradient. Often used to describe flow in porous media.	*Chemical*
Darcy's Law	an empirical relationship between hydraulic gradient and the viscous flow of water in the saturated zone of a porous medium under conditions of laminar flow. The flux of vapors through the voids of the vadose zone can be related to a pressure gradient through the air permeability by Darcy's Law.	*Chemical*
DARE	See Database of Abstracts of Reviews of Effects (DARE)	*Quality Engineering*
Darg	fixed amount of coal to be worked for a fixed price. Equivalent to the 'hewing' or 'score price' of the Newcastle area. (N. East) (Scot.). - see also Stint, or the amount of coal a collier sent out of the pit in one day. (Scot.).	*Mining*
Dark Operated (D.O.)	The control operating mode in which the output (load) is energized when the light is blocked (retro/thru scan) or object not present (diffuse), the photosensor is dark.	*Electrical Engineering*
Darlington Case	landmark case in which the U.S. Supreme Court held that an employer has the absolute right to terminate his entire business for any reason he chooses.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dashing air	mixing air and gas together until by being completely incorporated the mixture ceases to be inflammable, (N. East).	*Mining*
Dashpot	A mechanical device used to decrease plunger velocity for controlling noise.	*Mechanical*
Dass	a slice or cut taken out of a pillar in 'stooping'. (Scot.).	*Mining*
Data acquisition	Teams use sophisticated sensors, transmitters, computers and software to provide information on what the car and the driver are doing. Everything from engine stress to the driver's heartbeat can be monitored. The information is analyzed to improve handling, performance and even driver technique. Data can be acquired by connecting a computer to the car or by wireless telemetry.	*NASCAR*
Data Base	A large amount of data stored in a well-organized manner. A data base management system (DBMS) is a program that allows access to the information.	*Electrical*
Data Converter	An electronic circuit that converts analog signals to digital, or vice-versa. An analog signal is a continuously varying voltage or current. Its digital counterpart is a stream of digital numbers, each representing the amplitude of the analog signal at a moment in time.	*Electrical Engineering*
Data derived analyses	See Unplanned analyses	*Quality Engineering*
Data dredging	Performing many analyses on the data from a study, for example looking for associations among many variables. Particularly used to refer to unplanned analyses, where there is no apparent hypothesis, and only statistically significant results are reported.	*Quality Engineering*
Data Highway	A high-speed serial or parallel data path which connects several units of a distributed control or data collection system. Z = compressibility factor, dimensionless 1 = specific weight, upstream conditions = damping factor	*Electrical Engineering*
Data Manipulation Language (or Data Management Language)	A language that allows data to be manipulated in a database. In SQL, commands such as DELETE and INSERT are DML commands.	*Electrical Engineering*
Data monitoring committee	An expert committee set up to monitor the results of a continuing trial periodically, and assess whether or not the trial should continue or stop on ethical grounds, that is, if a treatment appears to be dramatically effective or harmful, and providing it or denying it to half the participants has become unethical. See also: Equipoise	*Quality Engineering*
Data Over Cable Service Interface Specification	A standard for delivering data over cable TV systems, typically for subscriber Internet access services.	*Electrical Engineering*
Database of Abstracts of Reviews of Effects (DARE)	A collection of structured abstracts and bibliographic references of systematic reviews of the effects of healthcare interventions produced by the NHS Centre for Reviews and Dissemination in York, UK. One of the databases in The Cochrane Library. Also called: DARE	*Quality Engineering*
Dataller, O.E.D., day-taler, day + reckoning	Men employed on a day-rate of pay or fixed rate per shift as distinct from a contract worker, a 'byeworker'. Sometimes spelt 'daitler'.	*Mining*
Daugh	the soft fireclay floor found below, above, or in the coal seam. (Scot.); or a holing fireclay (Lancs.).	*Mining*
Daugher	a pick designed for holing in a narrow 'daugh' band. It was usually longer and thinner than a normal pick. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Daughters of St. Crispin	the woman's auxiliary of the Knights of St. Crispin.	*Industrial Relations*
Davis-Bacon Act	a federal statute passed in 1931 and amended in 1935, 1940, and 1964.	*Industrial Relations*
Davy lamp	a safety lamp designed, by Sir Humphry Davy in 1818, for use in gassy conditions, incorporating a wire gauze around the flame.	*Mining*
Day drift	Day drift, -see Day hole.	*Mining*
Day level	Day level, - see 'Day hole'.	*Mining*
Day order	An order to buy or sell shares, good only on the day the order was entered.	*Mining*
Day Shift	where the plant or company operates on more than one shift, the day shift is the first working shift during daylight hours.	*Industrial Relations*
Day Wage	the wage paid for a definite number of hours per day.	*Industrial Relations*
Day Work	the time put in during a regular day shift and compensated for on the basis of a fixed number of hours.	*Industrial Relations*
Day Worker	a person hired by the day.	*Industrial Relations*
Day-ahead and hour-ahead markets	Forward markets where electricity quantities and market clearing prices are calculated individually for each hour of the day on the basis of participant bids for energy sales and purchases.	*Energy*
Day-Ahead Market	The forward market for energy and ancillary services to be supplied during the settlement period of a particular trading day that is conducted by the Independent System Operator, the power exchange, and other Scheduling Coordinators. This market closes with the Independent System Operator's acceptance of the final day-ahead schedule.	*Energy*
Day-ahead schedule	A schedule prepared by a scheduling coordinator or the independent system operator before the beginning of a trading day. This schedule indicates the levels of generation and demand scheduled for each settlement period that trading day.	*Energy*
Day-eye	the entrance to a drift mine or adit, or the speck of daylight seen on looking back towards the entrance of a drift	*Mining*
Daylight mine	Daylight mine, a drift mine. (Scot.).	*Mining*
Daylighting	A practice in which trees shading an access road are removed to increase the sunlight on the roadway and along its periphery.	*Forestry*
Daylighting controls	A system of sensors that assesses the amount of daylight and controls lighting or shading devices to maintain a specified lighting level. The sensors are sometimes referred to as "photocells."	*Energy*
Days of inventory	Calculate days of inventory by dividing the average inventory on hand (raw-materials inventory, work-in-process inventory, finished-goods inventory, or total inventory) by average daily usage.	*Quality*
Daytime Running Lamps	DRLs are white lights mounted on the front of an automobile. Mandated in many countries, they automatically switch on when the key is turned and are intended for daytime use, to increase the visibility of the automobile. They are typically built with LEDs.	*Electrical Engineering*
Daytime Running Lamps (DRLs)	Lights that automatically turn on when a vehicle is started, making it more visible during daylight hours.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
dB	Decibel	*General*
dB (Decibel)	20 times the log to the base 10 of the ratio of two voltages. Every 20 dBs correspond to a voltage ratio of 10, every 10 dBs to a voltage ratio of 3.162. For instance, a CMR of 120 dB provides voltage noise rejection of 1,000,000/1. An NMR of 70 dB provides voltage noise rejection of 3,162/1.	*General Engineering*
dB Decibels	A method for specifying the ratio of two signals. dB = 10 times the log of the ratio of the power of the two signals. This is equal to 20 times the ratio of their voltages, if the signals are driving equal impedances.	*Electrical Engineering*
dBm	A unit that defines a signal level by comparing it to a reference level. The reference level of 0dBm is defined as 1mW. The signal level in dBm is 10 times the log of the signal's power over that of the 0dBm reference.	*Electrical Engineering*
DBT	(Abbr.) (See Dry-Bulb Temperature).	*Facility Engineering*
DC	Direct current; an electric current flowing in one direction only and substantially constant in value.	*Electrical*
DC	Direct current; an electric current flowing in one direction only and substantially constant in value.	*Electronic Process*
DC grid	Today's electrical transmission systems are almost exclusively based on alternating current (AC), but the development of high-voltage, direct current (DC) technology has made it possible to build a DC grid (DC transmission network) that can handle bulk power flows over long distances. Power from such DC grids can be fed into the AC networks as needed. Overlay DC grids would handle fluctuations and instability in the network better than AC systems and are a part of the "smart grid" concept (see also Smart grid).	*Electrical*
d-Camphor (C11H16O)	Colorless crystals with a characteristic odor. The chief plasticizer for cellulose nitrate plastics imparting its characteristics odor to Celluloid.	*Material Process*
DCC	DaimlerChrysler Corporation	*Petro-Chemical Abbreviations*
DCS	A Distributed Control System is designed to have a series of decentralized control centers which have some degree of autonomy, but are still integrated into a whole system (except in an emergency shutdown). The centre has hierarchical control over the rest, but most control takes place away from the centre.	*Control Engineering*
DCT	dual clutch transmission	*Petro-Chemical Abbreviations*
DDC	Direct Digital Control. A control technique in which a digital computer is used as the sole controller and its out- put is used to set the final control element. This is in contrast to supervisory control.	*Electrical Engineering*
DDE	Direct Digital Embedding.	*Control Engineering*
DDE Windows Dynamic Data Exchange	A standard software method for communicating between applications under Microsoft Windows. Created by Microsoft starting with Windows 3.1. DDE is being replaced by OLE for process control, OPC.	*Process Control*
DDT	dichloro-diphenyl-trichloroethane, a chlorinated hydrocarbon used as an insecticide.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
De Minimis Doctrine	the legal doctrine that the law does not concern itself with minor or trifling matters.	*Industrial Relations*
Dead	a term meaning not ventilated, (N. East).	*Mining*
Dead Band	The range through which an input may vary without changing the output. In a mechanical instrument such as a meter movement or strip-chart recorder, the dead band is caused by friction and slack or "play" in the readout mechanism. In a controller, dead band is a zone around the setpoint in which the measurement may vary without initiating a compensating controller response.	*Electrical Engineering*
Dead Band	1. For chart records - the minimum change of input signal required to cause a deflection in the pen position. 2. For temperature controllers - the temperature band where heat is turned off upon rising temperature and turned on upon falling temperature expressed in degrees. The area where no heating (or cooling) takes place.	*Electronic Process*
Dead Break	Imperfect snap action in which the normally closed circuit of the switch opens before the plunger reaches the operating point, or the normally open circuit opens before the plunger reaches the release point.	*Electrical Engineering*
Dead coal	coal that is difficult to break down from the face.	*Mining*
Dead ground	where a coal seam thins out or becomes unworkable; or the seam hits a fault. The area beyond, until the seam becomes workable again, is also known as 'dead ground'. - see also Barren ground.	*Mining*
Dead Loads	The combined weight of the conveyor elements and supports.	*Equipment*
Dead Make	Imperfect snap action in which a switch fails to close its circuit when the plunger reaches the operating or release point.	*Electrical Engineering*
Dead Time	The interval of time lag between the initiation of a controller output or stimulus and the start of the resulting observable process response.	*Electrical Engineering*
Dead Time, Equivalent	To a controller, a process may appear to have more dead time than what it actually has. That is, the controller cannot be tuned tight enough (without going unstable) to make the process variable respond appreciably before an equivalent dead time. More accurately, the characteristic time of the loop is determined by equivalent dead time. Equivalent dead time consists of pure dead time plus process components contributing more than 180 degrees of phase lag.	*Process Control*
Dead Time, Pure	Pure dead time processes are usually found in plug flow or solids transportation loops. Examples are paper machine and conveyor belt loops. Dead time is also called delay. A controller cannot make the process variable respond before the process dead time.	*Process Control*
Dead Volume	The volume of the pressure port of a transducer at room temperature and ambient barometric pressure.	*General Engineering*
Dead work	any kind of miner's work other than actual coal getting and transport; or work done by a contractor or collier not provided for in his yardage or tonnage contract rates. Also called 'bye work'.	*Mining*
Dead Work	In mining or quarrying, the nonproductive work necessary to prepare the mine for productive work.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dead working	workings without adequate ventilation.	*Mining*
Deadband	1. For chart records: the minimum change of input signal required to cause a deflection in the pen position. 2. For temperature	*Electrical*
Dead-End Job	a job which has no future.	*Industrial Relations*
Deadhead	a person passed over in a promotion by a junior employee who may be better qualified.	*Industrial Relations*
Dead-Horse Rule	a procedure used by printers to increase the amount of make-work in setting up type.	*Industrial Relations*
Dead-Line	In drilling, it is the end of the rotary drilling line fastened to the anchor or dead-line clamp.	*Wire Rope & Cable*
Deads	waste material, such as shale, produced in the process of working the coal.	*Mining*
Deadweight tons	The lifting capacity of a ship expressed in long tons (2,240 lbs.), including cargo, commodities, and crew.	*Energy*
Deaeration	Deaeration is the process of removing air and gases from the boiler feedwater prior to its introduction to the boiler. High temperatures in the deaeration tower tank reduces the waters ability to retain oxygen and other dissolved gases. The oxygen is hence forced out the water through air vents. Deaeration is necessary in order to remove oxygen and carbon dioxide, ensuring improved heat transfer, continuous system operation, and for overall energy savings. See also Water Treatment	*Industrial*
Deaerator	A separator that removes air from the system fluid through the application of bubble dynamics.	*Oil Analysis*
Dealer tank wagon (DTW) sales	Wholesale sales of gasoline priced on a delivered basis to a retail outlet.	*Energy*
De-areator tank	This tank is used to process ore into gold in hard rock mining.	*Mining*
Dearn	a wooden sough or drain used to de-water a mine. (War).	*Mining*
Deasphalting	Process of removing asphaltic materials from reduced crude using liquid propane to dissolve nonasphaltic compounds.	*Petroleum Engineering*
Debenture	Debenture - See bonds.	*Mining*
Debris	Sediment from mines.	*Mining*
Debris Monitoring	See Oil Debris Monitoring.	*Maintenance*
Debt financing	Method of raising capital whereby companies borrow money from a lending institution.	*Mining*
Debug	To find and correct mistakes in a program.	*Electrical*
Debutanizer	A fractionating column used to remove butane and lighter components from liquid streams.	*Petroleum Engineering*
Debye-H¸ckel	Equation: Used in relating the activity coefficient (fi) to ion strength (see Activity coefficient):where I is the ionic strength, A and B the temperature-dependent constants (see Table A.5), Zi the valence of the ion (i), and Â the ion-size parameter in angstroms.	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Debye-H¸ckel Equation	Used in relating the activity coefficient (fi) to ion strength (see Activity coefficient) - where I is the ionic strength, A and B the temperature-dependent constants (see Table A.5), Zi the valence of the ion (i), and Â the ion-size parameter in angstroms.	*Electronic Process*
Decade	The interval between two frequencies which differ by exactly 10:1.	*Reliability Engineering*
Decalin or decahydronaphthalene	A solvent hydrocarbon.	*Material Process*
Decasualization	the process of regularizing employment of the casual worker.	*Industrial Relations*
Decatherm	Ten therms or 1,000,000 Btu.	*Energy*
Decatherm (or, Dekatherm)	Ten therms or 1 million Btu. One decatherm is equal to approximately 1,000 cubic feet (Mcf).	*Energy*
Decay	A failing pressure.	*Mechanical, Process, and Operations*
Decay rate	The ratio of pressure decay to time.	*Mechanical, Process, and Operations*
Deceleration Stress	The additional stress that is imposed on a wire rope as a result of a decrease in the load velocity.	*Wire Rope & Cable*
Decentralized Purchasing	When a firm approaches purchasing in a decentralized manner, individual departments (in a single-site organization) or location managers (in a multi-site organization) control the purchasing functions. There is no central purchasing department with specialized buying expertise in a single-site operation, although in a multi-site operation each plant may have its own purchasing department.	*Procurement*
Decertification	the procedure of removing a union as certified bargaining representative of employees in an appropriate bargaining unit.	*Industrial Relations*
Decibel	Ratios of identical quantities are expressed in decibel or deciBel or dB units. The number of dB is ratioed against some standard or reference value in terms of the base 10 logarithm of that ratio. In measuring acoustic or vibration power (as in PSD or ASD of random vibration), the number of dB = 10 log10 P/P_o. P_o, the reference level, equals 0 dB. In measuring the more common voltage-like quantities such as acceleration, the number of dB = 20 log10 E/E_o E_o, the reference level, equals 0 dB.-	*Reliability Engineering*
Decibel	Unit to express differences of power level. It is used to express power loss in cables.	*Electrical*
Decibels	It is used to describe a signal level by comparing it to a reference level. The reference is usually defined as 0dB and the dB value of the signal is 10 times the log of the signal's power over that of the reference. A letter is sometimes added to signify the reference. For instance, dBm is relative to 0 dBm = 1mW.	*Electrical Engineering*
Deciduous	A plant that sheds all its leaves, usually in the fall.	*Agriculture*
Decimal	Refers to a base ten number system using the characters 0 through 9 to represent values.	*General Engineering*

Term	Definition	*Industry*
Decision	a conclusion, usually by a court, which involves the interpretation or application of law to the facts of a particular case.	*Industrial Relations*
Decision analysis	A technique that formally identifies the options in a decision-making process, quantifies the probable outcomes (and costs) of each (and the uncertainty around them), determines the option that best meets the objectives of the decision-maker and assesses the robustness of this conclusion.	*Quality Engineering*
Decision Interval, Dint	Used here to represent the gray zone, or interval of uncertainty, in interpreting a test result. An example is the NCEP (National Cholesterol Education Program) guidelines that indicate a cholesterol of less than or equal to 200 mg/dL is okay and that a value of more than or equal to 240 should have followup testing, which defines a gray zone of 40 mg/dL between 200 to 240, which is 20% at a decision level of 200 mg/dL. Dint can also be defined more generally by the change in a test result that is judged to be medically significant.	*Quality*
Decision level for critical interpretation (Xc)	See medical decision level.	*Quality*
Deck	Civil Engineering (of a bridge truss) having a deck or floor upon or above the structure.	*Civil Engineering*
Deck Batt	(See Splash Bar).	*Facility Engineering*
Deck Stringer	Holds the splash bars of the fill deck in a fixed position with respect to air and water flow.	*Facility Engineering*
Deck support	A horizontal member supporting the fill decks.	*Facility Engineering*
Deck	The area around the shaft collar where men and materials enter the cage to be lowered underground.	*Mining*
Decking	the operation of loading and unloading the tubs or mine cars from the cage at the top or bottom of the shaft. When the tubs or mine cars are loaded or unloaded at the same time from different decks, this is known as 'simultaneous decking'. When loading is carried out by means of mechanical equipment it is known as 'power-operated decking'.	*Mining*
Decline Conveyor	A conveyor transporting down a slope.	*Manufacturing*
Decline	A sloping underground opening for machine access from level to level or from surface; also called a ramp.	*Mining*
Decoder	Converts signal from scanner into a signal which the computer can understand.	*Gears*
Decommissioning	Retirement of a nuclear facility, including decontamination and/or dismantlement.	*Energy*
Decomposition	Separation by chemical change into constituent parts, elements, or different compounds. More specifically related to fluid and seat chemical changes. The materials affected are primarily organic in nature. The products of change may be introduced into the system as contamination.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Decomposition method	A method for determining the reliability of complex systems. The decomposition method is an application of the law of total probability, which involves choosing a "key" component and then calculating the reliability of the system twice: once as if the key component failed and once as if the key component succeeded. These two probabilities are then combined to obtain the reliability of the system, since at any given time the key component will be failed or operating.	*Reliability Engineering*
Decompression	The slow release of confined fluid to gradually reduce pressure on the fluid.	*Mechanical, Process, and Operations*
Decompression Point	The point at which there is zero pressure at the joint interface as a result of forces applied to the joint. If the applied force is increased beyond the decompression point, a gap will form at the interface. Analytically, a criteria of joint failure is often taken as when the applied force on the joint reaches the decompression point. This is because forces acting on the bolt(s) can dramatically increase at this point. Loading beyond this point can also result in fretting at the interface that will lead to bolt tension loss that will subsequently lower the decompression point. This process can continue until bolt failure does occur. The failure can be by fatigue or other mechanism but the underlying cause was loading of the joint beyond the decompression point. It is for this reason that it is frequently taken as a failure criteria in analysis work.	*Maintenance*
Decompression Pressure Control Valve	A pressure control valve that controls the rate at which the contained energy of the compressed fluid is released.	*Mechanical, Process, and Operations*
Decontamination	Removal of unwanted radioactive or hazardous contamination by a chemical or mechanical process.	*Energy*
Dedendum	The depth of tooth space below the pitch circle or the radial dimension between the pitch circle and the bottom of the tooth space.	*Mechanical Engineering*
Dedicated Control	Using one controller to control one process variable.	*Electrical Engineering*
Dedicated reserves	The volume of recoverable, salable gas reserves committed to, controlled by, or possessed by the reporting pipeline company and used for acts and services for which both the seller and the company have received certificate authorization from the Federal Energy Regulatory Commission (FERC). Reserves include both company-owned reserves (including owned gas in underground storage), reserves under contract from independent producers, and short-term and emergency supplies from the intrastate market. Gas volumes under contract from other interstate pipelines are not included as reserves, but may constitute part or all of a company's gas supply.	*Energy*
Dedicated vehicle	A vehicle that operates only on an alternative fuel, as when a vehicle is configured to operate on compressed natural gas. Note: A vehicle powered by an electric motor is not to be treated as dedicated.	*Energy*
Deductions	generally refer to the check-off of union dues, fines, and other assessments.	*Industrial Relations*
Deeds	colliery waste tipped on the spoil tip. (N. East).	*Mining*
Deepen	To increase the distance below a specified reference datum.	*Petroleum Drilling*
Deepening from one zone to another	Deepening from one zone to another	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Deepest total depth	The deepest total depth of a given well is the distance from a surface reference point (usually the Kelly bushing) to the point of deepest penetration measured along the well bore. If a well is drilled from a platform or barge over water, the depth of the water is included in the total length of the well bore.	*Energy*
Deepside	the lower side or dip side of the face.	*Mining*
Deer	Diesel Engine Emission Reduction (Conference)	*Petro-Chemical Abbreviations*
De-ethanizer	A fractionating column designed to remove ethane and gases from heavier hydrocarbons.	*Petroleum Engineering*
Default	The value(s) or option(s) that are assumed during operation when not specified.	*General Engineering*
Default Service	The electric generation service provided to any consumer who does not or is not unable to arrange for or maintain electric generation services with an electric supplier.	*Energy*
Defect	A flaw or an imperfection of such size, shape, orientation, location, or properties as to be rejectable per the applicable minimum acceptance standards.7	*Maintenance and Repair*
Defendant	the individual or organization having the responsibility of defending its position before a tribunal or court.	*Industrial Relations*
Deferred charges	Expenses incurred but not charged against the current year's operation.	*Mining*
Deferred cost	An expenditure not recognized as a cost of operation of the period in which incurred, but carried forward to be written off in future periods.	*Energy*
Deferred fuel costs	An expenditure for fuel that is not recognized for bookkeeping practices as a cost in the operating period incurred, but carried forward to be written off in future periods.	*Energy*
Deferred income tax (liability)	A liability in the balance sheet representing the additional Federal income taxes that would have been due if a utility had not been allowed to compute tax expenses differently for income tax reporting purposes than for ratemaking purposes.	*Energy*
Deferred Retirement Date	the date to which is fixed or normal date set for retirement is postponed.	*Industrial Relations*
Definitive method, DM	"An analytical method that has been subjected to thorough investigation and evaluation for sources of inaccuracy, including nonspecificity." [CLSI]	*Quality*
Deflection	This word usually carries the same meaning as displacement, although it is sometimes used in place of deformation.	*Engineering Physics*
Deflocculation	The ability of some materials such as polyphosphides to peptize and disperse suspensions of colloidal particles.	*Chemical Engineering*
Defoamer	Substance used to reduce or eliminate foam.	*Chemistry*
Defoaming agents	During start-up air can become trapped in a system. Pumping creates air bubbles (foaming) which can lead to pump cavitations, possibly damaging pumps and other system components. Our proprietary additive package contains defoaming agents to help keep air from foaming in the oil.	*Lubrication*
Defoliant	A chemical that causes leaves to wither and die on plants.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Defoliator	Any chewing insect that consumes the leaves or needles of plants.[1] Fin.Swe.	*Forestry*
Deforestation	The net removal of trees from forested land.	*Energy*
Deform	To undergo deformation	*Civil Engineering*
Deformation	A change in the shape of an object or material.	*Engineering Physics*
Deformation (by overload)	Overloading by static or shock loads, which leads to plastic deformations (i.e. the formation of shallow depressions in steel surfaces).	*Maintenance*
Deformeter	A gauge used to determine stresses in a structure by tests on a model of the structure.	*Civil Engineering*
Degas	Removing air from a liquid, usually by ultrasonic and/or vacuum methods.	*Oil Analysis*
Degasification system	The methods employed for removing methane from a coal seam that could not otherwise be removed by standard ventilation fans and thus would pose a substantial hazard to coal miners. These systems may be used prior to mining or during mining activities.	*Energy*
Degradable organic carbon	The portion of organic carbon present in such solid waste as paper, food waste, and yard waste that is susceptible to biochemical decomposition.	*Energy*
Degradation	The progressive failure of a machine or lubricant.	*Lubrication*
Degradation analysis	Analysis involving the measurement and extrapolation of degradation or performance data that can be directly related to the presumed failure of the product in question. Degradation analysis allows the user to extrapolate to an assumed failure time based on the measurements of degradation or performance over time.	*Reliability Engineering*
Degradation potential	the degree to which a substance is likely to be reduced to a simpler form by bacterial activity.	*Chemical*
Degreaser	A product specifically formulated to remove grease, oil and greasy soils.	*Chemistry*
Degreasing	The removal of grease and oil from a surface. Degreasing by immersion in liquid organic solvents or by solvent vapors condensing on the parts to be cleaned.	*Paint and Coatings*
Degree	An incremental value in the temperature scale, i.e., there are 100 degrees between the ice point and the boiling point of water in the Celsius scale and 180°F between the same two points in the Fahrenheit scale.	*General Engineering*
Degree Day	See Heating Degree Days; Cooling Degree Days; Population-weighted Degree Days.	*Energy*
Degree of Decline	Angle of slope (in degrees that a conveyor is installed.	*Equipment*
Degree of Freedom	A displacement quantity which defines the shape and location of an object. In the two dimensional plane, a rigid object has three degrees of freedom: two translations and one rotation. In three dimensional space, a rigid object has six degrees of freedom (three translations and three rotations).	*Engineering Physics*
Degree of freedom	Number of independent variables available in specifying an equilibrium microstructure.	*Material Process*
Degree of Incline	Angle of slope (in degrees that a conveyor is installed.	*Manufacturing*
Degree of polymerization	Average number of mers in a polymeric molecule.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Degree-day	A unit measuring the extent to which the outdoor mean (average of maximum and minimum) daily dry-bulb temperature falls below (in the case of heating) or rises above (in the case of cooling) an assumed base. The base is normally taken as 65 degrees for heating and cooling unless otherwise designated.	*Energy*
Degrees API	Degrees API = (141.5 / sp.gr.60 deg.F/60 deg.F) - 131.5	*Energy*
Degrees of freedom	A concept that refers to the number of independent contributions to a sampling distribution (such as chi-squared distribution). In a contingency table, it is one less than the number of row categories multiplied by one less than the number of column categories; e.g. a 2 x 2 table comparing two groups for a dichotomous outcome, such as death, has one degree of freedom.	*Quality Engineering*
Degrees of freedom, df	This is the number of independent comparisons that can be made among N observations. It may be thought of as the number of measurements in a series minus the number of restrictions on the series. For example, there are N-1 degrees of freedom for the standard deviation because the mean has already been calculated prior to the calculation of the standard deviation. There are N-2 degrees of freedom for the standard deviation about the regression line because the slope and intercept have already been calculated.	*Quality*
Dehydrator	Equipment used to remove water from the natural gas.	*Petroleum Engineering*
Dehydrator	A separator that removes water from the system fluid.	*Lubrication*
Dehydrogenation	A chemical reaction involving the removal of hydrogen from a compound.	*Material Process*
Dehydrogenation	A reaction in which hydrogen atoms are eliminated from a molecule. Dehydrogenation is used to convert ethane, propane, and butane into olefins (ethylene, propylene, and butenes).	*Petroleum Engineering*
Dejonge Case	a decision by the U.S. Supreme Court which held that the "peaceable assembly for lawful discussion" was not a crime.	*Industrial Relations*
Delacomania	The process of transferring pictures from a paper support to another surface to be decorated.	*Material Process*
Delaminate	To split a laminated plastics material along the plane of its layers.	*Material Process*
Delamination Wear	A complex wear process where a machine surface is peeled away or otherwise removed by forces of another surface acting on it in a sliding motion.	*Lubrication*
Delaware River Basin Commission (DRBC)	This multi-state agency includes the governors of Pennsylvania, New Jersey, Delaware, and New York on its board. It regulates water withdrawals from the Delaware River as well as effluent into the river. It has been at the center of the debate over drilling in Northeastern Pennsylvania. Recently it issued an executive order halting most drilling in its watershed. It has promised to study the impacts of hydrofracturing and issue new permanent rules, possibly in the fall of 2010.	*Petroleum Drilling*
Delay	This term is often used in place of dead time. See dead time.	*Process Control Engineering*
Delay Allowances	the time factor allowed for unintentional or undue delay caused on the job because of machine or material delay.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Delayed Coking	A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.	*Energy*
Delf-low	the spoil-heap of a mine or shaft (N. Staffs.).	*Mining*
Delignification	The dissolving of the lignin portion of cooling water wood usually by strong alkaline and/or oxidizing agents.	*Chemical Engineering*
Delineation well	A well that extends the boundary of a previously discovered pool.	*Petroleum Engineering*
Delinquent Members	those members of the union who have not paid their dues as of a definite date during the month.	*Industrial Relations*
Deliquescent	To ramify into fine divisions, such as abnormal numbers of buds, twigs, branches, or leaves, e.g., witches' broom development.	*Forestry*
Deliverability	Represents the number of future years during which a pipeline company can meet its annual requirements for its presently certificated delivery capacity from presently committed sources of supply. The availability of gas from these sources of supply shall be governed by the physical capabilities of these sources to deliver gas by the terms of existing gas-purchase contracts, and by limitations imposed by State or Federal regulatory agencies.	*Energy*
Delivered (gas)	The physical transfer of natural, synthetic, and/or supplemental gas from facilities operated by the responding company to facilities operated by others or to consumers.	*Energy*
Delivered cost	The cost of fuel, including the invoice price of fuel, transportation charges, taxes, commissions, insurance, and expenses associated with leased or owned equipment used to transport the fuel.	*Energy*
Delivered energy	The amount of energy delivered to the site (building); no adjustment is made for the fuels consumed to produce electricity or district sources. This is also referred to as net energy.	*Energy*
Deliveries (electric)	Energy generated by one system and delivered to another system through one or more transmission lines.	*Energy*
Deliveries of fuel to an electric plant	Deliveries of fuel to an electric plant	*Energy*
Delivering Party	The entity supplying the capacity and/or energy to be transmitted at Point(s) of Receipt.	*Energy*
Delivery	The volume of fluid discharged by a pump in a given time, usually expressed in gallons per minute	*Mechanical, Process, and Operations*
Delivery drift	when water is pumped up a shaft it was not usually lifted higher than was necessary ; it was delivered into a drift or adit driven from low ground into the shaft. This is called a delivery or off-take drift.	*Mining*
Delivery Terms	Conditions in a contract that relate to carrier and routing, freight charges, place of delivery, time of delivery, etc.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Delocalized electron molecule	An electron equally probable to be associated with any of a large number of adjacent atoms.	*Material Process*
Delph rags, pit rags or pit clothes	the dirty clothes used by the miner for working underground.	*Mining*
Delph, a quarry or mine.	Delph, a quarry or mine.	*Mining*
Delta	Change. A specific "Delta-P," or a pressure differential across a filter surface, is the trigger for self-cleaning in many sophisticated filtration systems.	*Filtration*
Delta layer	the second layer of zinc-iron alloy growth from the base steel formed during the galvanizing process; the Delta layer's chemical composition is approximately 90% zinc and 10% iron; the Delta layer is 60% harder than the base steel it protects from abrasion and corrosion	*Materials Process*
DELTA P (^P)	DELTA P (^P) - See "Differential Pressure," "Pressure Drop."	*Mechanical*
Delta-P	Differential Pressure. The inlet pressure (Pl) minus the outlet pressure (P2).	*Industrial Engineering*
Delta-Sigma	An analog-to-digital converter (ADC) architecture consisting of a 1-bit ADC and filtering circuitry which over-samples the input signal and performs noise-shaping to achieve a high-resolution digital output. The architecture is relatively inexpensive compared to other ADC architectures. Sometimes called a "sigma-delta" converter.	*Electrical Engineering*
Delver, a miner or quarrier. (Yorks.)	Delver, a miner or quarrier. (Yorks.).	*Mining*
Demand	The amount of electricity that a customer uses at any given moment or averaged over period of time. Demand is usually in expressed in kilowatts or Megawatts. The primary source of demand is the power-consuming equipment of customers.	*Energy*
Demand (electric)	The rate at which electric energy is delivered to or by a system, part of a system, or a piece of equipment. Demand is expressed in kW, kVA, or other suitable units at a given instant or over any designated period of time. The primary source of "demand" is the power-consuming equipment of the customers.	*Energy*
Demand bid	A bid into the power exchange indicating a quantity of energy or an ancillary service that an eligible customer is willing to purchase and, if relevant, the maximum price that the customer is willing to pay.	*Energy*
Demand Billing	The electric capacity requirement for which a large user pays. It may be based on the customer's peak demand during the contract year, on a previous maximum or on an agreed minimum. It is measured in kilowatts.	*Energy*
Demand Charge	The sum to be paid by a large electricity consumer for its peak usage level.	*Energy*
Demand charge credit	Compensation received by the buyer when the delivery terms of the contract cannot be met by the seller.	*Energy*
Demand Controller	An electrical, mechanical, or electromechanical device or system that monitors the customer demand and causes that demand to be leveled and/or limited.	*Energy*
Demand flow scheduling systems	Software systems designed to optimize demand-based manufacturing techniques.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Demand indicator	A measure of the number of energy-consuming units, or the amount of service or output, for which energy inputs are required.	*Energy*
Demand interval	The time period during which flow of electricity is measured (usually in 15-, 30-, or 60-minute increments.)	*Energy*
Demand Ratchet	This is the minimum billing demand based upon a given percentage of the actual demand use, recorded during the last eleven months of demand history.	*Energy*
Demand response programs	Demand response programs are incentive-based programs that encourage electric power customers to temporarily reduce their demand for power at certain times in exchange for a reduction in their electricity bills. Some demand response programs allow electric power system operators to directly reduce load, while in others, customers retain control. Customer-controlled reductions in demand may involve actions such as curtailing load, operating onsite generation, or shifting electricity use to another time period. Demand response programs are one type of demand-side management, which also covers broad, less immediate programs such as the promotion of energy-efficient equipment in residential and commercial sectors.	*Energy*
Demand Side Management (DSM)	Processes and investments in equipment made by power companies and commercial customers to reduce the customers' "demand" for electricity or to shift the customers use away from periods of high electrical demand.	*Energy*
Demand See Energy demand	Demand: See Energy demand.	*Energy*
Demand-metered	Having a meter to measure peak demand (in addition to total consumption) during a billing period. Demand is not usually metered for other energy sources.	*Energy*
Demand-response	The term demand-response refers to a variety of technologies required to make demand for electricity more responsive to the supply available. As utilities generate more electricity from intermittent sources of energy such as wind and solar, demand-response technologies are needed to help consumers use power when it is plentiful and reduce their consumption when there is less available.	*Electrical*
Demand-Side Management (DSM)	A technology or program that encourages customers to use electricity differently.	*Energy*
Demand-side management costs	The costs incurred by the utility to achieve the capacity and energy savings from the Demand-Side Management Program. Costs incurred by customers or third parties are to be excluded. The costs are to be reported in thousands of dollars (nominal) in the year in which they are incurred, regardless of when the savings occur. The utility costs are all the annual expenses (labor, administrative, equipment, incentives, marketing, monitoring and evaluation, and other incurred by the utility for operation of the DSM Program), regardless of whether the costs are expensed or capitalized. Lump sum capital costs (typically accrued over several years prior to start up) are not to be reported. Program costs associated with strategic load growth activities are also to be excluded.	*Energy*
Demarcation Dispute	the name for a jurisdictional dispute among British unions.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Deming regression	An alternate regression calculation that can be employed when ordinary linear regression may not be reliable. This technique takes into account the imprecision of both the test and comparative methods. When the analytical range of comparison results is narrow, ordinary linear regression may give a slope that is too low and a y-intercept that is too high. The correlation coefficient is used as a practical measure of when alternate regression techniques should be applied. When r is less than 0.99 or 0.975, depending on the source of the recommendation, Deming regression or Passing-Bablock regression should be used instead of ordinary linear regression.	*Quality*
Democracy	term generally applied to political government where control and power rests in the majority of the people.	*Industrial Relations*
Demonstrated reserve base (coal)	A collective term for the sum of coal in both measured and indicated resource categories of reliability, representing 100 percent of the in-place coal in those categories as of a certain date that meet specific minability criteria. Includes beds of bituminous coal and anthracite 28 or more inches thick and beds of subbituminuous coal 60 or more inches thick that can occur at depths of up to 1,000 feet. Includes beds of lignite 60 or more inches thick that can be surface mined. Includes also thinner and/or deeper beds that presently are being mined or for which there is evidence that they could be mined commercially at a given time. Represents that portion of the identified coal resource from which reserves are calculated.	*Energy*
Demonstrated reserves	Demonstrated reserves: See Energy reserves.	*Energy*
Demonstrated resources	Same qualifications as identified resources, but include measured and indicated degrees of geologic assurance and excludes the inferred.	*Energy*
Demonstration	The application and integration of a new product or service into an existing or new system. Most commonly, demonstration involves the construction and operation of a new electric technology interconnected with the electric utility system to demonstrate how it interacts with the system. This includes the impacts the technology may have on the system and the impacts that the larger utility system may have on the functioning of the technology.	*Energy*
Demonstration and test vehicles	Vehicles operated by a motor vehicle dealer solely for the purpose of promoting motor vehicle sales or permitting potential purchasers to drive the vehicle for pre-purchase or pre-lease evaluation; or a vehicle that is owned and operated by a motor vehicle manufacturer or motor vehicle component manufacturer, or owned or held by a university research department, independent testing laboratory, or other such evaluation facility, solely for the purpose of evaluating the performance of such vehicles for engineering, research and development, or quality control reasons.	*Energy*
Demotion	the process of moving an employee to a position lower in the wage scale on in rank.	*Industrial Relations*
Demulsibility	A measure of a fluid's ability to separate from water.	*Lubrication*
Demulsifier	An additive that promotes oil-water separation in lubricants that are exposed to water or steam	*Lubrication*
Demurrage	The charge paid to the vessel owner or operator for detention of a vessel at the port(s) beyond the time allowed, usually 72 hours, for loading and unloading.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Denaturant	Petroleum, typically pentanes plus or conventional motor gasoline, added to fuel ethanol to make it unfit for human consumption. Fuel ethanol is denatured, usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent denaturant. See Fuel Ethanol, and Fuel Ethanol Minus Denaturant.	*Energy*
Denaturants	Toxic or noxious components used in fuel ethanol to make it unfit for use as a beverage.	*Lubrication*
Denatured	Fuel ethanol that is rendered unfit for human consumption by the addition of a petroleum denaturant, typically pentanes plus or conventional motor gasoline. Fuel ethanol is usually denatured prior to transport from the ethanol production facility, by adding 2- to 5-volume-percent denaturant.	*Energy*
Denatured ethanol, and other alcohols	denatured ethanol, and other alcohols	*Energy*
Dendritic structure	A nonequilibrium microstructure from casting.	*Material Process*
Denier	1) A unit of yarn number. The number of unit weight of 0.005g per 450 meter length. 2) A yarn numbering system based on denier units. A denier is equal numerically to the number of grams per 9000 meters.	*Material Process*
Denitrification	The removal of nitrogen from a system. This may be done chemically or biologically.	*Chemical Engineering*
Denitrification	bacterial reduction of nitrite to gaseous nitrogen under anaerobic conditions.	*Chemical*
Dense Wave Division Multiplexing	The technology by which the frequencies of light carried on a single optical fiber are subdivided into discrete wavelengths, allowing for the greater transmission of data.	*Electrical Engineering*
Density	the amount of mass per unit volume.	*Chemical*
Density	The weight per unit volume of a substance.	*Electrical*
Density (Specific Gravity)	Density measures a material's weight or compactness. It changes as temperatures fluctuate. Fluids with a higher density typically transfer heat more efficiently than fluids that are less dense. Density is sometimes expressed as specific gravity, a dimensionless value that has no unit of measure. It refers to the ratio of a fluid's weight in comparison to water. For example, a material with a spec gravity of less than 1 would be considered less dense than water and would therefore float in water.	*Lubrication*
Density Mass per unit volume	Density Mass per unit volume.	*Material Process*
Dents	Small indentations is molded plastics usually caused bulges in the mold or pressing plate.	*Material Process*
Denudation	Rocks laid bare by running water or other agencies.	*Mining*
DEOAP	Diesel Engine Oil Advisory Panel (API/EMA)	*Petro-Chemical Abbreviations*
Deodorant	A product for destroying, masking or eliminating offensive odors.	*Chemistry*
Deoxyribonucleic acid (DNA)	Carrier of genetic information.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Departing Member	A member consumer served at retail by an electric cooperative corporation that has given notice of intent to receive generation services from another source or that is otherwise in the process of changing generation suppliers. These persons shall nonetheless remain members of the electric distribution cooperative corporation for purposes of distribution service.	*Energy*
Department of Conservation and Natural Resources (DCNR)	The state agency that issues permits and enacts leasing policy for drilling on state-owned lands. The DCNR does not regulate wells. Currently close to half of all state lands are leased to drillers, including areas designated as wildlife preserves.	*Petroleum Drilling*
Department of Environmental Protection (DEP)	This state agency has permitting and primary regulatory authority over the natural gas industry in the state.	*Petroleum Drilling*
Departmental Seniority	a seniority procedure in a plant which gives employees of greater length of service in the department preference in matters of promotion.	*Industrial Relations*
Departmental Unit	a group within the plant composed of workers in a particular department.	*Industrial Relations*
Dependability	A measure of the degree to which an item is operable and capable of performing its required function at any (random) time during a specified mission profile, given item availability at the start of the mission. (This definition is significantly different from the definition of dependability used by most other US and international organizations dealing with reliability e.g., IEC and SAE. E.g. IEC 50 Chapter 191: "The collective term used to describe the availability performance and its influencing factors: reliability performance, maintainability performance and maintenance support performance." As such, its use is restricted to general descriptions in non-quantitative terms). Dependability is related to reliability; the intention was that dependability would be a more general concept then reliability.	*Reliability Engineering*
Dependable capacity	The load-carrying ability of a station or system under adverse conditions for a specified period of time.	*Energy*
Dependable Capacity	The system's ability to carry the electric power for the time interval and period specified. Dependable capacity is determined by such factors as capability, operating power factor and portion of the load the station is to supply.	*Energy*
Dependent	one who relies on someone else for his support.	*Industrial Relations*
Dependent variable	The outcome or response that results from changes to an independent variable. In a clinical trial, the outcome (over which the investigator has no direct control) is the dependent variable, and the treatment arm is the independent variable. The dependent variable is traditionally plotted on the vertical axis on graphs. Also called: Outcome variable	*Quality Engineering*
Dependent Unionism	a form of union organization described as dependent on the good will of the employer and sponsored or dominated by him.	*Industrial Relations*
Depentanizer	A fractionating column used to remove pentane and lighter fractions from hydrocarbon streams.	*Petroleum Engineering*
Depletable Energy Sources	This includes: 1) electricity purchased from a public utility and 2) energy obtained from burning coal, oil, natural gas or liquefied petroleum gasses.	*Energy*
Deplete	The depletion of additives expressed as an approximate percentage.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Depleted resources	Resources that have been mined; include coal recovered, coal lost in mining, and coal reclassified as subeconomic because of mining.	*Energy*
Depleted storage field	A sub-surface natural geological reservoir, usually a depleted gas or oil field, used for storing natural gas.	*Energy*
Depletion (coal)	The subtraction of both tonnage produced and the tonnage lost to mining from identified resources to determine the remaining tonnage as of a certain time.	*Energy*
Depletion allowance	A term for either (1) a periodic assignment to expense of recorded amounts or (2) an allowable income tax deduction that is related to the exhaustion of mineral reserves. Depletion is included as one of the elements of amortization. When used in that manner, depletion refers only to book depletion.	*Energy*
Depletion factor	The multiplier applied to the tonnage produced to compute depletion. This multiplier takes into account both the tonnage recovered and the tonnage lost due to mining. The depletion factor is the reciprocal of the recovery factor in relation to a given quantity of production.	*Energy*
Depletion	An accounting device, used primarily in tax computations. It recognizes the consumption of an ore deposit, a mine's principal asset.	*Mining*
Deposit	A body of ore distinct from a ledge.	*Mining*
Deposit Corrosion	Localized corrosion under or around a deposit or collection of material on a metal surface. (See also crevice corrosion.)	*Paint and Coatings*
Deposit	Mineral deposit or ore deposit is used to designate a natural occurrence of a useful mineral, or an ore, in sufficient extent and degree of concentration to invite exploitation.	*Mining*
Deposited Metal	Filler metal that has been added during a welding operation	*Maintenance and Repair*
Deposits	Oil-insoluble materials that result from oxidation of the oil and contamination from external sources and settle out in system components as sludge and varnish.	*Lubrication*
Depreciation	Depreciation: See definition for Amortization.	*Energy*
Depreciation and amortization of property, plant, and equipment	The monthly provision for depreciation and amortization (applicable to utility property other than electric plant, electric plant in service, and equipment).	*Energy*
Depreciation	The periodic, systematic charging to expense of plant assets reflecting the decline in economic potential of the assets.	*Mining*
Depreciation, Straight-line	Straight-line depreciation takes the cost of the asset less the estimated salvage value and allocates the cost in equal amounts over the asset's estimated useful life.	*Energy*
Depression	the period during the business cycle when unemployment is extremely high and the economy is at a low productive level.	*Industrial Relations*
Depropanizer	A fractionating column for removing propane and lighter components from liquid streams.	*Petroleum Engineering*
Depth (filter)	A filter medium which primarily retains contaminant within tortuous passages.	*Mechanical, Process, and Operations*
Depth filter	A filter medium that retains contaminants primarily within tortuous passages.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Depth Filter Media	Porous materials which primarily retain contaminants within a tortuous path, performing the actual process of filtration.	*Lubrication*
Depth of cut	the distance that the holing made by a coal cutter jib extends into the seam from the face. With power loading this is called the 'web'.	*Mining*
Depth of deepest production	The depth of the deepest production is the length of the well bore measured (in feet) from the surface reference point to the bottom of the open hole or the deepest perforation in the casing of a producing well.	*Energy*
Depth Of Field	The distance between the closest and farthest point at which a bar code can be scanned. DISCRETE - Symbologies in which intercharacter gaps are not treated as characters.	*Gears*
Depth of Fusion	The distance that fusion extends into the base metal from the surface melted during welding. See Fig. A1.6.	*Maintenance and Repair*
Depth	The word alone generally denotes vertical depth below the surface. In the case of incline shafts and boreholes it may mean the distance reached from the beginning of the shaft or hole, the borehole depth, or the inclined depth.	*Mining*
Deputy, Fireman or Examiner	an underground official in charge of a face or district, or of special work, and usually having certain statutory duties to perform in connection with safety. Sometimes referred to as a 'Chargehand'. Originally they were men who set timber for the safety of the workmen also put in brattice and brattice stoppings. They also draw the props in the workings from places where they were no longer required for further use.	*Mining*
Deputy's district	that part of a mine specified by the manager to be in the charge of a Deputy.	*Mining*
Derate	A decrease in the available capacity of an electric generating unit, commonly due to:	*Energy*
De-rating	Using an item in a way that applies stresses that are below the recommended stress values.	*Maintenance*
Derating Factor	A factor used to reduce a current carrying capacity of a wire when used in other environments from that for which the value was established.	*Electrical*
Deregulation	The elimination of regulation from a previously regulated industry or sector of an industry.	*Energy*
Derivative	The derivative function senses the rate of rise or fall of the system temperature and automatically adjusts the cycle time of the controller to minimize overshoot or undershoot.	*Electronic Process*
Derivative	derivative (rate) control action.	*Electrical Engineering*
Derivative Control	A mode of control using an algorithm which anticipates when a process variable will reach its de- sired control point by sensing its rate of change. This allows a control change to take place before the process variable overshoots the desired control point. See also "Control Action, Derivative (Rate)."	*Electrical Engineering*
Derivative Time	The time difference by which the output of a proportional-derivative (PD) controller leads the controller input when the input changes linearly with time.	*Electrical Engineering*
Dermatitis, Industrial	inflammation of the skin cause by fumes, vapors, irritant dusts, etc.	*Industrial Relations*
Dermatitis	Inflammation of the skin. Repeated contact with petroleum products can be a cause.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Derrick	a temporary three-legged head-frame or headgear for a shaft; or a 'Warwick' anchor prop or anchor girder, a safety girder, a bar or prop to stop a runaway on inclined haulage roads. - see also Bull props.	*Mining*
Derrick	The tower-like structure that houses most of the drilling controls.	*Petroleum Drilling*
Derrickman	The third in command after the driller & assistant driller.	*Petroleum Drilling*
Desal	Short for desalination, the removal of salts from water.	*Filtration*
Desalination	To remove salt and other chemicals from sea water or saline water.	*Petroleum Engineering*
Desalting	Removal of mineral salts (most chlorides, e.g., magnesium chloride and sodium chloride) from crude oil.	*Petroleum Engineering*
Descriptive study	A study that describes characteristics of a sample of individuals. Unlike an experimental study, the investigators do not actively intervene to test a hypothesis, but merely describe the health status or characteristics of a sample from a defined population.	*Quality Engineering*
Desiccant Breather	A device that incorporates a high capture-efficiency filter to help sustain desired cleanliness levels by removing minute particulate matter and by creating low relative humidity levels in the headspace, making condensation and absorption by the lubricant unlikely. When a system is properly fitted with a breather containing drying and filtration media, the contaminant ingression is greatly reduced.	*Reliability Engineering*
Design	to create, fashion, execute, or construct steel according to plan so that it will yield a quality hot-dip galvanized coating	*Materials Process*
Design appraisal	A procedure by which a certifying authority, appointed by the purchaser, appraises the design parameters of the equipment and/or materials they are buying. The supplier shall submit drawings, calculations, and documents as required to the C.A., in conjunction with those normally required for review and acceptance by the purchaser.	*Mechanical*
Design conditions	Defined as the hot water temperature (HWT) cold-water temperature (CWT), water flow and wet-bulb temperature (WBT) in mechanical draft towers. In natural draft towers; HWT, CWT, GPM, WBT plus either dry bulb temperature (DBT) or relative humidity (RH). Allowable noise level also applies to both.	*Facility Engineering*
Design effect	A number that describes how much larger a sample is needed in designs such as cluster randomized trials to achieve the same precision as a simple random sample. It is the ratio of the true variance of a statistic (taking the sampling design into account) to the variance of the statistic for a simple random sample with the same number of cases.	*Quality Engineering*
Design electrical rating (capacity) net	The nominal net electrical output of a nuclear unit, as specified by the utility for the purpose of plant design.	*Energy*
Design Factor	In a wire rope, it is the ratio of the nominal strength to the total working load.	*Wire Rope & Cable*
Design Failure Mode and Effects Analysis	A method for evaluating a design for robustness against potential failures.	*Electrical Engineering*
Design for the environment (DFE)	Design for the environment (DFE)	*Material Process*
Design for assembly	The practice in which ease and cost of assembly is emphasized during the product-design stage.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Design for logistics	The practice in which physical handling and distribution of a manufactured product are emphasized during the product-design stage.	*Quality*
Design for manufacturability	The practice in which ease and cost of manufacturing, as well as quality-assurance issues, are emphasized during the product-design stage.	*Quality*
Design for Manufacturing	A methodology that seeks to simplify a current or a future product design and/or manufacturing process in order to achieve cost savings.	*Reliability Engineering*
Design for procurement	A practice in which product designers work effectively with suppliers and sourcing personnel to identify and incorporate technologies or designs that can be used in multiple products, facilitating the use of standardized components to achieve economies of scale and assure continuity of supply.	*Quality*
Design for quality	The practice in which quality assurance and customer perception of product quality are emphasized as an integral part of the design process.	*Quality*
Design for recycling/ disposal	The practice in which ultimate disposal and recycling of the manufactured product are considered during the product-design stage.	*Quality*
Design for Reliability	A four-phase design process to build reliability into a part, component, or system. The phases are concept, design and development, full-scale development, and operational.	*Reliability Engineering*
Design for Six Sigma	DFSS is an approach used to design or redesign a product or service from the ground up, building in high levels of quality, reliability and performance.	*Reliability Engineering*
Design for Testability	Design For Testability (or Design for Test, or DFT) refers to design techniques that make products easier to test. Examples include the addition of test points, parametric measurement devices, self-test diagnostics, test modes, and scan design.	*Electrical Engineering*
Design Form Of Thread	The design form of an internal or external thread is the thread form in its maximum metal condition. It is the same as the basic thread profile except that the thread roots are rounded. If either the internal or external thread form exceeds the design form of the thread profile then a potential interference exists.	*Maintenance*
Design head	The achieved river, pondage, or reservoir surface height (forebay elevation) that provides the water level to produce the full flow at the gate of the turbine in order to attain the manufacturer's installed nameplate rating for generation capacity.	*Energy*
Design limit	The limit of normal operation of a system which if exceeded the system is bound to malfunction or fail.	*Reliability Engineering*
Design of experiments	An experimental design methodology that enables process designers to determine optimum product/process parameters by conducting a limited number of experiments involving combinations of variables. The usual objective is to determine which variables in a complex process are most critical for quality control - or those that can be most easily changed to reduce overall process variance.	*Quality*
Design parameter	Material property that serves as the basis for selecting a given engineering material for a given application.	*Material Process*
Design ruggedization	Design ruggedization. See Accelerated Life Testing.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Design selection	Method for corrosion prevention, for example, avoid a small area anode next to a large area cathode.	*Material Process*
Design validation	This is a process in which a series of tests are performed to verify that a design meets its specification. The test will normally include performance verification under particular environmental test conditions and usually excludes accelerated stress tests.	*Reliability Engineering*
Designated Agent	An agent that acts on behalf of a transmission provider, customer or transmission customer as required under the tariff.	*Energy*
Designated comparison method, DCM	"A fully specified method, which, in the absence of an NRSCL-credentialed reference method, serves as the common basis for the comparison of 'field' reference materials and methods, and for the development of principal assigned values (PAVs) or principal assigned characteristics (PACs)." [CLSI]	*Quality*
Designated Products	Products that are or can be made from recovered materials that have been designated in the CPG through EPA's formal rulemaking process. Also referred to as "designated items."	*Environmental Engineering*
Designer	Responsible for ensuring that the engineering design of piping	*Maintenance and Repair*
De-silting sump	The area in the cold water basin, usually at a low point, where silt can be flushed to a drain.	*Facility Engineering*
Desorption	Opposite of absorption or adsorption. In filtration, it relates to the downstream release of particles previously retained by the filter.	*Oil Analysis*
Destructive distillation	Distillation of a product at high temperatures to cause chemical changes in the original material or in its vapors so that the substances collected as a result of the distillation are decomposition products not present in the original material.	*Material Process*
Desulfurization	The removal of sulfur, as from molten metals, petroleum oil, or flue gases.	*Energy*
DETA	diethylene triamine	*Petro-Chemical Abbreviations*
Detaching hooks	devices for preventing the cage from falling when severed from the winding rope through overwinding.	*Mining*
Detection bias	Systematic difference between comparison groups in how outcomes are ascertained, diagnosed or verified. Also called: Ascertainment bias	*Quality Engineering*
Detection Limit	General concept meaning "the smalled test value that can be distinguished from zero." Depending on how this is determined experimentally, there are different estimates that can be made. See Limit of Blank (LoB), Limit of Detection (LoD), and Limit of Quantification (LoQ). Older terms that still may be seen are Lower Limit of Detection (LLD), Biological Limit of Detection (LLB), and Functional Sensitivity (FS).	*Quality*
Detection rate	See Sensitivity	*Quality Engineering*
Detectors	Specialized chemical or electronic instruments used to detect mine gases.	*Mining*
Detergent	A substance added to a fuel or lubricant to keep engine parts clean. In motor oil formulations, the most commonly used detergents are metallic soaps with a reserve of basicity to neutralize acids formed during combustion.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Detergent	Synthetic cleaning agent (other than soap) which is useful in physical removal of soils.	*Chemistry*
Detergent Oil	Is a lubricating oil possessing special sludge-dispersing properties usually conferred on the oil by the incorporation of special additives. Detergent oils hold formed sludge particles in suspension and thus promote cleanliness especially in internal-combustion engines. However detergent oils do not contain "detergents" such as those used for cleaning of laundry or dishes. Also detergent oils do not clean already "dirty" engines, but rather keep in suspension the sludge that petroleum oil forms so that the engine remains cleaner for longer period. The formed sludge particles are either filtered out by Oil Filters or drained out when oil is changed.	*Lubrication*
Detergent/Dispersant	An additive package that combines a detergent with a dispersant.	*Lubrication*
Determinant	Any definable factor that effects a change in a health condition or other characteristic.	*Analysis*
Deterministic Jitter	Reproducible jitter within a given system, under controlled conditions. Also known as bounded jitter.	*Electrical Engineering*
Deterministic vibration	A vibration whose instantaneous value at any future time can be predicted by an exact mathematical expression. Sinusoidal vibration is the classic example. Complex vibration is less simple (two or more sinusoids).	*Reliability Engineering*
Detonation	Uncontrolled burning of the last portion (end gas) of the air/fuel mixture in the cylinder of a spark-ignition engine. Also known as "knock" or "ping."	*Lubrication*
Detonation Gun	A thermal spray process in which the coating material is heated and accelerated to the work piece by a series of detonations or explosions from oxy-fuel gas mixtures.	*Paint and Coatings*
Detonator	A device containing a small detonating charge that is used for detonating an explosive, including, but not limited to, blasting caps, exploders, electric detonators, and delay electric blasting caps.	*Mining*
Developers	the team who drive the headings, (tunnels), to open out a new coalface or working area in the mine i.e. development.	*Mining*
Development	The preparation of a specific mineral deposit for commercial production; this preparation includes construction of access to the deposit and of facilities to extract the minerals. The development process is sometimes further distinguished between a preproduction stage and a current stage, with the distinction being made on the basis of whether the development work is performed before or after production from the mineral deposit has commenced on a commercial scale.	*Energy*
Development costs	Costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering, and storing the oil and gas. More specifically, development costs, depreciation and applicable operating costs of support equipment and facilities, and other costs of development activities, are costs incurred to:	*Energy*
Development drilling	Drilling done to determine more precisely the size, grade, and configuration of an ore deposit subsequent to when the determination is made that the deposit can be commercially developed. Not included are:	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Development mining	Work undertaken to open up coal reserves as distinguished from the work of actual coal extraction.	*Mining*
Development Phase	The phase in which a proven oil or gas field is brought into production by drilling production (development) wells.	*Petroleum Drilling*
Development phase	The phase in which a proven oil or gas field is brought into production by drilling production (development) wells.	*Petroleum Drilling*
Development plan	a plan showing the proposed development of the mine workings, kept for operational purposes.	*Mining*
Development well	A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive. Also see Well.	*Energy*
Developmental	Drilling to delineate the boundaries of a known mineral deposit to enhance the productive capacity of the producing mineral property.	*Energy*
De-vent	To close the vent connection of a pressure control valve permitting the valve to function at its adjusted pressure setting.	*Mechanical, Process, and Operations*
Deviation	The difference between the value of the controlled variable and the value at which it is being controlled.	*General Engineering*
Deviation, System	Deviation, System	*Process Control*
Devil	a forked shaped iron bar that is fixed to the last tub or tram being hauled up an incline. Should the haulage rope break the 'devil' would dig into the floor and prevent the tubs from running away. (Lancs.), also called a 'drag'. –see also bar-hook and bull.	*Mining*
Devitrified	In reference to a material initially in a glassy, or vitreous, sate. Crystallized.	*Material Process*
Devon	The Devon is one of the oldest beef breeds in existence. Some authorities believe the origin of the breed to be prehistoric. These red cattle may have contributed to the Hereford and other British breeds. Originally a dual-purpose (milk and meat) breed, the Devon has evolved over the last half century as a beef-type breed. However, the American Milking Devon Cattle Association maintains the Milking Devon strain, which is unique to America . Devons originated in southwestern England where Romans noted them in 55 B.C. Devons made their way to the United States in 1623, only 131 years after Columbus . Devons are red, varying in shade from a rich deep red to a light red or chestnut.	*Agriculture*
Dew Point	Upon cooling a vapor mixture, this is the point at which droplets of liquid first appear.	*Chemical*
Dewatering	The process of removing water from a coal seam in the vicinity of a producing gas well. Dewatering is required to reduce pressure within the coal seam, which in turn allows the methane gas to be released from the coal.	*Petroleum Engineering*
Dewatering Well	A well not used or intended for use as a source of water for agriculture or human consumption and made, (a) to lower or control the level of groundwater in the area of the well, or (b) to remove materials that may be in the groundwater.	*Petroleum Engineering*
Dewaxing	The removal of wax from petroleum products (usually lubricating oils and distillate fuels) by solvent absorption, chilling, and filtering.	*Petroleum Engineering*
Dewaxing	Removal of wax from a base oil in order to reduce the pour point.	*Lubrication*

Term	Definition	*Industry*
Dexron	General Motors ATF specification	*Petro-Chemical Abbreviations*
Dezincification	A form of pitting corrosion which attacks certain zinc bearing copper-based alloys, often called "yellow brasses", when in contact with sea water or fresh water that is high in oxygen and carbon dioxide. (ASTM B61 and B62 are "red brasses" and not susceptible to dezincification.)	*General Mechanical*
Dezincification	A form of pitting corrosion which attacks certain zinc	*Mechanical*
Dezinfication	Dezinfication selective leaching or parting, was first observed on brasses. The zinc is selectively leached out of the alloy, leaving a brittle, weak, and porous mass. It consists predominantly of copper plus copper oxides.	*Material Process*
DFA	diesel fuel additive	*Petro-Chemical Abbreviations*
d-Galactonic lactone ($C_6H_{10}O_6$)	White crystals, m.p. 91 °C (195.8.°F). Soluble in water and alcohol, slightly soluble in glycerol. Derivates from galactose by partial oxidation, and uses for dentifrices, dentistry, oral preparations and organic synthesis.	*Material Process*
DHIA	Dairy Herd Improvement Association.	*Agriculture*
DHYCA	Direction des Hydrocarbures et des Carburants (French Ministry of Industry)	*Petro-Chemical Abbreviations*
DI	detergent inhibitor	*Petro-Chemical Abbreviations*
Di-(diethyl glycol monoethyl ether) phthalate (C6H4(COOCH2CH2OCH2CH2OC2H5)2)	A colorless liquid, a plasticizer, also known as Di-Carbitol phthalate.	*Material Process*
Diabase	A common basic igneous rock usually occurring in dykes or sills.	*Mining*
Diacetone alcohol	A solvent both a ketone and an alcohol.	*Material Process*
Diafiltration	A crossflow filtration process allowing for the transfer of low molecular weight species, water and/or solvents through a membrane without changing the solution volume. This process is used for purifying retained large molecular weight species, increasing the recovery of low molecular weight species, buffer exchange and simply changing the properties of a given solution.	*Pollution Engineering*
Diagnostics	Information extracted from a device or sensor that can be used to troubleshoot or diagnose a problem.	*Mechanical*
Diagonal	(See also Cross Struts for Natural Draft Tower) A framework member; a load bearing member transmitting forces at other than a right angle with reference to columns or horizontal ties. Also known as Brace.	*Facility Engineering*
Diagram	A drawing which illustrates pertinent characteristics, component positions, sizes, inter- connection, controls and actuation of components and fluid power circuits.	*Mechanical, Process, and Operations*
Diagram, Combination	A drawing utilizing a combination of graphical, cutaway and pictorial symbols showing interconnected lines.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diagram, Cutaway	A drawing showing principle internal parts of all components, controls and actuating mechanisms, all interconnecting lines and functions of individual components.	*Mechanical, Process, and Operations*
Diagram, Graphical (schematic)	A drawing showing each piece of apparatus including all interconnecting lines by means of approved ANSI or ISO standard symbols.	*Mechanical, Process, and Operations*
Diagram, Pictorial	A drawing showing each component in its actual shape according to the manufacturer's installation drawings.	*Mechanical, Process, and Operations*
Dial	an early name of the surveyor's principal surveying tool, hence the term 'dialers' for surveyors.	*Mining*
Dialer	mine surveyor or surveyor's assistant; also called a 'Latcher' (S. Staffs.).	*Mining*
Dialing	mine surveying, also known as 'latching'.	*Mining*
Diallyl Phthalate (DP)	DAP can be made in both polymeric and monomeric form. As a polymer, it is used to produce casting resins, thermosetting molding powders, and laminates.	*Material Engineering*
diam	Diameter	*General*
Diamagnetism	Magnetic behavior associated with a relative permeability of slightly less than one.	*Material Process*
Diameter	A line segment which passes through the center of a circle and whose end points lie on the circle. As related to wire rope it would be the diameter of a circle which circumscribes the wire rope.	*Wire Rope & Cable*
Diameter at Breast Height (DBH)	The diameter of a tree measured in inches at breast height 4.5 feet above the ground.	*Forestry*
Diameter limit cutting	A selection method in which all marketable trees at or above a specified diameter are harvested.	*Forestry*
Diametral Pitch	Pitch: The ratio of the number of teeth to the number of inches of pitch diameter-equals number of gear teeth to each inch of pitch diameter. Normal Diametral Pitch is the diametral pitch as calculated in the normal plane and is equal to the diametral pitch divided by the cosine of the helix angle.	*Mechanical Engineering*
Diamond	an allotropic form, highly crystalline form of carbon that is the hardest known material. Also considered to be a girl's best friend. See 'dog' for man's best friend.	*Physics*
Diamond Concentration	the amount of diamond within a given volume of the matrix.	*Petroleum Drilling*
Diamond cubic	Important crystal structure for covalently bonded, elemental solids.	*Material Process*
Diamond drill	A rotary type of rock drill that cuts a core of rock that is recovered in long cylindrical sections, two cm or more in diameter.	*Mining*
Diamond drill	A rotary type of rock drill in which the cutting is done by abrasion rather than percussion. The cutting bit is set with diamonds and is attached to the end of long hollow rods. The drill cuts a core of rock which is recovered in long cylindrical sections, an inch or more in diameter.	*Mining*
Diamond driller	A person who operates a diamond drill.	*Mining*
Diamond Pyramid Number	(DPN) system of assigning values to metals quantifying their hardness	*Materials Process*
Diamond Size	expressed in diamond mesh sizes.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diamond	The hardest known mineral, composed of pure carbon; low-quality diamonds are used to make bits for diamond drilling in rock.	*Mining*
Diamond-like Carbon	A thin carbon-based coating applied by either PVD or PACVD. It has high hardness and low friction.	*Paint and Coatings*
Diamyl naphthalene (C10H6(C5H11)2)	A colorless liquid, a plasticizer.	*Material Process*
Diamyl nitrosamine A solvent-amine	Diamyl nitrosamine A solvent-amine.	*Material Process*
Diamyl phthalate (C10H4(COOC5H11)2)	Diamyl phthalate (C10H4(COOC5H11)2)	*Material Process*
Diapause	Suspended development or hibernation in insects.	*Agriculture*
Diaphragm	The sensing element consisting of a membrane which is deformed by the pressure differential applied across it.	*Electronic Process*
Diaphragm	The membrane of material that remains after etching a cavity into the silicon sensing chip. changes in input pressure cause the diaphragm to deflect.	*Electrical Engineering*
Diaphragm Actuator	Is a fluid (usually pneumatic) pressure-operated, spring-opposed diaphragm assembly which positions the valve stem in response to an input signal.	*Industrial Engineering*
Diaphragm Pressure	See bench set.	*Industrial Engineering*
Diatomaceous Earth	A light-colored, soft, siliceous (a loose, soft, porous, fine-grained sediment) earth composed of the shells of diatoms, a form of algae. Some deposits are of lake origin, the largest are marine.	*Petroleum Engineering*
Diatomaceous earth (infusorial earth, kieselguhr, and tripoli)	a fine powder composed of siliceous skeletons of diatoms, apparent density 0.24 to 0.34 g/cm^3 used as filler for plastics.	*Material Process*
Diatoms	Algae with siliceous shell enclosing them, origin of diatomaceous earth.	*Material Process*
Diazinon	An organophosphate insecticide.	*Agriculture*
Dib hole	the lowest part of a pit shaft below the scaffold on which the cage rests. It forms a lodge to hold the water draining out of the mine. - see also Sump. (Lancs.).	*Mining*
Dibutoxy ethyl phthalate (C6H4(COO C2H4OC5H9)2)	A colorless liquid, a plastificizer, also known as Dibutyl Cellosolve phthalate and Kronisol.	*Material Process*
Dibutyl phthalate (CH(COOC4H9)2)	A colorless oily liquid. An important plasticizer for cellulose nitrate and other cellulose derivatives.	*Material Process*
Dibutyl succinate (C12H14O3 (OCO(CH3)8)	A colorless liquid.	*Material Process*
Dibutyl tartrate (C4H9OCO(CHOH)2 COOC4H9)	A good plasticizer for cellulose acetate.	*Material Process*
Dichlooethane or ethylene chloride	1,2 Dichlooethane or ethylene chloride (CH2ClCH2Cl) A colorless liquid, ordinary organic solvent A liquid that reacts with alkali polysulfides to form a rubberlike material (Thiokol).	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dichotomous data	Data that can take one of two possible values, such as dead/alive, smoker/non-smoker, present/not present. (Also called binary data.) Sometimes continuous data or ordinal data are simplified into dichotomous data (e.g. age in years could become <75 years or ≥75 years).Also called: Binary data	*Quality Engineering*
Dicot	Seeds that have two cotyledons.	*Agriculture*
Dictatorship of the Proletariat	the term which implies control of the means of production by the workers.	*Industrial Relations*
Division of Labor	the process whereby a production problem is broken down to its component operations.	*Industrial Relations*
Dicyanodiamide (NH2C(NH)NHCN Rhombic leaflets	A compound prepared from calcium cyanamide and water, and in the production of melamine, which in turn is used for melamine formaldehyde plastics.	*Material Process*
Dieldrin	A chlorinated hydrocarbon insecticide.	*Agriculture*
Dielectric	The term dielectric is almost synonymous with electrical insulation, which can be considered the applied form of the dielectric.	*Electrical Engineering*
Dielectric	Electrically insulating material.	*Material Process*
Dielectric strength	The voltage gradient at which a dielectric breaks down and becomes conductive. The voltage that will rupture or puncture the material in question when placed between electrodes of a given size. Expressed in volts per millimeter.	*Material Process*
Dielectric breakdown	The electric potential required to puncture the material.	*Material Process*
Dielectric breakdown	The voltage at which a dielectric material is punctured; which is divisible by thickness to give dielectric strength.	*Electrical*
Dielectric Constant	Related to the force of attraction between two opposite charges separated by a distance in a uniform medium.	*General Engineering*
Dielectric Constant	That property (K) of an insulating material which is the ratio of the parallel capacitance (C) of a given configuration of electrodes with the material as the dielectric, to the capacitance of the same electrode configuration with a vacuum as the dielectric.	*Electrical*
Dielectric Strength	The voltage which an insulating material can withstand before breakdown occurs, usually expressed as a voltage gradient (such as volts per mil).	*Electrical*
Dielectric Tests	1). Tests which consist of the application of a voltage higher than the rated voltage for a specified time for the purpose of determining the adequacy against breakdown of insulating materials and spacings under normal conditions. 2). The testing of insulating materials by application of constantly increasing voltage until failure occurs.	*Electrical*
Diesel Engine	A diesel engine uses heavier weight components than gas engines to handle higher compression ratios. Typically, diesel engines run with greater efficiency and higher torque than similar size gas engines. These attributes lead to better fuel economy and towing performance. Diesel engines do not have spark plugs or carburetors. Instead glow plugs are used to preheat air in the cylinders to ensure easy starts. Once the engine is started, compression heats the fuel in the cylinders for combustion.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diesel fuel	A fuel composed of distillates obtained in petroleum refining operation or blends of such distillates with residual oil used in motor vehicles. The boiling point and specific gravity are higher for diesel fuels than for gasoline.	*Energy*
Diesel fuel system	Diesel engines are internal combustion engines that burn diesel oil rather than gasoline. Injectors are used to spray droplets of diesel oil into the combustion chambers, at or near the top of the compression stroke. Ignition follows due to the very high temperature of the compressed intake air, or to the use of "glow plugs," which retain heat from previous ignitions (spark plugs are not used). Diesel engines are generally more fuel-efficient than gasoline engines but must be stronger and heavier because of high compression ratios.	*Energy*
Diesel-electric plant	A generating station that uses diesel engines to drive its electric generators.	*Energy*
Dieseling	A condition in which gasoline continues to fire after the ignition has been shut off. In late-model engines, dieseling, or run-on, is caused by heat and the unusually high manifold pressure that result from retarding the spark at idle. In fuel-injected cars when the engine is turned off, fuel is automatically shut off, eliminating dieseling.	*Mechanical Engineering*
Diethanolamine	A chemical (C4H11O2N) used to remove H2S from gas streams.	*Petroleum Engineering*
Diethoxyethyl adipate	(C2H5OC2H4 OCO(CH2)4COOC2 H4OC2H5) A colorless liquid, plasticizer.	*Material Process*
Diethoxyethyl phthalate (C6H4(COOC2H4 OC2H5)2)	A plasticizer, also known as Ethox or Di Cellosolve phthalate.	*Material Process*
Diethyl adipate (CH2COOC2H5)2)	A colorless liquid, a plasticizer.	*Material Process*
Diethylene glycol propionate (CH3CH2 COOCH2CH2)2 O	A colorless liquid, plasticizer. Also, known as K P - 45.	*Material Process*
Diethylene triamine	A colorless liquid. Solvent –amine.	*Material Process*
Difference graph, difference plot	Used here to refer to the display of paired test results in which the differences between the test values and the comparison values are plotted on the y-axis versus the comparison values on the x-axis.	*Quality*
Differential	For an on/off controller, it refers to the temperature difference between the temperature at which the controller turns heat off and the temperature at which the heat is turned back on. It is expressed in degrees.	*General Engineering*
Differential	For an on/off controller, it refers to the temperature difference between the temperature at which the controller turns heat off and the temperature at which the heat is turned back on. It is expressed in degrees.	*Electronic Process*
Differential Cost	A difference in cost between any two alternatives. Also see Incremental cost.	*Procurement*
Differential current	The algebraic summation of the current in the torque motor; measured in MA (milliamperes).	*Mechanical, Process, and Operations*
Differential Curve	A curved section of roller conveyor having a conveying surface of two or more concentric rows of rollers. Also referred to as a Split Roller Design.	*Manufacturing*
Differential cylinder	Any cylinder in which the two opposed piston areas are not equal.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Differential flotation	A milling process using the flotation process, by which concentrates are made of each of the various valuable minerals in an ore.	*Mining*
Differential Input	A signal-input circuit where SIG LO and SIG HI are electrically floating with respect to ANALOG GND (METER GND, which is normally tied to DIG GND). This allows the measurement of the voltage difference between two signals tied to the same ground and provides superior common-mode noise rejection.	*General Engineering*
Differential Inputs	Two inputs, where the measured signal is the difference between them. Any voltage common to both is rejected. Differential inputs can reduce noise picked up by the signal leads.	*Reliability Engineering*
Differential Nonlinearity	A specification that appears in data-converter datasheets. In an ideal D/A converter, incrementing the digital code by 1 changes the output voltage by an amount that does not vary across the device's permitted range. Similarly, in an A/D, the digital value ramps smoothly as the input is linearly swept across its entire range. DNL measures the deviation from the ideal. An ideal converter has the code exactly the same size, and a DNL of 0 (zero).	*Electrical Engineering*
Differential Pieve-Rate Plan	a method of wage payment designed to speed up production by providing a higher rate for work performed above the standard and a lower rate of work performed below the standard.	*Industrial Relations*
Differential Pressure	The difference in static pressure between two identical pressure taps at the same elevation located in two different locations in a primary device.	*General Engineering*
Differential pressure (DP)	The difference between the pressure on the influent side of a filter (upstream pressure) and the pressure on the effluent side (downstream pressure). The differential pressure increases as the filter removes contaminants from the process fluid.	*Contamination Control*
Differential pressure indicator	An indicator which signals the difference in pressure between any two points of a system or a component.	*Oil Analysis*
Differential Pressure Indicator	An indicator which signals the difference in pressure between two points, typically between the upstream and downstream sides of a filter element.	*Lubrication*
Differential Pressure Sensor	A sensor which is designed to accept simultaneously two independent pressure sources. The output is proportional to the pressure difference between the two sources.	*Electrical Engineering*
Differential Pressure Valve	A valve whose primary function is to limit differential pressure.	*Lubrication*
Differential Revenue	The difference in revenue between any two alternatives.	*Procurement*
Differential Travel	The distance from the operating point to the release point.	*Electrical Engineering*
Differential, Locking	The same attributes of a standard differential, except that when one wheel is slipping, the most torque is supplied to the wheel with best traction. A locking differential reduces the possibility of a vehicle becoming immobile when one driving wheel loses traction.	*Mechanical Engineering*
Differentiation	Representation in terms of time rate of change. Example: differentiating velocity yields acceleration. In a computer, this is accomplished by multiplying the velocity signal by jΩ, where Ω is frequency multiplied by 2Π.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diffraction geometry	Geometry associated with Bragg's law.	*Material Process*
Diffractometer	An electromechanical scanning device for obtaining an X-ray diffraction pattern of a powder sample.	*Material Process*
Diffuse reflection	Light reflection due to surface roughness.	*Material Process*
Diffuse Scan	A reflective scanning technique in which reflection from a near: by non: shiny surface illuminates the photosensor in the receiver. Sometimes called proximity scan because of the required nearness of the light source and photosensor to reflecting surface. Also used to detect color contrast as in registration control.	*Electrical Engineering*
Diffuser fan	A fan mounted on a continuous miner to assist and direct air delivery from the machine to the face.	*Mining*
Diffuser	The bodywork at the rear underside of the car that controls underbody airflow as it exits the back of the car. A good diffuser generates significant downforce.	*NASCAR*
Diffusion	Blending of a gas and air, resulting in a homogeneous mixture. Blending of two or more gases.	*Mining*
Diffusion	the process by which molecules in a single phase equilibrate to a zero concentration gradient by random molecular motion (Brownian motion). The flux of molecules is from regions of high concentration to low concentration and is governed by Fick's Second Law.	*Chemical*
Diffusion Coating	An alloy coating produced by applying heat to one or more coatings deposited on a basis metal.	*Paint and Coatings*
Diffusion coefficient (diffusivity)	Proportionality constant in the relationship between flux and concentration gradient.	*Material Process*
Diffusion deck	A fill deck that is located directly under the distribution basin or nozzle bank. The purpose of this deck is to receive water from the basin or nozzle and distribute it uniformly over the fill decks.	*Facility Engineering*
Diffusion layer	Fictitious layer in a fluid close to a solid surface where a chemical reaction takes place. The flux of species perpendicular to the surface in this layer is dominated by diffusion.	*Chemical*
Diffusional transformation	Phase transformation that is essentially time independent, due to a mechanism of atomic diffusion.	*Material Process*
Diffusionless transformation	Phase transformation that is essentially time independent, due to the absence of a diffusional mechanism.	*Material Process*
Diffusive transport	The process by which particles of liquids or gases move from an area of higher concentration to an area of lower concentration.	*Energy*
Dig	To form or excavate (a hole, tunnel, etc.) by removing material.	*Civil Engineering*
Dig	To form or excavate (a hole, tunnel, etc.) by removing material.	*Civil Engineering*
Digest	To soften substance by heat and moisture, sometimes under pressure, in order to remove certain substances from vegetable products.	*Material Process*
Digester	A strong closed vessel in which substances are heated under pressure, usually with water or other liquid, in order to change them physically and often chemically.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diggings	Name applied to placers being worked.	*Mining*
Digit	A measure of the display span of a panel meter. By convention, a full digit can assume any value from 0 through 9, a 1/2-digit will display a 1 and overload at 2, a 3/4-digit will display digits up to 3 and overload at 4, etc. For example, a meter with a display span of ±3999 counts is said to be a 3-3/4 digit meter.	*General Engineering*
Digital	Digital devices transmit in bits, i.e. a series of binary numbers, to other parts of the system.	*Control Engineering*
Digital	Of or pertaining to the general class of devices or circuits whose output varies in discrete steps (i.e., pulses or "on-off" characteristics).	*Mechanical, Process, and Operations*
Digital Circuit	A circuit that has only two stable states, operating in the manner of a switch; that is, it is either On or Off.	*Electrical Engineering*
Digital Computer	An electronic machine for performing calculations on discrete quantities of data. Usually includes bulk storage devices such as disks, tape units, etc., in addition to internal memory. Also includes devices for printing and/or displaying output data.	*Electrical Engineering*
Digital Multimeter	Measuring instrument or VOM with a digital display. Example: Voltage, resistance, current	*Electrical Engineering*
Digital Multimeter	Measuring instrument or VOM with a digital display. Example—Voltage, resistance, current	*Electrical Engineering*
Digital Output	Output that is of only two stable states, appearing in the manner of a switch; that is, it is either On or Off or High or Low (i.e., high voltage or low voltage).	*Electrical Engineering*
Digital Position Sensor	A type of position sensor whose voltage output has only two states.	*Mechanical*
Digital Signal Processor	A Digital Signal Processor, or DSP, is a special-purpose digital circuit that acts on digitized signals, such as audio. DSP circuits can replace traditional analog functions, such as filtering and more complex functions that are difficult to accomplish in the analog domain.	*Electrical Engineering*
Digital Subscriber Line Access Multiplexer	A device which takes a number of ADSL subscriber lines and concentrates these to a single ATM line.	*Electrical Engineering*
Digital-to-Analog (D/A or DAC)	A device or circuit to convert a digital value to an analog signal level.	*General Engineering*
Digital-to-analog converter	A data converter, or DAC, that receives digital data (a stream of numbers) and outputs a voltage or current proportional to the value of the digital data.	*Electrical Engineering*
Di-hydroxyethyl aniline	Solvent-amine.	*Material Process*
DII	diesel ignition improver	*Petro-Chemical Abbreviations*
Di-isopropanolamine	Di-isopropanolamine A colorless liquid, solvent-amine.	*Material Process*
Dike	An embankment for controlling or holding back the waters of the sea or a river. Example: They built a temporary dike of sandbags to keep the river from flooding the town. A bank of earth formed of material being excavated. A causeway. To furnish or drain with a dike. To enclose, restrain, or protect by a dike: Example: to dike a tract of land.	*Civil Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dilatant Liquid	If the viscosity of a liquid increases as agitation is increased at constant temperature, the liquid is termed dilatant. Examples are clay slurries and candy compounds.	*Maintenance and Repair*
Dilly	a counter-balance mounted on a tram used for hauling empties up an incline; or a balance haulage incline. (N. East).	*Mining*
Dilsh	a thin seam of inferior culm (S. Wales).	*Mining*
Diluent	A substance, solid or liquid used to increase bulk of a solution.	*Material Process*
Dilute	To lower the concentration of a mixture; in this case the concentration of any hazardous gas in mine air by addition of fresh intake air.	*Mining*
Dilution	Waste of low grade rock which is unavoidably removed along with the ore in the mining process.	*Mining*
Dilution (mining)	Rock that is , by necessity, removed along with the ore in the mining process, subsequently lowering the grade of the ore.	*Mining*
Dilution (of shares)	A decrease in the value of a company's shares caused by the issue of treasury shares.	*Mining*
Dilution of Engine Oil	Contamination of crankcase oil by unburned fuel, leading to reduced viscosity and flash point. May indicate component wear or fuel system maladjustment.	*Lubrication*
Dilution	The contamination of ore with barren wall rock in stopping.	*Mining*
Diluvium	A deposit of superficial sand, loam, gravel, pebbles, etc.	*Mining*
Dimethyl furan	A solvent furan.	*Material Process*
Dimethyl phthalate (C6H4(COOCH3)2	A colorless liquid. A plasticizer for cellulose acetate and other cellulose derivatives.	*Material Process*
Dimethyl sulfate (CH3)2 SO4	A colorless heavy liquid, almost odorless and very poisonous. A reagent widely used industrially to introduce the methyl group into an organic molecule. It is used in the preparation of methyl cellulose by direct methylation of cellulose.	*Material Process*
Di-methylcyclohexil adipate (CH3C6H10 OCO (CH2)4COOC6H10CH3)	A colorless liquid, a plasticizer. Also, known as Sipalin A O M.	*Material Process*
Dimethylene urea (N(CH2)2CO)	The B-stage urea resin, the formation of which from dimethylol urea in the presence of a catalyst is characterized by a change through a viscous liquid to a gel.	*Material Process*
Dimethylol urea (NHCH2OH)2 CO)	A colorless liquid, the principal ingredient of the A-stage urea resin, formed by the condensation of one molecular proportion of urea with two of formaldehyde.	*Material Process*
Dimple	Small surface depression in plastics. Term not recommended.	*Material Process*
DIN	DIN (Deutsches Institut für Normung) is a non-governmental organization established to promote the development of standardization in Germany and related markets. Their goals are to facilitate the international exchange of goods and services, and to develop cooperation in the spheres of intellectual, scientific, technological and economic activity. Through the European standards organizations CEN and CENELEC, DIN presents the German view of European standards, which is critical to complete the single European market. Over 12,000 DIN standards cover a wide range of topics including: physical quantities and	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	units, fasteners, water analysis, building and civil engineering (including building materials, construction contract procedures (VOB), soil testing, corrosion protection of steel structures), materials testing (testing machines, plastics, rubber, petroleum products, semiconductors), steel pipes, machine tools, twist drills, roller and ball bearings, and process engineering. DIN Handbooks (covering subjects such as mechanical engineering, fasteners, steel, steel pipes, and welding), and most DIN standards are available as English versions, or English translations. (From http://www.cssinfo.com/info/din.html)	
DIN (Deutsche Industrial Norm)	A set of German standards recognized throughout the world. The 1/8 DIN standard for panel meters specifies an outer bezel dimension of 96 x 48 mm and a panel cutout of 92 x 45 mm.	*General Engineering*
DIN (Deutsche Industrial Norm)	A set of German standards recognized throughout the world. The 1/8 DIN standard for panel meters specifies an outer bezel dimension of 96 x 48 mm and a panel cutout of 92 x 45 mm.	*Electronic Process*
DIN 43760	The standard that defines the characteristics of a 100 ohm platinum RTD having a resistance vs. temperature curve specified by a = 0.00385 ohms per degree.	*General Engineering*
DIN 43760	The standard that defines the characteristics of a 100 ohm platinum RTD having a resistance vs. temperature curve specified by a = 0.00385 ohms per degree.	*Electronic Process*
Dinky prop	a small hydraulic prop, also known as a 'Bottle prop'.	*Mining*
Dint or Dinting	to take up the floor that has heaved in order to gain headroom; or to mine the fire-clay after the coal has been removed. – see Baiting, Beating, Beating-up or Blocking-up.	*Mining*
Dintheader	a machine designed to carry out dinting, usually consisting of a wide cutting boom carrying a series of cutting chains, or a continuous deck of hinged plates, incorporating multiple pick holders.	*Mining*
Dioctyl phthalate (C6H4(COOC8H17)2	A colorless liquid insoluble in water. A plasticizer.	*Material Process*
Diode	A two-terminal device that rectifies signals (passes current in only one direction). Most commonly, a semiconductor consisting of a P-N junction, but dioides can also be realized using vacuum tube, point-contact, metal-semiconductor junction (Schottky), and other technologies.	*Electrical Engineering*
Diorite	An intrusive igneous rock composed chiefly of sodic plagioclase, hornblende, biotite or pyroxene.	*Mining*
Di-o-xenyl mono phenyl phosphate (C30H23O4P)	A colorless liquid insoluble in water. A plasticizer, also known as Dow Plasticizer 6.	*Material Process*
Dioxins	General name given to 210 organic compounds containing carbon, oxygen and hydrogen with one to eight chlorine atoms.	*Chemical*
Dioxins	General name given to 210 organic compounds containing carbon, oxygen and hydrogen with one to eight chlorine atoms.	*Chemical Engineering*
Dioxolane	A colorless liquid, solvent–ether.	*Material Process*
DIP	The angle at which a vein, structure or rock bed is inclined from the horizontal, measured at right angles to the strike.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dip face	a coalface advancing downhill.	*Mining*
Dip level	the lowest drift or roadway that follows the strike of the strata. (Scot.).	*Mining*
Dip needle	A compass whose needle is mounted so as to swing in a vertical plane, used for determining the magnetic attraction of rocks.	*Mining*
Dip side	the side dipping downhill away from the point of reference; or the lowest side of a 'room' or 'wall'. Also called the 'laigh side' (Scot.).	*Mining*
Dip Stick	a stick to aid the miner when walking out up a steep roadway or dip.	*Mining*
Dip tube	Extending the blow down valve on large gate valves requires a tube which is located inside of the valve. The tube is called the "dip tube" and extends through the bonnet to the bottom of the body cavity.	*Mechanical*
Diphenyl guanidine or Melaniline (NH C(NHC6H5)2)	Monoclinic needles crystallizing from alcohol. An accelerator in rubber and plastics manufacture.	*Material Process*
Diphenyl mono -o-xenyl phosphate ((C6H5C6H4O)(C6H5O)2PO)	A plasticizer, also known as Dow Plasticizer S.	*Material Process*
Diphenyl phthalate (C6H4(COOC6H5)2)	A plasticizer.	*Material Process*
Dipole	Asymmetrical distribution of positive and negative charge, associated with secondary bonding.	*Material Process*
Dipole force	electrostatic interaction between molecules resulting from alignment of charges	*Physics*
Dipole moment	Product of charge and separation distance between centers of positive and negative charge in a dipole.	*Material Process*
Dipper	a fault that throws down the coal in front of the drift approaching it, a downthrow fault. The same fault approached from the other side would be a 'riser'. (N. East).	*Mining*
Dipropyl phthalate (C6H4(COOC3H7)2)	A colorless liquid. A plasticizer.	*Material Process*
Direct	a haulage system hauling up and lowering down an incline (S. Staffs.).	*Mining*
Direct access	The ability of a retail customer to purchase electricity or other energy sources directly from a supplier other than their traditional supplier.	*Energy*
Direct Access	The ability of a retail customer to purchase commodity electricity directly from the wholesale market rather than through a local distribution utility.	*Energy*
Direct Acting	This term has several different meanings depending upon the device it is describing. A direct-acting actuator is one in which the actuator stem extends with an increase in diaphragm pressure. A direct-acting valve is one with a push-down-to-close plug and seat orientation. A direct-acting positioner or a direct-acting controller outputs an increase in signal in response to an increase in set point.	*Industrial Engineering*
Direct Action	a procedure used by some unions to achieve their aims, rather than by negotiation or use of the machinery or the collective bargaining agreement.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Direct Actuator	Is one in which the actuator stem extends with an increase in diaphragm pressure.	*Industrial Engineering*
Direct Broadcast Satellite	A system which broadcasts directly from satellite to the subscriber (end user). Prominent examples in the US are DirecTV and Dish network.	*Electrical Engineering*
Direct Broadcast Satellite	A system which broadcasts directly from satellite to the subscriber (end user). Prominent examples in the US are DirecTV and Dish network.	*Electrical Engineering*
Direct Contact Method of Training	a procedure used in training supervisory employees.	*Industrial Relations*
Direct control load management	The magnitude of customer demand that can be interrupted at the time of the seasonal peak load by direct control of the system operator by interrupting power supply to individual appliances or equipment on customer premises. This type of control usually reduces the demand of residential customers.	*Energy*
Direct Cost	A cost that can be easily and conveniently traced to the particular cost object under consideration.	*Procurement*
Direct current (DC)	This is electrical current that does not alternate (see Alternating current), the electrons flow through the circuit in one direction. As a result, DC does not generate reactive power (see Reactive Power). This means that, in a DC system, only real (or active) power is transmitted, making better use of the system's capacity. In order to transmit electrical power as DC, the alternating current generated in the power plant must be converted into DC. At the other end of the process, the DC power must be converted back into AC, and fed into the AC-transmission or distribution network. The transmission of DC current has very low losses. In the conversion between the two forms of power, known as rectification, incurs additional power losses and so it is worth while only when these losses are less than would be incurred by AC transmission, i.e., over very long distances (~1000 km for overhead lines, ~100 km for underwater). The other situation in which DC transmission is advantageous is when connecting asynchronous grids, i.e., where adjoining electricity grids have different frequencies (e.g., 50 or 60 Hz, as happens in some parts of Brazil and the United States). (See HVDC.)	*Electrical*
Direct Current (DC)	Electric that flows continuously in the same direction.	*Energy*
Direct Digital synthesis	Is a method for digitally generating analog waveforms, such as sine waves (modulated or not) or arbitrary waveforms.	*Electrical Engineering*
Direct Digital synthesis	Is a method for digitally generating analog waveforms, such as sine waves (modulated or not) or arbitrary waveforms.	*Electrical Engineering*
Direct electricity load control	The utility installs a radio-controlled device on the HVAC equipment. During periods of particularly heavy use of electricity, the utility will send a radio signal to the building in its service territory with this device and turn off the HVAC for a certain period.	*Energy*
Direct Energy Conversion	Production of electricity from an energy source without transferring the energy to a working fluid or steam. For example, photovoltaic cells transform light directly into electricity. Direct conversion systems have no moving parts and usually produce direct current.	*Energy*
Direct Flow Filtration	Filtration in which liquid flows directly through the filter medium.	*Contamination Control*

Term	Definition	*Industry*
Direct Heating	The process of heating where the heat-source comes into direct contact with the item being heated. Conventional ovens and steam cookers are examples of direct heat transfer. See also Indirect Heating	*Industrial*
Direct Labor	an internal control or accounting device to determine or establish cost factors of labor directly involved in the production operation.	*Industrial Relations*
Direct Labor	Those factory labor costs that can be easily traced to individual units of product. Also called touch labor.	*Procurement*
Direct labor hours	Direct labor hours worked by all mining employees at a mining operation during the year. Includes hours worked by those employees engaged in production, preparation, development, maintenance, repair, shop or yard work management, and technical or engineering work. Excludes office workers. Excludes vacation and leave hours.	*Energy*
Direct Load Control	Activities that can interrupt load at the time of peak by interrupting power supply on consumer premises, usually applied to residential consumers.	*Energy*
Direct Materials	Those materials that become an integral part of a finished product and can be conveniently traced into it.	*Procurement*
Direct Memory Access	A scheme which reads or writes data directly to memory, bypassing the processor and the processor bus.	*Electrical Engineering*
Direct Memory Access	A scheme which reads or writes data directly to memory, bypassing the processor and the processor bus.	*Electrical Engineering*
Direct milling cost	Operating costs directly attributable to the processing of ores or other feed materials, including labor, supervision, engineering, power, fuel, supplies, reagents, and maintenance.	*Energy*
Direct mining cost	Operating cost directly attributable to the mining of ore, including costs for labor, supervision, engineering, power, fuel, supplies, equipment replacement, maintenance, and taxes on production.	*Energy*
Direct nonprocess end use	Those end uses that may be found on commercial, residential, or other sites, as well as at manufacturing establishments. They include heating, ventilation, and air conditioning (HVAC), facility lighting, facility support, onsite transportation, conventional electricity generation, and other nonprocess uses. "Direct" denotes that only the quantities of electricity or fossil fuel used in their original state (i.e., not transformed) are included in the estimates.	*Energy*
Direct process end use	Those end uses that are specific to the carrying out of manufacturing. They include process heating, process cooling and refrigeration, machine drive, electrochemical processes, and other process uses. "Direct" denotes that only the quantities of electricity or fossil fuel used in their original state (i.e., not transformed) are included in the estimates.	*Energy*
Direct Sales/Direct Marketing	an exchange in which the producer sells directly to the customer, as in a farmers' market or CSA model. In direct sales, the growers are able to reap 100% of the profits of their labor, and the customer is able to build a relationship with the producer.	*Agriculture*
Direct seeding	Sowing seed for broad coverage from the air or on the ground.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Direct Tension Indicators	Direct Tension Indicators (DTI's) is a term sometimes used to describe load indicating washers. Projections on the face of the washer (usually on the face abuting the bolt head or nut) that deform under loading as the bolt is tensioned. An indication of the tension in the bolt can be made by measuring the gap between the washer face and the nut or bolt head. The smaller the gap - the greater the tension in the bolt. Commonly used in civil rather than mechanical engineering applications.	*Maintenance*
Direct torque control	A drive system (see Drive) that controls the speed of an electric motor, and hence the torque it can produce on a rotating shaft. The drive works by regulating the amount of power the motor draws from the grid. Torque is an angular force that causes rotation, as seen for example in a car's engine, which turns the vehicle's drive shaft.	*Electrical*
Direct use	is exclusive of station use.	*Energy*
Direct Utility Cost	A cost identified with one of the DSM categories.	*Energy*
Direction of Lay	The lateral direction, designated as left-hand or right-hand, in which the wires of a member or units of a conductor run over the top of the member or conductor as they recede from an observer looking along the axis of the member or conductor.	*Electrical*
Directional	Drilling that is deliberately made to depart significantly from the vertical.	*Energy*
Directional (deviated) well	A well purposely deviated from the vertical, using controlled angles to reach an objective location other than directly below the surface location. A directional well may be the original hole or a directional "sidetrack" hole that deviates from the original bore at some point below the surface. The new footage associated with directional "sidetrack" holes should not be confused with footage resulting from remedial sidetrack drilling. If there is a common bore from which two or more wells are drilled, the first complete bore from the surface to the original objective is classified and reported as a well drilled. Each of the deviations from the common bore is reported as a separate well.	*Energy*
Directional control performance	a subjective term or quantitative measure related to overall DLS-variance, and the "closeness" of drilling along the planned well path trajectory.	*Petroleum Drilling*
Directional Control Servo Valve	A directional control valve which modulates flow or pressure as a function of its input signal.	*Lubrication*
Directional Control Valve	A valve whose primary function is to direct or prevent flow through selected passages.	*Lubrication*
Directional Driller	These are highly trained drillers who work alongside the rig's regular drillers to direct the horizontal drilling process. An oil company brings in the directional crew, including the directional driller and MWD (measure while drilling) employees when it is time to deviate the well from vertical and build the "curve" and "lateral" portions of the well. Directional drillers are some of the highest paid service hands in the oilfield, however much is expected of them and the pressure can of the job can be great at times. Directional driller can be abbreviated "DD." If the DD does not build the curve properly or does not keep the well on target, it could cost the company thousands of dollars to correct the problem by drilling another hole.	*Petroleum Drilling*

Term	Definition	*Industry*
Directional drilling	A method of drilling involving the use of stabilizers and wedges to direct the orientation of the hole.	*Mining*
Directional plan view	a plot that displays (North/South, East/West) Cartesian coordinates of a well path projected to a horizontal surface plane; also known as map view.	*Petroleum Drilling*
Directional Stability	The ability of a vehicle to travel in a straight line with a minimum of driver control.	*Mechanical Engineering*
Directional survey	a summary of geometric information--calculated with directional survey data and a directional survey calculational method (e.g., minimum curvature method)--that pertains to spatial properties (e.g., Cartesian coordinates) of a directional well; sometimes synonymous with directional survey data or directional survey station.	*Petroleum Drilling*
Directional survey data	typically refers to the "raw" data acquired at a directional survey station, namely, well bore inclination and azimuth at specific measured depths.	*Petroleum Drilling*
Directional survey station	a reference point that corresponds to a measured depth along the (typically actual) well path where well bore inclination and azimuth are observed/measured and recorded.	*Petroleum Drilling*
Directional valve	A valve which selectively directs or prevents fluid flow to desired channels.	*Mechanical, Process, and Operations*
Directional vertical section view	a plot that displays vertical section versus true vertical depth of a well path. Vertical section is the horizontal distance (departure) of a well path projected to a vertical plane of specific azimuth. The specific azimuth typically coincides with the final target azimuth.	*Petroleum Drilling*
Directional well	a well bore created by drilling directionally.	*Petroleum Drilling*
Director- Business Services	Same as Director - Materiel Management ; Office of the President representative with facilitative, consultative, and coordinative responsibility for the Materiel Management function of the University and administrative responsibility for the Planned Purchasing and Classification and Coding programs.	*Procurement*
Direct-Reduced Iron (DRI)	metallic iron product made from iron ore pellets, lumps or fines that is reduced (by removing only the oxygen) from the ore at a temperature below the melting point of the iron. DRI is used as feedstock in electric-arc furnaces, blast furnaces and in other iron and steel making processes.	*Metallurgy*
Direct-Sequence Spread Spectrum	A transmission technology used in WLAN (wireless LAN) transmissions where a data signal at the sending station is combined with a higher data-rate bit sequence, or chipping code, that divides the user data according to a spreading ratio.	*Electrical Engineering*
Dirt band or Dirt parting	a layer of foreign material in the coal seam, often soft shaley material.	*Mining*
Dirt capacity (dust capacity) (contaminant capacity)	The weight of a specified	*Mechanical, Process, and Operations*
Dirt flinger	a 'gummer' that throws cuttings into the goaf. Also called a 'gum flinger' or 'gum stower'.	*Mining*

Term	Definition	*Industry*
Dirt ruck or Dirt tip	a spoil or waste heap on the surface (N. Staffs.). Also called a 'pit heap', 'tip', or a 'bing' in Scotland.	*Mining*
Dirt, stone or shale	Anything solid other than coal and wood, or any part of the coal measures material with an ash content exceeding 45% ash. Also called 'debris', 'muck', 'redd', 'refuse', 'rubbish', 'spoil' or 'steriles'.	*Mining*
Dirty	Term applied to a plastics piece with foreign particles molded in the surface.	*Material Process*
Dirty air	The rear wing of the car in front tends to push the air higher, creating a very turbulent low-pressure area directly behind the car. At high speeds, downforce can be disrupted by following closely behind another car. A car following closely often will suffer understeer as a result of being in this "dirty air."	*NASCAR*
Dirty coal or Inferior coal	coal with many dirt partings or a high ash content, likely to be sub-economic; or part of a coal seam with an ash content of between 15% and 45% ash.	*Mining*
Dirty locker	the locker in the pit head baths where a miner stores his working clothes between shifts. - see also Clean locker.	*Mining*
Disable	To prevent the output despite an input signal. A wiring terminal for this purpose is provided on most MICRO SWITCH control bases. The disabling circuit may receive its signal from the current sinking output of a photoelectric logic card, or modulated LED control, or from an electromechanical limit switch, etc. Disabling is used to prevent false or unwanted signals from triggering the control.	*Electrical Engineering*
Disabled Veteran	A veteran of the military, naval, or air service of the United States with a service connected disability who is a resident of the State of California . To qualify as a veteran with a service connected disability, the person must be currently declared by the United States Veterans Administration to be 10 percent (10%) or more disabled as a result of service in the armed forces. (California Military and Veterans Code, Article 6, Section 999 et seq)	*Procurement*
Disabled Veteran Business Enterprise (DVBE)	A business that is at least fifty-one percent (51%) owned by one or more disabled veterans or, in the case of any publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by such individuals: and whose management and daily business operations are controlled by one or more of such individuals.	*Procurement*
Disadvantaged Business Enterprise (DBE)	A business concern which is at least fifty-one percent (51%) owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by such individuals and whose management and daily business operations are controlled by one or more of such individuals. Business owners who certify that they are members of named groups (Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent-Asian Americans) are to be considered socially and economically disadvantaged.	*Procurement*
Disaffiliation	the procedure whereby a local union separates from the national or international union of which it is a member.	*Industrial Relations*
Disaggregation	The functional separation of the vertically integrated utility into smaller, individually owned business units (I.e. generation, dispatch/control, transmission, distribution). The terms "deintegration", "disintegration" and "delimitation" are sometimes used to mean the same thing.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Disaster payments	Financial aid paid to farmers and livestock producers who suffer heavy economic losses from natural disasters such as floods, wind and drought. Usually refers to federal funds administered through the U.S. Department of Agriculture.	*Agriculture*
Disc	a device used on a machine to cut the coal.	*Mining*
Disc	The closure element of a globe angle or small regulator valve. The disc (sometimes referred to as "valve," "poppet" or "plug") moves to and from the seat in a direction perpendicular to the seat face. Depends on stem force for tight shutoff.	*Mechanical*
Disc Brakes	Properly called caliper disc brakes, a type of brake that consists of a rotor that rotates at wheel speed, straddled by a caliper that can squeeze the surfaces of the rotor with brake pads near its edge. Disc brakes provide a more linear response and operate more efficiently at high temperatures and during wet weather than drum brakes.	*Mechanical Engineering*
Discard Task	The Removal And Disposal Of Items Or Parts.	*Plant Engineering*
Discharge	When the water reappears above the ground surface. Volume of water that passes a given location within a given period of time.	*Petroleum Engineering*
Discharge	dismissal of an employee.	*Industrial Relations*
Discharge Area	The zone in which groundwater leaves the ground either as a spring or into a water body.	*Petroleum Engineering*
Discharge End	Location at which objects are removed from the conveyor.	*Manufacturing*
Discharge stack	(See also Fan stack) A walled enclosure extending upward above the eliminators to direct exhaust air vertically away from fans in a forced draft tower. See Fan Stack for operation in induced draft towers.	*Facility Engineering*
Discharge Time Constant	The time required for the output-voltage from a sensor or system to discharge 37% of its original value in response to a zero rise time step function input. This parameter determines a low frequency response.	*General Engineering*
Discharge Warning	a notice given to a worker that his services will be terminated if he commits infractions.	*Industrial Relations*
Discharged fuel	Irradiated fuel removed from a nuclear reactor during refueling. Also see Spent Fuel.	*Energy*
Dischargee	a worker who has been discharged.	*Industrial Relations*
Disciplinary Layoff	a temporary removal of a worker from the payroll because of infraction or violation of company rules or policies.	*Industrial Relations*
Discipline	action by an employer, short of discharge, against an employee for infraction of company or contract rules.	*Industrial Relations*
Discoloration	Any change from an initial color possessed by a plastic, a lack of uniformity in color where color should be uniform over the whole area of a plastics object. In the later sense, where they can be applied, use the more definite terms.	*Material Process*
Discontinuity	A lack of continuity or cohesion; an interruption in the normal physical structure of material or a product.	*Maintenance and Repair*
Discount	The minimum price below the par value at which treasury shares may legally be sold.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Discount/Interest Rate	The discount rate is used to determine the present value of future or past cash flows. The rate accounts for inflation and the potential earning power of money.	*Energy*
Discrete (chopped) fiber	Composite reinforcing fiber broken into segments.	*Material Process*
Discrete I/O	Senses or sends either "on or off" signals to the field. For example a discrete input would sense the position of a switch. A discrete output would turn on a pump or light.	*Process Control Engineering*
Discrete Logic	Refers to digital or "on or off" logic. For example, if the car door is open and the key is in the ignition, then the bell rings.	*Process Control Engineering*
Discrete manufacturing	Manufacturing a product by means other than a continuous process. Examples of discrete manufacturing are: 1) Mass production for high volume production of an item at minimum unit cost. Increasingly this involves the use of specialized machines for some or all parts of the manufacturing process. 2) Batch production typically employs general-purpose machines (as opposed to the special purpose machines employed for mass production). 3) Individual production for items required in low volume (typically one-offs), which results in greatly increased unit costs.	*Maintenance*
Discrete Process	A process handling distinct, separate products. The usual example is an automotive factory product line, where each car is a distinct artifact. Discrete processes are in contradistinction to continuous processes handling liquids.	*Control Engineering*
Discrete-delivery energy sources	Energy sources that must be delivered to a site.	*Energy*
Discretion	the nature and the amount of freedom possessed by an employer in the handling of his plant problems.	*Industrial Relations*
Discriminary Discharge	a discharge not based on job performance, but on discriminatory reasons.	*Industrial Relations*
Discrimination	the unequal or unfair application of policy to an individual or group.	*Industrial Relations*
Di-sec-octylamine	A colorless liquid, solvent amine.	*Material Process*
Di-sec-octylaminoeethanol	A solvent—amine.	*Material Process*
Disestablishment	the procedure used by the NLRB to divest an organization of its claim to represent the employees and its status as a labor organization.	*Industrial Relations*
Dish	the section on an underground haulage road where the sets of empties stood before being hauled inbye. (N. East).	*Mining*
Dished	Showing a symmetrical distortion of a flat or curved section of a plastic object, so that as normally viewed, it appears concave or more concave.	*Material Process*
DISI	direct injection spark ignition	*Petro-Chemical Abbreviations*
Disinfectant	An agent that destroys harmful bacteria and/or viruses on inanimate surfaces (except spores). Most common types include Quaternary Ammonium Compounds, Phenolic Compounds, Pine Oil (at least 70%). Products making disinfectant claims must be registered with the Environmental Protection Agency (EPA), and state it on the label with a registered EPA number.	*Chemistry*
Disinfecting	To remove microorganisms from a particular surface or liquid.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Disinfection	A cleaning process which destroys most disease-causing microorganisms (pathogens).	*Petroleum Engineering*
Disintegration	Crumbling or breaking up into the original components.	*Material Process*
Disk	to prepare the soil for planting by cutting the soil with rotating metal disks	*Agriculture*
Disk Operating System (DOS)	Program used to control the transfer of information to and from a disk, such as MS DOS.	*General Engineering*
Dislocation	Linear defect in a crystalline solid.	*Material Process*
Dislocation climb	A mechanism for creep deformation, in which the dislocation moves to an adjacent slip plane by diffusion.	*Material Process*
Dismissal	occasionally used as a synonym for discharge.	*Industrial Relations*
Dispatchability	This is the ability of a generating unit to increase or decrease generation, or to be brought on line or shut down at the request or a utility's system operator.	*Energy*
Dispatching	The operating control of an integrated electric system involving operations such as (1) the assignment of load to specific generating stations and other sources of supply to effect the most economical supply as the total or the significant area loads rise or fall (2) the control of operations and maintenance of high-voltage lines, substations, and equipment; (3) the operation of principal tie lines and switching; (4) the scheduling of energy transactions with connecting electric utilities.	*Energy*
Dispensability	The ease with which a grease can be delivered through its dispensing system to the point of application (see Pumpability and Feedability).	*Lubrication*
Dispersant	A chemical that causes particulates in a water system to remain in or be placed into suspension.	*Chemical Engineering*
Dispersant	In lubrication, a term usually used interchangeably with detergent. An additive, usually nonmetallic ("ashless"), which keeps fine particles of insoluble materials in a homogeneous solution. Hence, particles are not permitted to settle out and accumulate.	*Lubrication*
Dispersion	The spreading and mixing of chemical constituents in groundwater caused by diffusion and mixing due to microscopic variations in velocities with and between pores.	*Petroleum Engineering*
Dispersion	the process by which a substance or chemical spreads and dilutes in flowing groundwater or soil gas.	*Chemical*
Dispersion strengthened metal	An aggregate type composite in which the metal contains less than 15 vol.% oxide particles (0.01 to 0.1 micron in diameter).	*Material Process*
Displacement	A change in position. A displacement may be a translation a rotation or a combination of those.	*Engineering Physics*
Displacement	In an engine, the total volume of air or air-fuel mixture an engine is theoretically capable of drawing into all cylinders during one operating cycle. Generally expressed in liters or cubic inches. Engine displacement is equal to (bore) x (bore) x (stroke) x (number of pistons) x (.785).	*Mechanical Engineering*
Disposable	A filter element intended to be discarded and replaced after one service cycle.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Disposal well	A well, commonly a depleted oil or gas well, into which waste fluids can be injected for safe disposal. Disposal wells require regulatory approvals.	*Petroleum Engineering*
Disposal Well	A well that is typically drilled into a porous rock formation which is nonproductive (of oil or gas) and into which oilfield waste water, such as produced saltwater, is disposed using injection pumps. Disposal wells and facilities are regulated by the Texas Railroad Commission and are used throughout the Eagle Ford Shale to dispose of produced water.	*Petroleum Drilling*
Disposition, natural gas	The removal of natural, synthetic, and/or supplemental gas, or any components or gaseous mixtures contained therein, from the responding company's facilities within the report State by any means or for any purpose, including the transportation of such gas out of the report State.	*Energy*
Disposition, petroleum	A set of categories used to account for how crude oil and petroleum products are transferred, distributed, or removed from the supply stream. The categories include stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.	*Energy*
Dispute	a controversy between an employer and a union.	*Industrial Relations*
Dispute Adjustment	a labor dispute, generally speaking, includes any controversy concerning the terms and conditions of employment.	*Industrial Relations*
Disseminated ore	Ore carrying small particles of valuable minerals spread more or less uniformly through the host rock.	*Mining*
Dissimilar metals	two or more different metals in contact; due to varying surface conductivity, one or more metals may experience accelerated corrosion; because zinc is high in the galvanic series (see Galvanic Series of Metals), it preferentially corrodes to protect most dissimilar metals	*Materials Process*
Dissipation	Unusable or lost energy, as the production of unused heat in a circuit.	*Electrical*
Dissipation Constant	The ratio for a thermistor which relates a change in internal power dissipation to a resultant change of body temperature.	*General Engineering*
Dissociation	A chemical process that causes a molecule to split into simpler groups of atoms, single atoms, or ions. For example, the water molecule breaks down spontaneously into H and OH.	*Petroleum Engineering*
Dissociation Constant (K)	A value which quantitatively expresses the extent to which a substance dissociates in solution. The smaller the value of K, the less dissociation of the species in solution. This value varies with temperature, ionic strength, and the nature of the solvent.	*General Engineering*
Dissociation Constant (K) -	A value which quantitatively expresses the extent to which a substance dissociates in solution. The smaller the value of K, the less dissociation of the species in solution. This value varies with temperature, ionic strength, and the nature of the solvent.	*Electronic Process*
Dissolution	dissolving of a substance in a liquid solvent (e.g., water).	*Chemical*
Dissolved Air	Air which is dispersed in a fluid to form a mixture.	*Lubrication*
Dissolved gases	Total gases dissolved in a liquid.	*Chemical Engineering*
Dissolved solids	Total solids that have been dissolved into a liquid. They may be ionic and/or polar in nature.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dissolved Water	Water which is dispersed in the fluid to form a mixture.	*Lubrication*
Distillate	The liquid obtained through distillation.	*Chemical*
Distillate	The products of distillation formed by condensing vapors.	*Petroleum Engineering*
Distillate fuel oil	A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.	*Energy*
Distillate Fuel Oils	Fuel oils which are products of distillation. They include fuels used for diesel fuel and space heating.	*Petroleum Drilling*
Distillation	The process of boiling a liquid and collecting its condensed vapor. This process is used to purify liquids and to separate liquid mixtures.	*Chemical*
Distillation	The process of boiling a liquid and collecting its condensed vapor. This process is used to purify liquids and to separate liquid mixtures.	*Chemical Engineering*
Distillation method (ASTM D-95)	A method involving distilling the fluid sample in the presence of a solvent that is miscible in the sample but immiscible in water. The water distilled from the fluid is condensed and segregated in a specially-designed receiving tube or tray graduated to directly indicate the volume of water distilled.	*Oil Analysis*
Distillation Range	Distillation range is a measurement of the temperatures within which a liquid distills or boils. It's usually expressed as a percentage of the material that boils between two temperatures. A higher initial boiling point indicates a more thermally stable fluid as well as lower vapor pressures. A narrower boiling range is also more desirable.	*Lubrication*
Distillation unit (atmospheric)	The primary distillation unit that processes crude oil (including mixtures of other hydrocarbons) at approximately atmospheric conditions. It includes a pipe still for vaporizing the crude oil and a fractionation tower for separating the vaporized hydrocarbon components in the crude oil into fractions with different boiling ranges. This is done by continuously vaporizing and condensing the components to separate higher oiling point material. The selected boiling ranges are set by the processing scheme, the properties of the crude oil, and the product specifications.	*Energy*
Distortion	In systems that handle electrical signals, distortion is a generally unwanted change in the signal. Not all signal alterations are considered distortion. For instance, a uniform delay or a linear attenuation or amplification would generally not be considered distortion.	*Electrical Engineering*
Distortion	In systems that handle electrical signals, distortion is a generally unwanted change in the signal. Not all signal alterations are considered distortion. For instance, a uniform delay or a linear attenuation or amplification would generally not be considered distortion.	*Electrical Engineering*
Distortion	Change in shape in a plastics article from the original molded form. Larger forms of waviness and other defects causing the distortion of objects viewed through a transparent plastic.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Distraction or Distortion	the deviation of a coal seam from its natural level. (Yorks.).	*Mining*
Distributed Control System	Any control system in which the degradation or failure of any single element will affect only the control loop, or related loops, in which it operates.	*Electrical Engineering*
Distributed Control System (DCS)	A system customized per facility/organization and designed to meet the total measurement, control and real-time information requirements of today's process plants. A single application to connect to subsystems such as maintenance (CMMS), statistical process control (SPC), and advanced control.	*Reliability Engineering*
Distributed control system (DCS)	Distributed control system (DCS) - A control system that regulates a process (manufacturing, chemical or other) from a series of strategic positions in the processing plant, as opposed to from a single, centralized control unit. Microprocessor-based distributed control systems (DCS) originated in continuous process industries (e.g., refineries). and integrate distributed automation controllers, networks, application servers, workstations and other modules necessary to build a complete automation system.	*Electrical*
Distributed generation	This term refers to electricity generating installations that are scattered across the grid, rather than placed at a central location. They tend to be small-scale generating plants – often operating using renewable fuels. They also include domestic power generators such as roof-top wind turbines and solar panels, and microhydro installations. As more smart technologies are incorporated into the grid, enabling local distribution grids to receive as well as deliver electricity, distributed generation will become an increasingly common feature of our power systems.	*Electrical*
Distributed Generation	A distributed generation system involves small amounts of generation located on a utility's distribution system for the purpose of meeting local (substation level) peak loads and/or displacing the need to build additional (or upgrade) local distribution lines.	*Energy*
Distributed generator	A generator that is located close to the particular load that it is intended to serve. General, but non-exclusive, characteristics of these generators include: an operating strategy that supports the served load; and interconnection to a distribution or sub-transmission system (138 kV or less).	*Energy*
Distributed load	An external force which acts over a region of length, surface, or area: essentially any external force which is not a concentrated force.	*Engineering Physics*
Distributed/point-of-use water-heating system	A system for heating hot water, for other than space heating purposes, which is located at more than one space within a building. A point-of-use water heater is located at the faucet and heats water only as required for immediate use. Because water is not heated until it is required, this equipment is more energy-efficient.	*Energy*
Distribution	The delivery of energy to retail customers.	*Energy*
Distribution basin	A shallow pan-shape basin used to distribute hot water over the tower fill.	*Facility Engineering*
Distribution box	Used in conjunction with the manifold and valve assembly in a crossflow tower to disperse the hot water uniformly in all directions thereby increasing the effectiveness of the distribution nozzles.	*Facility Engineering*
Distribution header	Pipe or flume delivering water from inlet connection to lateral headers, troughs, flumes, or distribution basins.	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Distribution line	A pipeline which distributes gas to the service lines of individual consumers. Most generally it is small in diameter (6 inch and under) and low pressure (under 150 psi).	*Mechanical*
Distribution Line	This is a line or system for distributing power from a transmission system to a customer. It is any line operating at less than 69,000 volts.	*Energy*
Distribution nozzle	(See Nozzle and next entry).	*Facility Engineering*
Distribution Power	A packaged power unit located at the point of demand. While the technology is still evolving, examples include fuel cells and photovoltaic cells.	*Energy*
Distribution provider (electric)	Provides and operates the wires between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the Distribution function at any voltage. NERC definition	*Energy*
Distribution substation	A distribution substation comprises medium-voltage switchgear, transformers and low-voltage distribution equipment. It is used to transfer power from a medium-voltage electricity distribution system to a low-voltage distribution system that serves groups of domestic or industrial consumers.	*Electrical*
Distribution system	The portion of the transmission and facilities of an electric system that is dedicated to delivering electric energy to an end-user.	*Energy*
Distribution System	That part of the electric system that delivers electric energy to consumers.	*Energy*
Distribution transformers	Distribution transformers are used to regulate the supply of power to residential premises, factories and elsewhere. (See also Transformer.)	*Electrical*
Distribution use	Natural gas used as fuel in the respondent's operations.	*Energy*
Distribution Utility (Disco)	The regulated electric utility entity that constructs and maintains the distribution wires connecting the transmission grid to the final customer. The Disco can also perform other services such as aggregating customers, purchasing power supply and transmission services for customers, billing customers and reimbursing suppliers, and offering other regulated or non-regulated energy services to retail customers. The "wires" and "customer service" functions provided by a distribution utility could be split so that two totally separate entities are used to supply these two types of distribution services.	*Energy*
Distribution	The system of wires, switches, and transformers that serve neighborhoods and business, typically lower than 69,000 volts. A distribution system reduces or downgrades power from high-voltage transmission lines to a level that can be used in homes or businesses.	*Energy*
Distributive Power	A packaged power unit located at the point of demand. While the technology is still evolving, examples include fuel cells and photovoltaic applications.	*Energy*
Distributor	A company primarily engaged in the sale and delivery of natural and/or supplemental gas directly to consumers through a system of mains.	*Energy*
Distributor	A component of the ignition system, usually driven by the camshaft that directs high-voltage surges to the spark plugs in the proper sequence.	*Mechanical Engineering*
District	one of the parts into which the mine is divided for the purpose of supervision or ventilation, an underground section of the mine.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
District chilled water	Chilled water from an outside source used as an energy source for cooling in a building. The water is chilled in a central plant and piped into the building. Chilled water may be purchased from a utility or provided by a central physical plant in a separate building that is part of the same multibuilding facility (for example, a hospital complex or university).	*Energy*
District Council	An intermediate form of labor organization between the international and local union.	*Industrial Relations*
District heat	Steam or hot water from an outside source used as an energy source in a building. The steam or hot water is produced in a central plant and piped into the building. The district heat may be purchased from a utility or provided by a physical plant in a separate building that is part of the same facility (for example, a hospital complex or university).	*Energy*
District heating	a district heating system is one that makes use of heat generated at a central location, often in a thermal power plant, to heat water that is then fed through a communal system, delivering heat to homes in the surrounding area.	*Electrical*
Ditchdigger	A power excavating machine designed to remove earth in a continuous line and to a predetermined width and depth, as by means of a rotating belt equipped with scoops.	*Civil Engineering*
Ditched top	a seam where the tops stick to the roof and have to be brought down with a pick. A collier could claim extra pay for this work. - see also Sticky coal.	*Mining*
Dither	A low amplitude, relatively high frequency periodic electrical signal, sometimes superimposed on the servo valve input to improve system resolution. Dither is expressed by the dither frequency (Hz) and the peak-to-peak dither current amplitude (ma).	*Mechanical, Process, and Operations*
Dithering	A common technique to improve digitizing when quantization noise (quantization error/noise) can no longer be treated as random. A small amount of random noise is added to the analog input signal. This added noise causes the digital output to randomly toggle between two adjacent codes, thereby avoiding thresholding effect.	*Electrical Engineering*
Dithering	A common technique to improve digitizing when quantization noise (quantization error/noise) can no longer be treated as random. A small amount of random noise is added to the analog input signal. This added noise causes the digital output to randomly toggle between two adjacent codes, thereby avoiding thresholding effect.	*Electrical Engineering*
Diverging	A section of roller or wheel conveying which makes a connection for diverting articles from a main line to a branch.	*Manufacturing*
Diversity	In radio systems, diversity is a method of improving the reliability and capacity by using multiple communication channels to carry each signal.	*Electrical Engineering*
Diversity	In radio systems, diversity is a method of improving the reliability and capacity by using multiple communication channels to carry each signal.	*Electrical Engineering*
Diversity Exchange	Exchange of capacity or energy between systems that have peak loads occurring at different times.	*Energy*
Diversity Factor	: The ratio of the sum of the non-coincident maximum demands of two or more loads to their coincident maximum demand for the same period.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Diverter	A device used to direct fluids flowing from a well away from the drilling rig.	*Petroleum Engineering*
Divestiture	The stripping off of one utility function from the others by selling (spinning-off) or in most other way changing the ownership of the assets related to that function. Most commonly associated with spinning-off generation assets so they are no longer owned by the shareholders that own the transmission and distribution assets.	*Energy*
Dividend	Cash or stock awarded to preferred and common shareholders at the discretion of the company's board of directors.	*Mining*
Dividend claim	Made when a dividend has been paid to the previous holder because stock has not yet been transferred to the name of the new owner.	*Mining*
Divinyl ether, or vinyl ether(CH2 CH)2 O)	A colorless liquid. A vinyl ether which is readily polymerized to a thermoplastic resin.	*Material Process*
DKA	Deutscher Koordinieungsausschuss	*Petro-Chemical Abbreviations*
DLS	DLS - abbreviation for dogleg severity. (degrees/100 feet or degrees/30 meters)	*Petroleum Drilling*
DLS*	DLS* - planned well bore dogleg severity (e.g., build gradient) at MD*. (degrees/100 feet or degrees/30 meters)	*Petroleum Drilling*
DMA	Acronym direct memory access. A high speed data storage mode of the IBM PC.	*General Engineering*
DMA	DMA - Acronym direct memory access. A high speed data storage mode of the IBM PC.	*Electronic Process*
DMAIC	A methodology that incorporates the following five steps: Define the project goals and customer requirements. Measure the process to determine current performance. Analyze and determine the root cause(s) of the defects. Improve the process by eliminating defect root causes. Control future process performance.	*Reliability Engineering*
DME	dimethyl ether	*Petro-Chemical Abbreviations*
DNA	DNA - Deoxyribonucleic acid.	*Agriculture*
Do It Now (DIN) Work	"Do It Now" means non-emergency work that has to be done immediately. An example is moving furniture in the executive wing.	*Maintenance*
Doak Plan	a plan designed to improve the public employment offices throughout the United States.	*Industrial Relations*
DOC	diesel oxidation catalyst	*Petro-Chemical Abbreviations*
Docket	A formal record of a Federal Energy Regulatory Commission proceeding. These records are available for inspection and copying by the public. Each individual case proceeding is identified by an assigned number.	*Energy*
Docking	deducting from the pay of a worker an amount equal to the penalty imposed.	*Industrial Relations*
Docosane (n) (CH3CH2)20CH3)	Crystals from alcohol. A solvent hydrocarbon.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
DOCP	dispersant olefin copolymer	*Petro-Chemical Abbreviations*
DOD	Department of Defense	*Petro-Chemical Abbreviations*
Doddy	the period of time which has to be worked to be able to claim a quarter of a shift overtime (Leics.).	*Mining*
DOE	DOE: Department of Energy.	*Energy*
Dog	a tool for gripping pipes; or a spring hook attached to the end of the winding rope. Before the advent of the cage, the creels would be clipped directly onto the dog for winding up the shaft. (Scot.); or an iron bar spiked at the ends; or the length of timber across the bottom of the air doors. (N. East); or an iron bar fitted to the last tub being drawn up an inclined road. Should the rope break the dog would dig into the floor and through the tub off the rail. (Lancs.). - see also Devil and Cow. A alternate term also used for 'keps'.	*Mining*
Dog	Something that is not a cat.	*Breakroom*
Dog and chain	An iron bar with a chain attached used for withdrawing props. - see also Ringer and chain.	*Mining*
Dog balls	roughly spheroidal nodules of ironstone, commonly found in the lower horizons of seatearths. (Yorks.).	*Mining*
Dog belt	a leather belt worn around the waist with a chain which passed between the legs for drawing tubs from the workings to the haulage road. (Mids.).	*Mining*
Dog Collar	Dog Collar	*Petroleum Drilling*
Dog Tracking	A condition where the rear wheels do not follow the path of the front wheels.	*Mechanical Engineering*
Dogaskin	A plastic surface with very small irregularities, usually observable only by reflected light at grazing incidence.	*Material Process*
Doggers	irregularly-shaped nodules or concretions, and sometimes a term used for inferior ironstone. (Scot.).	*Mining*
Doggin	a large specially shaped type of nail used for attaching rails to sleepers (S. Staffs.).	*Mining*
Doggy or Doggie	Originally the term was used for the man who hung the corves or creels of coal on the winding rope using a dog clip. Later, in the Midlands, it was a term used for the man who managed all the underground work of a colliery for the butty, or a chargeman responsible for a team of men on a longwall face. (Lancs.).	*Mining*
Doghouse	A small enclosure on the rig floor used as an office or a storehouse for small objects. Also, any small building used as an office or for storage.	*Petroleum Drilling*
Dog-Leg	Permanent bend or kink, in a wire rope, caused by improper use or handling.	*Wire Rope & Cable*
Dogleg severity	a normalized estimate (e.g., degrees/100 feet) of the overall curvature of an actual well path between two consecutive directional survey stations, according to the minimum curvature survey calculational method. With respect to a planned well path, dogleg severity may at times be synonymous with build gradient and/or turn gradient. (degrees/100 feet or degrees/30 meters)	*Petroleum Drilling*
Dogs	another name for 'keps'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dole	The term used in England for public unemployment relief.	*Industrial Relations*
Doll dirt	the soft material found underlying the coal. It was sometimes used for stemming. (Lancs.). - see Dolls.	*Mining*
Dolls	pieces of stemming usually made from brick clay and molded by hand to the same size and shape as a cartridge of explosive.	*Mining*
Dolman	A Turkish woman's cloak or mantle with capelike sleeves	*Breakroom*
Domain	Microscopic region of common electrical dipole alignment, in a ferroelectrical material, or common magnetic moment alignment, in a ferromagnetic material.	*Material Process*
Domain structure	Microstructural arrangement of magnetic domains.	*Material Process*
Dome	In a dam, a semidome having its convex surface toward the impounded water.	*Civil Engineering*
Domed	Showing a symmetrical distortion on a flat or curved section of a plastics object, so that as normally viewed, it appears convex or more convex.	*Material Process*
Domestic	Domestic: See United States.	*Energy*
Domestic crude oil	Crude oil produced in the United States including the Outer Continental Shelf (OCS).	*Energy*
Domestic inland consumption	Domestic inland consumption is the sum of all refined petroleum products supplied for domestic use (excludes international marine bunkers). Consumption is calculated by product by adding production, imports, crude oil burned directly, and refinery fuel and losses, and then subtracting exports and charges in primary stocks (net withdrawals is a plus quantity and net additions is a minus quantity).	*Energy*
Domestic System	generally referred to the putting-out system, which featured work at home.	*Industrial Relations*
Domestic uranium industry	Collectively, those businesses (whether U.S. or foreign-based) that operate under the laws and regulations pertaining to the conduct of commerce within the United States and its territories and possessions and that engage in activities within the United States, its territories, and possessions specifically directed toward uranium exploration, development, mining, and milling; marketing of uranium materials; enrichment; fabrication; or acquisition and management of uranium materials for use in commercial nuclear power plants.	*Energy*
Domestic vehicle producer	An Original Vehicle Manufacturer that assembles vehicles in the United States for domestic use. The term "domestic" pertains to the fifty states, the District of Columbia, common wealths, territories, and possessions of the United States.	*Energy*
Domesticate	to tame and breed for human use	*Agriculture*
Dominant Dead Time Process	If the dead time is larger than the lag time the process is a dominant dead time process.	*Process Control Engineering*
Dominant Lag Process	Most processes consist of both dead time and lag. If the lag time is larger than the dead time, the process is a dominant lag process. Most process plant loops are dominant lag types. This includes most temperature, level, flow and pressure loops.	*Process Control Engineering*
Donkey	a clog sole with the heel removed or a piece of wood with a small metal plate tacked to the bottom. Used by miners as a kind of ski to slide down the tub rail when going down an incline. The men became very adept in their use and could often travel at great speed while squatting down and balancing on one leg. (Lancs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Donkey	A small domestic mammal classified with the asses.	*Agriculture*
Donor level	Energy level near the conduction band in an n-type semiconductor.	*Material Process*
Dooby wagon	a wagon for carting dirt to the colliery tip. (Yorks.).	*Mining*
Dook	a mine or roadway driven to the dip side. Usually the main road going to the dip. (Scot.). - see also Steeps and Crut.	*Mining*
Doors	usually a boy who opens and closes ventilation doors in a haulage road.	*Mining*
Doors, Double shift working or Double shifting	coal getting on two shifts per day; or a 'double un', working two shifts back to back (S. Staffs.).	*Mining*
Doors, Landings	the entrance to the workings from the shaft. The first landing going down the shaft was the 'high-door'. The next, the, 'middle-landing' in the shaft was the 'mid-door' and the lowest or the bottom of the shaft was the 'low door' or 'laigh doors'. (Scot.). –see also Inset. Also wooden or steel doors erected across the roadways to separate the ventilation circuits, also called 'Air doors'.	*Mining*
Doors, Door stoop	the pillar of coal left unworked around the base of a shaft to support the shaft and the buildings on the surface (Scot.)—see also Shaft pillar.	*Mining*
Doors, Dosco	Doors. Dosco—see Road Headers.	*Mining*
Doors, Double bond	when two cages were in use in a shaft as opposed to the 'single bond' when a shaft had only one cage.	*Mining*
Doors, Double buttocking	Doors. Double buttocking—see Buttocking.	*Mining*
Doors, Double stall	a modification of the pillar and stall method of working coal, applied extensively in S. Wales for working shallow inclined seams.	*Mining*
Dopant	an impurity deliberately added to a material to enhance the conductivity of the material	*Physics*
Dope	A name commonly applied to a viscous cellulose ester or ether solution, for use upon aircraft fabric, leather, and like surfaces, and for making film.	*Material Process*
Dor bar	The final saleable product of a gold mine. Usually consisting of gold and silver.	*Mining*
Dormant	Seeds that fail to germinate even though environmental conditions for germination are adequate.	*Agriculture*
Dorsal	Of or belonging to the upper surface; top.	*Forestry*
Dorset	A breed of sheep that originated in Southwest England when Spanish Merino sheep crossed with the Horned Sheep of Wales. Apparently first came to the United States in 1860. There are both horned and polled Dorsets .	*Agriculture*
Dorsoventral	From top to bottom; from the upper surface to the lower surface.[1]	*Forestry*
Dorsum	The upper surface; top.	*Forestry*
Dose	A measured concentration of a toxicant for a known duration of time (concentration per unit time).[1]	*Forestry*
Dose dependent	A response to a drug which may be related to the amount received (i.e. the dose). Sometimes trials are done to test the effect of different dosages of the same drug. This may be true for both benefits and harms.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Dose response relationship	The relationship between the quantity of treatment given and its effect on outcome. In meta-analysis, dose-response relationships can be investigated using meta-regression.	*Quality Engineering*
Dose-response relationship	A relationship in which change in amount, intensity, or duration of exposure is associated with a change-either an increase or decrease-in risk of a specified outcome.	*Analysis*
DOT	Department of Transport	*Petro-Chemical Abbreviations*
Dot Matrix Printer	Printer which forms characters when an array of pins hits an inked ribbon which transfers the image to the media.	*Gears*
Double Submerged Arc-Welded Pipe	Pipe having a longitudinal butt joint produced by at least two passes, one of which is on the inside of the pipe. Coalescence is produced by heating with an electric arc or arcs between the bare metal electrode or electrodes and the work. The welding is shielded by a blanket of granular, fusible material on the work. Pressure is not used, and filler metal for the inside and outside welds is obtained from the electrode or electrodes.	*Maintenance and Repair*
Double acting cylinder	A cylinder in which fluid force can be applied to the movable element in either direction.	*Mechanical, Process, and Operations*
Double band	Covalent sharing of two pairs of valence electrons.	*Material Process*
Double blind	See Blinding	*Quality Engineering*
Double block and bleed	The capability of a valve under pressure to obtain a seal across both the upstream and downstream seat rings and to have its body cavity bled down to atmospheric pressure.	*General Mechanical*
Double Break Contacts	(Twin break) breaks the circuit in two places. Also referred to as form Z circuitry.	*Electrical Engineering*
Double circuit line	A transmission line having two separate circuits. Because each carries three-phase power, at least six conductors, three per circuit, are required.	*Energy*
Double Employment	the practice of holding down two jobs at the same time.	*Industrial Relations*
Double Extra Strong	(XXS) also referred to as Double Extra Heavy (XXH); A designation of pipe with a wall thickness twice that of Extra Strong Pipe.	*Petroleum Engineering*
Double piston effect principal (DPE)	The sealing principal of a ball valve whereby line pressure is used on both the upstream and downstream floating seats to effect a dead-tight seal simultaneously on both sides of the ball. With the DPE seat configuration when the upstream seat leaks, the pressure entering into the body cavity acts on the down stream seat, which being of the PPE design, is then pushed against the ball and the valve seals in both directions.	*Mechanical*
Double Pitch Chain	A roller chain using the same joint members as standard pitch chain and having the same dimensions except for the pitch which is twice standard.	*Equipment*
Double Precision	The degree of accuracy that requires two computer words to represent a number. Numbers are stored with 17 digits of accuracy and printed with up to 16 digits.	*General Engineering*
Double Seal	Two mechanical seals designed to permit a liquid or gas barrier fluid between the seals mounted back-to-back or face-to-face.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Double Studded Adaptor	(DSA) A flange with a through bore and a ring groove on each side, drilled and tapped bolt hole sets on both sides and tapped end studs complete with nuts fitted on both sides. The two sides are different in size and/or pressure rating. (If they are the same it is just a 'spacer'). Utilized to adapt between different flange end connections.	*Petroleum Engineering*
Double timbering	Double timbering, -see Street timbering.	*Mining*
Double unit face	a longwall face with three gates, one in the centre, the 'mothergate', and two tailgates. – see also Single unit.	*Mining*
Double Wishbone Suspension (A Arm Suspension)	A system of independent suspension in which each wheel is located on a "knuckle" that is connected by ball joints to an upper A arm and a lower A arm. Usually, the lower A arms are longer. This system provides minimal changes in track and camber when the suspension is under load, as when going over bumps or in hard cornering.	*Mechanical Engineering*
Double Wishbone Suspension (A Arm Suspension)	A system of independent suspension in which each wheel is located on a "knuckle" that is connected by ball joints to an upper A arm and a lower A arm. Usually, the lower A arms are longer. This system provides minimal changes in track and camber when the suspension is under load, as when going over bumps or in hard cornering.	*Mechanical Engineering*
Double Pole Double Throw (DPDT)	Switches which make and break two separate circuits. This circuit provides a normally open and normally closed contact for each pole.	*Electrical Engineering*
Double-acting	A type of actuation that uses air on both sides of a piston to drive a control valve open or closed.	*Mechanical*
Double-Acting Cylinder	A cylinder in which fluid force can be applied to the movable element in either direction.	*Mechanical, Process, and Operations*
Double-deck	To add a second deck to (a bridge) or a second level to (a road).	*Civil Engineering*
Double-deck	To add a second deck to (a bridge) or a second level to (a road).	*Civil Engineering*
Double-dipping (see progressive-dipping)	the act of dipping steel, too large in one dimension to completely fit into the galvanizing kettle, more than once in cleaning solutions and molten zinc metal in order to produce a coating that covers the entire surface of the steel	*Materials Process*
Double-flow water-cooling tower	A crossflow tower with two fill sections and one plenum chamber, which is common to both.	*Facility Engineering*
Double heading Pay	extra pay to railroad engineers who are required to use more than one engine in running over steep grades for any length of time.	*Industrial Relations*
Double-Rod Cylinder	A cylinder with a single piston and a piston rod extending from each end.	*Mechanical, Process, and Operations*
Doubles	a medium size of coal, around 1-2 inches in dimensions.	*Mining*
Doup-out	in 'stoop and room' working, where a miner connected his drift into another one. (Scot.).	*Mining*
Dour holing	under-cutting with difficulty in hard coal or stone. (Scot.). Downcast (shaft), the shaft down which the clean air descends to ventilate the underground workings. - see also 'Air pit' and 'Upcast shaft'.	*Mining*
Dowel pin	A pin, usually of circular section, fitting into a corresponding hole in an abutting piece, as of two parts of mold.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Down Converters	A device which provides frequency conversion to a lower frequency. Example: In digital broadcast satellite applications.	*Electrical Engineering*
Down Converters	A device which provides frequency conversion to a lower frequency. Example -	*Electrical Engineering*
Down time	The amount of time a repairable unit is not operating. This can be due to being in a failed state, administrative delay, waiting for replacement parts to be shipped or undergoing active repair.	*Reliability Engineering*
Downer	a rest taken during the shift usually for a meal. (Som.).	*Mining*
Downflow	Process in which the hydrocarbon stream flows from top to bottom.	*Petroleum Engineering*
Downforce	Wings on a racing car are upside down compared to an airplane wing. Instead of lifting the car, they press the car harder onto the track, providing increased traction for braking, acceleration and cornering. Downforce is also provided by the ground-effects tunnels underneath the car, creating a vacuum that sucks the car to the track. A modern open wheeled car provides so much downforce that it could actually stick to the ceiling at just over 100 miles per hour. Increased downforce also results in increased drag, which slows a car down, so it's a tradeoff.	*NASCAR*
Downgradient	in the direction of decreasing static head (potential).	*Chemical*
Downhole	Term used pertaining to the wellbore	*Petroleum Drilling*
Down-hole disposal	The disposal of formation water and drilling and waste fluids down a wellbore in a deep formation not in communication with an aquifer.	*Petroleum Engineering*
Downsizing	A reduction in the number of employees that occurs due to management decision, not associated with natural attrition.	*Maintenance*
Downspacing	Refers reducing the number of acres required for oil or gas wells so that more wells are drilled in a given space. Downspacing is being researched by several oil and gas companies in the Eagle Ford Shale as a means of boosting the overall oil and gas recovery factor.	*Petroleum Drilling*
Downspout	A short vertically placed pipe or nozzle used in a gravity distribution system to divert water from a flume or lateral to a splasher.	*Facility Engineering*
Downstream	The oil industry term "downstream" refers to all petroleum activities from the processing of refining crude oil into petroleum products to the distribution, marketing, and shipping of those products. See also Upstream.	*Electrical*
Downstream	Those activities in the oil and gas industry which take place away from the source of the supply. Downstream operations commonly include refining and marketing endeavors.	*Petroleum Drilling*
Down-throw fault	a fault in the strata which causes the coal seam to be cut off and be carried to a lower level. - see Faults. Also known as 'down fall' and 'down leap'.	*Mining*
Downtime	The time that an item of equipment is out of service, for example as a result of equipment failure. The time that an item of equipment is available but not utilized is generally not included in the calculation of downtime. In other words, downtime is the time that the asset is not in a condition to perform its required function. The downtime of an item includes active maintenance time and delays due to awaiting spares, labor, facilities, movement, etc. Unless otherwise stated, downtime due to failure is considered to commence at the instant the item is deemed to have failed and to persist until the equipment is again available.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dowty or Dowty prop	the first British made hand operated hydraulic prop developed by Dowty Mining Equipment in 1946. By 1956 there were 400,000 hydraulic props and 200,000 yielding props in use. These were of tubular steel construction designed to be erected single handed and set by a pumping action using a pump handle. They were generally set to yield at about 15-20 tons bearing pressure.	*Mining*
DPF	diesel particulate filter	*Petro-Chemical Abbreviations*
DPMA	dispersant polymethacrylate	*Petro-Chemical Abbreviations*
DPNA	Diesel Particulate NOx Reduction (Toyota)	*Petro-Chemical Abbreviations*
DPST	Double-pole single-throw, as related to electrical switches. See definition of "SPST."	*Mechanical*
Draft	Taper or slope of vertical surfaces of mold required to facilitate removal of casting or molding.	*Material Process*
Drafting	A fast-moving car creates a low-pressure area behind it, causing the air to try to move with the car. A car following behind can take advantage of this low pressure as it actually sucks the car along faster, known as "being in the slipstream." A savvy driver can either use the draft to pass, or to lift off the gas slightly and conserve fuel.	*NASCAR*
Drag	a brake, a device attached to the rear vehicle of a train of tubs on an inclined system to arrest or derail the train in the event of a runaway; also called a 'snibble' or a, 'spragg'. (Scot.).	*Mining*
Drag	The resistance to movement caused by oil viscosity.	*Lubrication*
Drag Chain Conveyor	A type of conveyor having one or more endless chains which drag bulk materials through a trough.	*Equipment*
Drag Coefficient	A measure of the aerodynamic sleekness of an object. Drag coefficient is signified by "dc.: The lower the number, the greater the aerodynamic efficiency. The higher the drag coefficient, the more a car's engine must work to keep a given road speed. Also known as "CD" for coefficient of drag."	*Mechanical Engineering*
Drag fold	Rock that has been folded or bent back on itself.	*Mining*
Drag fold	The result of the plastic deformation of a rock unit where it has been folded or bent back on itself.	*Mining*
Dragline	a) Wire rope used for pulling excavating or drag buckets, and b) name applied to a specific type of excavator.	*Wire Rope & Cable*
Dragline crane	An excavating crane having a bucket that is dropped from a boom and dragged toward the crane base by a cable. Also called "dragline."	*Civil Engineering*
Dragline excavator	removes overburden to expose the coal by means of a scoop bucket that is suspended from a long boom. The dragline digs by pulling the bucket toward the machine by means of a wire rope.	*Energy*

Term	Definition	*Industry*
Dragline	A large excavation machine used in surface mining to remove overburden (layers of rock and soil) covering a coal seam. The dragline casts a wire rope-hung bucket a considerable distance, collects the dug material by pulling the bucket toward itself on the ground with a second wire rope (or chain), elevates the bucket, and dumps the material on a spoil bank, in a hopper, or on a pile.	*Mining*
Dragon	a barrel used to raise water from a 'gin-pit' (S. Staffs.).	*Mining*
Drags-man	a man employed as a putter or pusher in the working places. (N. East).	*Mining*
Drain	One of the three terminals that comprise a FET. A voltage on the gate controls the current flow between the source and drain.	*Electrical Engineering*
Drain Region	in a field effect transistor that receives charge carriers.	*Material Process*
Drain Cleaner	A chemically strong product formulated to clean plugs of solid grease and other varied materials embedded in drains.	*Chemistry*
Drain plug	A fitting at the bottom of a valve, the removal of which permits draining and flushing the body cavity.	*Mechanical*
Drain plug	A fitting at the bottom of a valve, the removal of which permits draining and flushing the body cavity.	*General Mechanical*
Drain Wire	An uninsulated wire, usually placed directly beneath and in electrical contact with a grounded shield, which is used for making ground connections.	*Electrical*
Drain, -see Water gate	Drain, -see Water gate.	*Mining*
Drainage	A system of drains, artificial or natural.	*Civil Engineering*
Drainage basin	The land drained by a river system.	*Energy*
Drainage	The process of removing surplus ground or surface water either by artificial means or by gravity flow.	*Mining*
Drainageway	A conduit, ditch, or the like, for draining water from an area.	*Civil Engineering*
Drainfield	An open area, the soil of which absorbs the contents of a septic tank.	*Civil Engineering*
Draught	the quantity of coal raised to the bank in any given time, e.g. one day's production (S. Staffs.).	*Mining*
Draulic component	draulic component.	*Mechanical, Process, and Operations*
Draw slate	A soft slate, shale, or rock from approximately 1 cm to 10 cm thick and located immediately above certain coal seams, which falls quite easily when the coal support is withdrawn.	*Mining*
Draw the Jud	means to take out or withdraw the timber supports.	*Mining*
Draw, to wind	the act of hoisting or winding; or to haul; or the break in the strata from the coalface to the surface. The angle between this break and the vertical; or to remove props which are no longer required.	*Mining*
Drawbridge	A bridge of which the whole or a section may be drawn up, let down, or drawn aside, to prevent access or to leave a passage open for boats, barges, etc.	*Civil Engineering*
Drawdown	lowering the water table due to withdrawal of groundwater as from a well.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Drawdown (maximum)	The distance that the water surface of the reservoir is lowered from the normal full elevation to the lowest allowable elevation as the result of the withdrawal of water for the purposes of generating electricity.	*Energy*
Drawing	the knocking away of spraggs beneath the coal after holing; or to raise coal up the pit shaft or out of a drift; or the withdrawing of props, bars and chocks out of the waste or goaf for re-use and to allow the roof to fall, also called 'drawing off'.	*Mining*
Drawing	In the manufacture of wire, pulling the metal through a die or series of dies for reduction of diameter to specified size.	*Electrical*
Drawing-off, -see Drawing	Drawing-off, -see Drawing.	*Mining*
Drawpoint	An underground opening at the bottom of a stope through which broken ore from the stope is extracted.	*Mining*
DRB	DRB: Demonstrated Reserve Base	*Energy*
Dredge	Any of various powerful machines for dredging up or removing earth, as from the bottom of a river, by means of a scoop, a series of buckets, a suction pipe, or the like.	*Civil Engineering*
Dredge mining	A method of recovering coal from rivers or streams.	*Energy*
Dreel	a hand operated or power driven machine for boring shotholes (Scot.).	*Mining*
Dregs, -see 'Lockers'	Dregs, -see 'Lockers'.	*Mining*
Dress	to trim loose material from the face.	*Mining*
Dresser	a large pick used for preparing large coal for loading into skips. (Derbys.), (S. Staffs.), or breaking down oversized pieces of coal or rock. Also known as a 'loading pick or 'Poll tomahawk'. One side of the head is in the form of a hammer, the other a curved pick.	*Mining*
Dressing	that portion of a coal seam prepared by holing and cutting for detachment from its position in situ.	*Mining*
Drier	A composition that accelerates the drying of oil, paint or varnish. Driers are usually organo-metallic compositions and are available in both solid and liquid form.	*Material Process*
Drift	Water lost from a cooling tower as liquid droplets entrained in the exhaust air. It is independent of water lost by evaporation. Units may be in lbs./hr. or percentage of circulating water flow. Drift eliminators control this loss from the tower.	*Chemical Engineering*
Drift (drive)	A horizontal passage underground that follow along the length of a vein or rock formation as opposed to a crosscut which crosses the rock formation.	*Mining*
Drift and pillar	a system of working the coal similar to the 'bankwork' system of Yorkshire (N. Staffs.).	*Mining*
Drift eliminators	An assembly constructed of wood, plastic, cement board, or other material that serves to remove entrained moisture from the discharged air.	*Facility Engineering*
Drift mine	is driven horizontally into coal that is exposed or accessible in a hillside. In a hydraulic mine, high-pressure water jets break the coal from a steeply inclined, thick coalbed that would be difficult to mine with the usual underground methods. The coal is then transported to the surface by a system of flumes or by pipeline. Although currently not in commercial use in the United States, hydraulic mining is used in western Canada.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Drift mine	An underground coal mine in which the entry or access is above water level and generally on the slope of a hill, driven horizontally into a coal seam.	*Mining*
Drift of an Operating Characteristic	An inexact term referring in a general way to the degree of instability of a plunger force or travel characteristic under specified conditions and during a specified number of cycles of switch operation.	*Electrical Engineering*
Drift velocity	Average velocity of the charge carrier in an electrically conducting material.	*Material Process*
Drift	A horizontal underground opening that follows along the length of a vein or rock formation as opposed to a crosscut which crosses the rock formation.	*Mining*
Drifter	person employed in driving underground roadways (tunnels) in stone. Also called a 'stoneman'.	*Mining*
Drifter	A rock drill used for boring horizontal holes for blasting.	*Mining*
Drifter	A hydraulic rock drill used to drill small-diameter holes for blasting or for installing rock bolts.	*Mining*
Drifting back	the operation of working away the pillars towards the shaft in rearing seams (N. Staffs.).	*Mining*
Drill and equip development wells	development-type stratigraphic test wells, and service wells, including the costs of platforms and of well equipment such as casing, tubing, pumping equipment, and the well head assembly.	*Energy*
Drill bit	Interchangeable diamond tipped drill bit.	*Petroleum Engineering*
Drill Collar	A length of extremely heavy steel tube. It is placed in the drill string immediately above the drill bit to minimize bending caused by the weight of the drill pipe.	*Petroleum Engineering*
Drill pipe	Steel pipe, in approximately 9-metre lengths, screwed together to form a continuous pipe extending from the drilling rig's derrick to the drilling bit in the bottom of the hole.	*Petroleum Drilling*
Drill Rig	Any power-driven percussion, rotary, boring, coring, digging, jetting, or augering machine used in the construction of a well or borehole.	*Petroleum Engineering*
Drill string	A column, or string, of pipe that transmits drilling fluid (via the mud pumps) and torque (via the Kelly drive or top drive) to the drill bit.	*Petroleum Drilling*
Drill	A machine utilizing rotation, percussion (hammering), or a combination of both to make holes. If the hole is much over 0.4m in diameter, the machine is called a borer.	*Mining*
Drill	(1) To bore a hole, Also see Drilling (2) An implement with cutting edges used to bore holes.	*Petroleum Drilling*
Driller	The crew supervisor on a drilling rig, working under the toolpusher.	*Petroleum Drilling*
Drill-indicated reserves	The size and quality of a potential orebody as suggested by widely spaced drillholes; more work is required before reserves can be classified as probable or proven.	*Mining*
Drilling	The act of boring a hole (1) to determine whether minerals are present in commercially recoverable quantities and (2) to accomplish production of the minerals (including drilling to inject fluids).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Drilling	The using of a rig and crew for the drilling, suspension, completion, production testing, capping, plugging and abandoning, deepening, plugging back, sidetracking, redrilling or reconditioning of a well (except routine cleanout and pump or rod pulling operations) or the converting of a well to a source, injection, observation, or producing well, and including stratigraphic tests. Also includes any related environmental studies. Associated costs include completion costs but do not include equipping costs	*Petroleum Drilling*
Drilling and equipping of wells	The drilling and equipping of wells through completion of the "Christmas tree."	*Energy*
Drilling arrangement	A contractual agreement under which a working interest owner (assignor) assigns a part of a working interest in a property to another party (the assignee) in exchange for which the assignee agrees to develop the property. The term may also be applied to an agreement under which an operator assigns fractional shares in production from a property to participants for cash considerations as a means of acquiring cash for developing the property. Under a "disproportionate cost" drilling arrangement, the participants normally pay a greater total share of costs than the total value of the fractional shares of the property received in the arrangement.	*Energy*
Drilling Choke	A Choke designated by its manufacturer as suitable for drilling service, (utilized as part of Choke Manifold).	*Petroleum Engineering*
Drilling directionally	the process of drilling a well bore with sustained and proactive attention to a preferred path; such preferred trajectory comprising non-vertical hole sections.	*Petroleum Drilling*
Drilling Fluid	A water or air-based fluid used in the water well drilling operation to remove cuttings from the hole, to clean and cool the bit, to reduce friction between the drill string and the sides of the hole, and to seal the borehole.	*Petroleum Engineering*
Drilling fluid (Mud)	The circulating fluid used to bring drilling cuttings out of the well bore, cool the drill bit and provide hole stability and pressure control.	*Petroleum Engineering*
Drilling Fluids	Special chemical fluids, usually called mud, introduced into the hole to lubricate the action of a rotary bit, to remove the cuttings and to prevent blowouts.	*Petroleum Drilling*
Drilling rig	The machine used to drill a wellbore. It includes virtually everything except living quarters. Major components of the rig include the mud tanks, the mud pumps, the derrick or mast, the drawworks, the rotary table or topdrive, the drillstring, the power generation equipment and auxiliary equipment.	*Petroleum Drilling*
Drilling rig	A drilling rig is used to determine the amount and type of overburden overlying a coal deposit and the extent of the deposit, to delineate major geologic features, and to drill holes for explosives to fragment the overburden for easier removal.	*Energy*
Drilling rig	A drilling unit that is not permanently fixed to the seabed, e.g. a drillship, a semi-submersible or a jack-up unit. Also means the derrick and its associated machinery.	*Petroleum Drilling*
Drilling Spool	Equipment used with Blowout Preventers to space pieces of equipment apart. Is fitted with outlets to attach lines extending to Choke and Kill Manifolds. Also referred to as a 'Mud Cross'.	*Petroleum Engineering*
Drilling	The use of such a machine to create holes for exploration or for loading with explosives.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Drilling	The using of a rig and crew for the drilling, suspension, completion, production testing, capping, plugging and abandoning, deepening, plugging back, sidetracking, redrilling or reconditioning of a well (except routine cleanout and pump or rod pulling operations) or the converting of a well to a source, injection, observation, or producing well, and including stratigraphic tests. Also includes any related environmental studies. Associated costs include completion costs but do not include equipping costs.	*Petroleum Drilling*
Drill-stem test	A method of gathering data on the potential productivity of a geological formation before installing casing in a well. A drill stem test records pressure and fluid recovery data from which formation characteristics can be inferred.	*Petroleum Engineering*
Drip irrigation	A system for irrigating crops by delivering water to the root zone through small, plastic pipes equipped with emitters. This technology conserves water and eliminates soil erosion from irrigation water runoff. Also called trickle irrigation.	*Agriculture*
Drip oil	A by product in the manufacture of illuminating gas, providing a new source of supply for styrene and several other hydrocarbons.	*Material Process*
Drivage	a roadway or tunnel.	*Mining*
Drive	An assembly of the necessary structural, mechanical and electrical parts which provide the motive power for a conveyor. Usually consisting of motor/reducer, chain, sprockets, guards, mounting base and hardware.	*Manufacturing*
Drive	A drive is an electronic device used to regulate the performance of an electric motor. It works by controlling the power, frequency and current the motor draws from the grid. Drives (also referred to as a variable-speed motor drive) can lead to considerable energy savings as most motors are fixed-speed devices that run at full speed, even when a lower speed would suffice. Many motors are controlled by "throttling down," which is equivalent to slowing a car by using the brake, rather than taking your foot off the accelerator, and does not save energy. Reducing a motor's speed by half using a drive can reduce the energy it consumes to one-eighth of its consumption at full speed.	*Electrical*
Drive Belt	A belt which is used to transmit power or motion from one part to another.	*Equipment*
Drive Chain	A chain used to transmit power.	*Equipment*
Drive pins	The two pins which fit into the bottom of a ball valve stem and engage corresponding holes in the ball. As the operator turns the stem, the drive pins turn the ball.	*Mechanical*
Drive Pulley	A pulley mounted on the drive shaft that transmits power to the belt with which it is in contact. Pulley is normally positive crowned and lagged.	*Manufacturing*
Drive Shaft	(1) A main driving shaft on a which conveyor sprockets, gears, or pulleys are mounted. This shaft is connected to the drive unit through a coupling, sprocket, gear, or other form of mechanical power transmission; (2) A shaft used to support t	*Equipment*
Driven Roller	Any carrying roller driven by belting, chain or other propelling medium.	*Equipment*
Driver	Primary drive for the fan drive assembly. It may be an electric motor, gas engine, steam turbine, hydraulic motor, or other power source.	*Facility Engineering*
Drivetrain	The power-transmitting components in a vehicle, including clutch, gearbox (or automatic transmission), driveshaft, universal joints, differential and axle shafts.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Droop	A common occurrence in time-proportional controllers. It refers to the difference in temperature between the set point and where the system temperature actually stabilizes due to the time-proportioning action of the controller.	*General Engineering*
Drop	drilling directionally with the intent to decrease well bore inclination; also refers to increasing and orienting lateral bit force magnitude to or towards the low side of the drill hole.	*Petroleum Drilling*
Drop cages	small cages operating between decking levels in multi decking.	*Mining*
Drop fault	Drop fault, -see 'downthrow fault'.	*Mining*
Drop Pipe	The pipe that carries water from a pump in a well up to the surface.	*Petroleum Engineering*
Drop post or Drop Warwick	Drop post or Drop Warwick, another name for a 'Warwick'.	*Mining*
Drop shaft, Drop staple or Drop pit	a shaft underground between two seams that does not come to the surface. The shafts were used to lower coal to the level of the base of the winding shaft. This allowed all the coal produced in the mine to be wound up the shaft from a single loading point, also known as a 'blind pit', - see also Cut and Staple, Blind Pit, Jacky Pit. Usually a shaft with a single cage and balance weight.	*Mining*
Drop-Out Voltage	Refers to the power level at which the internal forces in the solenoid valve (spring and friction) overcome the magnetic field and can no longer maintain a latched condition. Drop-out voltage is one of the measurements used to determine solenoid limits.	*General Mechanical*
Dropouts	See Attrition	*Quality Engineering*
Dropping Point	The temperature at which grease becomes soft enough to form a drop and fall from the orifice of the test apparatus of ASTM D566 (IP 132) and ASTM D 2265.	*Lubrication*
Dropping Point	In general, the dropping point is the temperature at which the grease passes from a semisolid to a liquid state. This change in state is typical of greases containing conventional soap thickeners. Greases containing thickeners other than conventional soaps may, without change in state, separate oil.	*Lubrication*
Dross	byproduct of the galvanizing process that forms by reactions between zinc and loose particles of iron; dross may exist at all depths of the kettle, but usually sinks to the bottom	*Materials Process*
Dross coal	small coal, also a term often used to distinguish ordinary coal from cannel coal in compound seams. (Scot.); or useless coal. (Lancs.).	*Mining*
Dross inclusions	dross that is carried out on the work upon removal from the galvanizing kettle	*Materials Process*
Drossing	removing dross buildup from the bottom of the kettle	*Materials Process*
Drub or Drug	a kind of seatearth; or sometimes a carbonaceous or bituminous shale. (Yorks.); or dirt.	*Mining*
Druggon	a square wrought-iron or wooden box, used for taking clean water into the mine for the horses, or for watering down dust before shot firing, sometimes hung beneath the cage (S. Staffs.).	*Mining*

Term	Definition	*Industry*
Drum	the drum of a winding engine upon which the winding rope is coiled or wound, often conical scroll or spiral shaped; or the barrel or 'roll' at the top of a self-acting incline around which the rope passes; or a brick, iron or wooden cylinder used for sinking through beds of sand or soft ground. (Lancs.).	*Mining*
Drum chopping	A site preparation technique in which logging debris is leveled by a bulldozer pulling a large drum filled with water.	*Forestry*
Drum head	a short heading at the top of a self-acting incline made to house the 'drum'. (N. East).	*Mining*
Drum Or Formed	Images formed from hammer striking ribbon and media against reversed image on a rotating drum.	*Gears*
Dry (coal) basis	Coal quality data calculated to a theoretical basis in which no moisture is associated with the sample. This basis is determined by measuring the weight loss of a sample when its inherent moisture is driven off under controlled conditions of low temperature air-drying followed by heating to just above the boiling point of water (104 to 110 degrees Centigrade).	*Energy*
Dry area	An unified surface caused by lack of fusion.	*Material Process*
Dry bottom boiler	No slag tanks at furnace throat area. The throat area is clear. Bottom ash drops through the throat to the bottom ash water hoppers. This design is used where the ash melting temperature is greater than the temperature on the furnace wall, allowing for relatively dry furnace wall conditions.	*Energy*
Dry bulb temperature	Temperature of the air as indicated by a standard thermometer.	*Material Process*
Dry Circuit	A slang expression meaning a low energy circuit. Although many individuals and groups have assigned current and voltage values to "dry circuits" there is at present no general agreement as to what the values should be.	*Electrical Engineering*
Dry Diggings	Earth excavated in the summer and held to be washed in winter, when water was more plentiful.	*Mining*
Dry Film Lubricant	Low shear-strength lubricants that shear in one particular plane within its crystal structure (such as graphite, molybdenum disulfide and certain soaps).	*Lubrication*
Dry galvanizing	dipping steel in an aqueous zinc ammonium chloride solution and then thoroughly drying before immersing in the molten zinc bath	*Materials Process*
Dry gas	Dry gas: See Dry natural gas.	*Energy*
Dry Gas	Natural gas composed mainly of methane with only minor amounts of ethane, propane and butane and little or no heavier hydrocarbons in the gasoline range.	*Petroleum Drilling*
Dry Gas	Natural gas composed mainly of methane with only minor amounts of ethane, propane and butane and little or no heavier hydrocarbons in the gasoline range.	*Petroleum Drilling*
Dry hole	An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well. Also see Well.	*Energy*
Dry hole charge	The charge-off to expense of a previously capitalized cost upon the conclusion of an unsuccessful drilling effort.	*Energy*
Dry hole contribution	A payment (either in cash or acreage) that is required by agreement only if a test well is unsuccessful and that is made in exchange for well test and evaluation data.	*Energy*
Dry hole	A well which has proved to be non-productive.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dry house	A building where the miner changes to his working clothes.	*Mining*
Dry Lubrication	The situation when moving surfaces have no liquid lubricant between them.	*Lubrication*
Dry natural gas	Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute. Also see Natural gas.	*Energy*
Dry natural gas production	The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include (1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and (2) gas vented and flared. Processing losses include (1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and (2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.	*Energy*
Dry process	Preparation of a material in the absence of enough water to product a solution or slurry, for example, making phenol formaldehyde resin using solid aldehyde-yielding agents in place of the more common aqueous formaldehyde.	*Material Process*
Dry production	Dry production: See Dry natural gas production.	*Energy*
Dry spot	Area of incomplete surface film on laminated plastics, in laminated glass, an area over which the interlayer and the glass have not become bonded.	*Material Process*
Dry Sump	An engine design in which oil is not retained in a pan beneath the crankshaft thus permitting splash lubrication. There may be a remote sump from which oil is recirculated, or there may be a total loss system.	*Lubrication*
Dry Washing	Fine soil blown away, leaving the gold.	*Mining*
Dry well	A drainage pit lined with loose stonework for the leaching of liquid wastes.	*Civil Engineering*
Dry	A building where the miner changes into working clothes.	*Mining*
Dry-bulb temperature (DBT)	The temperature of the inlet or ambient air adjacent to the cooling tower as measured by a dry-bulb thermometer.	*Facility Engineering*
Dryer	Steam used to create heat can be channeled through heat exchange coils for the purpose of drying. Industries which use dryers may include timber mills, dried fruit and food manufacturers, tobacco producers, etc.	*Industrial*
Drying agents (Dryers catalysts)	Metallic soaps of higher organic acids used to hasten the film formation of reins modified with drying oils.	*Material Process*
Drying oils	Oils which dry or oxidize to a varnish like film on exposure to air and sun light. Linseed oil, Chine wood oil, and perilla oil are examples.	*Material Process*
Drywasher	A common desert mining tool similar to a highbanker but does not need water. It operates by the use of wind. The light junk material is blown off the top of the sluice in the drywasher and the gold stays on the bottom.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
DSA	See Double Studded Adaptor.	*Petroleum Engineering*
DSL	A mechanism for providing high-speed digital communications over a standard phone line. Example: Internet access	*Electrical Engineering*
DSL	A mechanism for providing high-speed digital communications over a standard phone line.	*Electrical Engineering*
DSM	DSM: Demand-Side Management	*Energy*
DSM Measure Technology Program	Single devices, equipment, or rates as listed in the Reference Data. A demand-side management program is usually a group of DSM measures or technologies. However, a DSM program could in some cases be a single measure.	*Energy*
DSP	dual spark engine	*Petro-Chemical Abbreviations*
DSP	Digital Signal Processor. A microprocessor optimized for digital signal manipulations.	*Reliability Engineering*
DTBP	di-tert-butyl phenol	*Petro-Chemical Abbreviations*
DTW	DTW: Dealer Tank Wagon	*Energy*
"DU" BEARING	A bearing consisting of bonze, impregnated with TFE (Teflon) resin and lead powder – bonded to a low carbon steel backing	*Mechanical*
Dual Element Sensor	A sensor assembly with two independent sensing elements.	*General Engineering*
Dual Front Airbags	Designed to protect the driver and front passenger in a frontal collision. Mounted in the steering wheel hub and in the right side of the dashboard, they inflate and deflate within a fraction of a second. Most systems can judge the severity of an impact and determine whether a front-seat occupant is wearing a safety belt or is out of position. This allows them to adjust the rate of deployment to minimize injuries from the airbags themselves. Dual front airbags are required by law on all new passenger vehicles.	*Mechanical Engineering*
Dual fuel vehicle (1)	A motor vehicle that is capable of operating on an alternative fuel and on gasoline or diesel fuel. These vehicles have at least two separate fuel systems which inject each fuel simultaneously into the engine combustion chamber.	*Energy*
Dual fuel vehicle (2)	A motor vehicle that is capable of operating on an alternative fuel and on gasoline or diesel fuel. This term is meant to represent all such vehicles whether they operate on the alternative fuel and gasoline/diesel simultaneously (e.g., flexible-fuel vehicles) or can be switched to operate on gasoline/diesel or an alternative fuel (e.g., bi-fuel vehicles).	*Energy*
Dual Inline Package	Dual Inline Package is an integrated circuit package with two rows of pins.	*Electrical Engineering*
Dual Overhead Camshafts (DOHC)	A DOHC engine has two camshafts in each cylinder head; one camshaft actuates intake valves and the other actuates exhaust valves. The camshafts act directly on the valves, eliminating pushrods and rocker arms. This reduced reciprocating mass of the valve train enables the engine to build RPM more quickly. DOHC designs are typically high-performance, four valve per cylinder engines. (A four valve per cylinder two intake and two exhaust design helps the engine "breathe" more freely for increased performance.)	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dual Phase Controller	Switching regulator that employs dual-phase technique to reduce output noise and boost output current capability.	*Electrical Engineering*
Dual Ratings	the piping system may be subjected to full-vacuum conditions or sub- merged in water and thus experience external pressure, in addition to withstanding the internal pressure of the flow medium. Such piping systems must be rated for both internal and external pressures at the given temperatures. In addition, a piping system may handle more than one flow medium during its different modes of operation. Therefore, such a piping system may be assigned a dual rating for two different flow media. For example, a piping system may have condensate flowing through it at some lower temperature during one mode of operation while steam may flow through it at some higher temperature during another mode of operation. It may be assigned two pressure ratings at two different temperatures.	*Maintenance and Repair*
Dual Unionism	a term generally applied to any union or organization which is seeking to represent workers in the same trade or industry in which a union already exists.	*Industrial Relations*
Dual-Band	Dual-band refers to the capability of GSM network infrastructure and handsets to operate across two frequency bands.	*Electrical Engineering*
Dual-fired unit	A generating unit that can produce electricity using two or more input fuels. In some of these units, only the primary fuel can be used continuously; the alternate fuel(s) can be used only as a start-up fuel or in emergencies.	*Energy*
Dual-Line System	A positive displacement terminating (oil, or grease) lubrication system that employs two main lines supplied from a pump connected to a 4-way (reverser) valve. Pressure in one main line (while the other is open to tank) causes the measuring piston(s) in the dual-line valve(s) to stroke in one direction dispensing lubricant to one group of lube points. Switching the 4-way (reverser) valve directs pump flow to the second main line and opens the first main line to tank. This allows pressure to build in the second main line causing the dual-line valve(s) measuring piston(s) to stroke back to their original position dispensing lubricant to a second group of lube points. The system is a parallel type and each dual-line valves operates independently of any other in the system.	*Lubrication*
Dual-Modulus Prescaler	A Dual-Modulus Prescaler (DMP) is an important circuit block used in frequency synthesizers to divide the high-frequency signal from the voltage controlled oscillator (VCO) to a low-frequency signal by a predetermined divide ratio, either (N+1) or N, which is controlled by a swallow counter.	*Electrical Engineering*
Dual-Pay System	a method of wage payment whereby compensation is paid on the basis of hours work and miles travelled.	*Industrial Relations*
Duals	Two tire and wheel assemblies, mounted on one side of an axle.	*Mechanical Engineering*
Dual-slope A/D Converter	An analog-to-digital converter which integrates the signal for a specific time, then counts time intervals for a reference voltage to bring the integrated signal back to zero. Such converters provide high resolution at low cost, excellent normal-mode noise rejection, and minimal dependence on circuit elements.	*General Engineering*
Dual-Stage Airbags	Front airbags that can deploy at either of two levels, depending on the severity of a collision.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Dual-Stroke Cylinder	A cylinder combination which provides two working strokes.	*Mechanical, Process, and Operations*
Dual-Zone Climate Control	Allows individualized control of heating and air conditioning. Most systems are adjustable for the driver and front passenger; others feature a third adjustment for rear passengers.	*Mechanical Engineering*
Duane model	A reliability growth model similar to the AMSAA model that uses a relationship between cumulative test time and cumulative failures to develop a reliability growth profile.	*Reliability Engineering*
Duck tin, -see Dan tin	Duck tin, -see Dan tin.	*Mining*
Duck-bill props	a miners' name for the 'Bathgate' prop, an adjustable steel prop with duckbill shaped wedges, which locked it when it was set. Also generally known as 'key-props'. To the men, they were known as 'finger trappers' or 'thumb busters'.	*Mining*
Ductile	to brittle transition temperature Narrow temperature region in which the fracture of alloys changes from brittle at lower temperature to ductile at higher temperatures.	*Material Process*
Ductile Deformable	Ductile Deformable.	*Material Process*
Ductile Iron	A cast ferrous material in which the free graphite is in a spheroidal form rather than a fluke form. The desirable properties of ductile iron are achieved by means of chemistry and a ferritizing heat treatment of the castings.	*Maintenance and Repair*
Ductile iron	A form of cast iron is relatively ductile due to spheroidal graphite precipitates, rather than flakes.	*Material Process*
Ductile iron	molten iron treated with an element such as magnesium or cerium to induce a measurable degree of ductility to the metal; these additives do not affect galvanizability	*Materials Process*
Ductility	Ductility generally refers to the amount of inelastic deformation which a material or structure experiences before complete failure. Quantitatively, ductility can be defined as the ratio of the total displacement or strain at failure, divided by the displacement or strain at the elastic limit.	*Engineering Physics*
Ductility	the ability of a material to be formed without fracturing; galvanized steel is ductile within certain recommended bending radii	*Materials Process*
Ductility Deformability	Percent elongation at failure is a quantitative measure. Extent to which a solid can be drawn out into a fine thread.	*Material Process*
Dudley	a large capacity, circular water bottle used underground.	*Mining*
Duds	underground clothes.	*Mining*
Due diligence	The degree of care and caution required before making a decision; loosely, a financial and technical investigation to determine whether an investment is sound.	*Mining*
Due Process of Law	provisions in the U.S. Constitution in the 5th and 14th amendments.	*Industrial Relations*
Dues ion	periodic payments paid by members to the union.	*Industrial Relations*
Dufaylite	Honeycomb structure bonded with a synthetic resin.	*Material Process*
Duff	very small size of coal, fine coal, also called 'pease', generally less than ? inch.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dug Wells	Large-diameter wells dug by backhoe or by hand. Usually shallow with large-diameter casing, 60 to 120 cm (24 to 48 in.). Advantages are: easy to construct; inexpensive initial cost; large casing provides storage; may be used in poor-yielding aquifer. Disadvantages: if shallow, water shortages are possible in dry periods; easy to seal properly, but require large volumes of material; vulnerable to near surface contamination.	*Petroleum Engineering*
Dukey	an inclined haulage road worked by an engine (S. Wales).	*Mining*
Dull surface	Lack of gloss or luster in the surface of plastic, approaching a matte or sand blasted finish.	*Material Process*
Dumb drift	a drift for return air to avoid the furnace or by-pass an inset where cages or skips are loaded and reach the Upcast Shaft.	*Mining*
Dumb fault	Dumb fault, -see Washout.	*Mining*
Dummocky	where the roof stratum of a road is tender but not 'heavy' or 'weighted' (N. Staffs.).	*Mining*
Dummy	A bag filled with sand, clay, etc., used for stemming a charged hole.	*Mining*
Dummy gate	a road that is formed but not maintained or used behind a longwall face (which can sometimes provide material for building packs). Also called a 'Dummy road'.	*Mining*
Dump	A pile or heap of rock or ore on the surface.	*Mining*
Dump energy	Energy generated in a hydroelectric plant by water that cannot be stored or conserved and which energy is in excess of the needs of the system producing the energy.	*Energy*
Dumpy level	underground surveying instrument.	*Mining*
Dundy	inferior coal or coal affected by 'trap-rock'. (Scot.).	*Mining*
Duns	carbonaceous dirt partings. (Yorks.).	*Mining*
Duplex	Pertaining to simultaneous two-way independent data communication transmission in both direction. Same as "full duplex".	*Electronic Process*
Duplex Filter	An assembly of two filters with valving for selection of either or both filters.	*Lubrication*
Duplex systems	galvanized steel that has been coated with an additional corrosion-inhibiting product, typically liquid or powder paint; the two separate coating systems work synergistically to provide enhanced corrosion protection	*Materials Process*
Duplex Wire	A pair of wires insulated from each other and with an outer jacket of insulation around the inner insulated pair.	*General Engineering*
Duplex Wire	A pair of wires insulated from each other and with an outer jacket of insulation around the inner insulated pair.	*Electronic Process*
Duplicating	Milling operation in which the contour or outline to be milled is followed by a tracer on stylus that governs the motion of one or more cutting spindles.	*Material Process*
Durability	A measure of useful life (a special case of reliability).	*Reliability Engineering*
Duration	Duration of a shock pulse is how long it lasts. For "classical" pulses (not found in the real world), time is usually measured between instants when the amplitude is greater than 10% of the peak value.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Duress	physical force or threat of force or intimidation to make a person do something against his will or better judgment.	*Industrial Relations*
Durham	Durham—see Pit pan.	*Mining*
Durometer	A standard for quantifying the hardness of rubber, plastic, and other non-metallic materials. Typical hardness of flexible tubing ranges from 50 to 70 Durometer on the "A" scale.	*Mechanical*
Durometer	A measurement used to denote the hardness of a substance (usually of thermo-setting and thermoplastic materials).	*Electrical*
Durometer hardness	An arbitrary indication of hardness of rubber or plastic determined by an indenter.	*Mechanical, Process, and Operations*
Dusting Product (Furniture)	An aerosol or pump spray that dispenses ingredients in a fine spray onto surface of dusting cloth. Some cloths come already impregnated with active ingredients. These products attract, pick up and retain light dust and soil.	*Chemistry*
DUT	Acronym for Device Under Test used to describe a unit, component, sub-system or system being tested	*Reliability Engineering*
Dutchman	A short section of belt, provided with lacing, in a conveyor belt which can be removed when take-up provision has been exceeded.	*Manufacturing*
Duty Cycle	The total time to one on/off cycle. Usually refers to the on/off cycle time of a temperature controller.	*General Engineering*
Dye Soluble	organic colorant for polymers.	*Material Process*
Dyestuffs	specially prepared for dyeing of viscose rayon. They tend to cover the irregularities occasioned by varying batches of rayon.	*Material Process*
Dyke	see Fault and Slip Dyke.	*Mining*
Dyke	A long and relatively thin body of igneous rock that, while in the molten state, intruded a fissure in older rocks.	*Mining*
Dynamic (Two-Plane) Balancing Machine	A dynamic balancing machine is a centrifugal balancing machine that furnishes information for performing two-plane balancing.	*General Engineering*
Dynamic Balance	Balance in Motion. The balance of a tire and wheel while it is rotating. A condition in which a tire and wheel assembly has weight distributed equally on both sides of the wheel's axis of rotation.	*Mechanical Engineering*
Dynamic Calibration	Calibration in which the input varies over a specific length of time and the output is recorded vs. time.	*General Engineering*
Dynamic equilibrium	Equilibrium which includes inertial forces.	*Engineering Physics*
Dynamic Friction	Resistance to relative movement of two bodies that are already in motion.	*Maintenance*
Dynamic modulus of elasticity	Parameter representing the stiffness of a polymeric material under an oscillating load.	*Material Process*
Dynamic motion	Movement, as compared with nonmoving or static position. Dynamic motion is sensed with displacement or velocity pickups or with accelerometers.	*Reliability Engineering*
Dynamic Pressure	The difference in pressure levels from static pressure to stagnation pressure caused by an increase in velocity. Dynamic pressure increases by the square of the velocity.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Dynamic RAM	Random-Access Memory that uses a continuous clock. Unlike SRAM, when DRAM is no longer clocked, its data is lost.	*Electrical Engineering*
Dynamic Range	The range, in dB, between the noise floor of a device and its defined maximum output level.	*Electrical Engineering*
Dynamic Seal	A seal that moves due to axial or radial movement of the unit.	*Lubrication*
Dynamic shunt compensation	A technology used to stabilize voltage by introducing or absorbing reactive power at specific points of a power transmission grid. The system helps to improve power transmission capacity as well as the overall stability of the grid. Dynamic shunt compensation is one of the three main FACTS (Flexible Alternating Current Transmission Systems) technologies, the others being series compensation and dynamic energy storage. (See also Series and Shunt.)	*Electrical*
Dynamic signal analyzer DSA	Vibration analyzer using digital signal processing and the Fast Fourier Transform (FFT) to display vibration frequency components. May also display the time domain and the phase spectrum. Usually interfaced to a computer.	*Reliability Engineering*
Dynamic Unbalance	Dynamic unbalance is that condition in which the central principal axis is not coincident with the shaft axis.	*General Engineering*
dynamic viscosity	a measure of a fluid's resistance to tangential or shear stress.	*Chemical*
Dynamometer	A device which absorbs and measures the power derived by an internal combustion engine.	*Mechanical Engineering*
Dyno	A contraction of "Dynamometer," an engine-testing device used in the shop that measures power and simulates the loads and environment of a racing engine.	*NASCAR*
Dysodil—see Lignite	Dysodil—see Lignite.	*Mining*
E	E	*Forestry*
--E--	--E--	*Petroleum Drilling*
E&A	Abbreviation for exploration and appraisal.	*Petroleum Drilling*
E&A	Abbreviation for exploration and appraisal.	*Petroleum Drilling*
E&P	Abbreviation for exploration and production.	*Petroleum Drilling*
E&P	Abbreviation for exploration and production.	*Petroleum Drilling*
E*	planned well bore East (+) / West (-) Cartesian coordinate at MD*. (feet or meters)	*Petroleum Drilling*
E.B.G., or Elsewhere below ground	a statistical term applied to all personnel working underground other than at the coalface.	*Mining*
E.P.A.	Environmental Protection Agency of the United States Government. Has responsibility to regulate the environment.	*Chemistry*
E/P	Voltage to pneumatic converter.	*Industrial Engineering*
E85	A fuel containing a mixture of 85 percent ethanol and 15 percent gasoline. See Motor gasoline (finished).	*Energy*
E85	A mixture of base gasoline and fuel ethanol, containing 85% by volume of ethanol.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
E95	A fuel containing a mixture of 95 percent ethanol and 5 percent gasoline	*Energy*
Eaglebine Play	Refers to areas where oil companies can produce from both Eagle Ford Shale and Woodbine formation in a single well.	*Petroleum Drilling*
EAN	European Article Number	*Gears*
EAR	Estimated Additional Resources	*Energy*
Early Retirement Date	a date preceding the expected retirement date set by agreement or practice.	*Industrial Relations*
Earning Power	a worker's potential capacity on his job to earn wages over a period of time.	*Industrial Relations*
Earnings	the total amount of remuneration received as compensation for work performed or services rendered.	*Industrial Relations*
Earth or Earthy coal	an early term for coal to differentiate it from charcoal, or a term used for lignite, an earthy brown coal; or shale or clay, generally in association with a coal seam. (Lancs.).	*Mining*
East Central Area Reliability Coordination Agreement	One of the ten regional reliability councils that make up the North American Electric Reliability Council (NERC).	*Energy*
East North Central	Illinois, Indiana, Michigan, Ohio, and Wisconsin;	*Energy*
East South Central	Alabama, Kentucky, Mississippi, and Tennessee;	*Energy*
Eastern	Bridgeport, CT, Washington, DC, Boston, MA, Baltimore, MD, Portland, ME, Buffalo, NY, New York City, NY, Ogdensburg, NY, Philadelphia, PA, Providence, RI, Norfolk, VA, St. Albans, VT.	*Energy*
Eastern Region	Consists of the Appalachian Coal Basin. The following comprise the Eastern Region: Alabama, eastern Kentucky, Georgia, Maryland, Mississippi, Ohio, Pennsylvania, Virginia, Tennessee, North Carolina, and West Virginia.	*Energy*
Eat out	an expression used when a level coal drift is turned to the dip, in order to take advantage of (or "eat out") an up throw fault, (N. East).	*Mining*
Ebb pit	a pit or shaft sunk to a shallow seam. (Scot.).	*Mining*
EC	Environment Canada	*Petro-Chemical Abbreviations*
ECAR	ECAR: East Central Area Reliability Council	*Energy*
ECCC	electronically controlled converter clutch	*Petro-Chemical Abbreviations*
Eccentric	- Not having the same center.	*Mechanical*
Eccentricity	A measure of the lack of coincidence of longitudinal axes of a circular cross-sectional wire and its surrounding circular cross-sectional insulation. It is expressed as the percentage ratio of the distance between wire and insulation centers to the difference between wire and insulation radii.	*Electrical*
Eccentricity, mechanical	Variation of shaft surface radius when referenced to the shaft's true geometric centerline. Out-of-roundness.	*Reliability Engineering*
ECE	Economic Commission for Europe	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Echo	To reflect received data to the sender. For example, keys depressed on a keyboard are usually echoed as characters displayed on the screen.	*General Engineering*
Echo	- To reflect received data to the sender. For example, keys depressed on a keyboard are usually echoed as characters displayed on the screen.	*Electronic Process*
EC-II	Energy Conserving-II (engine oil designation)	*Petro-Chemical Abbreviations*
ECM	electronic control module	*Petro-Chemical Abbreviations*
Eco-efficiency	- Combining efficiency and ecological aspects in the pursuit of sustainable development.	*Electrical*
Ecology	the study of the environment and how living things interact with it	*Agriculture*
Economic Action	steps taken by labor organizations to achieve their goals, generally in the form of strikes, picketing, boycotts, or other means at their disposal.	*Industrial Relations*
Economic analysis (economic evaluation)	Comparison of the relationship between costs and outcomes of alternative healthcare interventions. See also: Cost-benefit analysis, Cost-effectiveness analysis, Cost-utility analysis	*Quality Engineering*
Economic Dispatch	The distribution of total generation requirements among alternative sources for optimum system economy with consideration to both incremental generating costs and incremental transmission losses.	*Energy*
Economic Efficiency	A term that refers to the optimal production and consumption of goods and services. This generally occurs when prices of products and services reflect their marginal costs. Economic efficiency gains can be achieved through cost reduction, but it is better to think of the concept as actions that promote an increase in overall net value (which includes, but is not limited to, cost reductions).	*Energy*
Economic Life	The Total Length Of Time That An Asset Is Expected To Remain Actively In Service Before It Is Expected That It Would Be Cheaper To Replace The Equipment Rather Than Continuing To Maintain It. In Practice, Equipment Is More Often Replaced For Other Reasons, Including: Because It No Longer Meets Operational Requirements For Efficiency, Product Quality, Comfort Etc., Or Because Newer Equipment Can Provide The Same Quality And Quantity Of Output More Efficiently.	*Management*
Economic Report	the Report of Congress required of the President by the Employment Act of 1946.	*Industrial Relations*
Economic Sanctions	actions intended to penalize an employer for violating the provisions of an agreement or other understanding with a union.	*Industrial Relations*
Economic Strike	a work stoppage which results from inability of an employer and a union to agree on wages, hours, or other conditions of employment.	*Industrial Relations*
Economic Value Added (EVA)	A measurement of shareholder wealth created by an investment center. A trademark of Stern Stewart & Company, calculating EVA can be very complex but is basically net operating profit after taxes (NOPAT) minus an appropriate charge for the opportunity cost of all capital invested in an enterprise.	*Quality*
Economy Energy	Energy produced and substituted for the traditional but less economical source of energy. Economic energy is usually sold without capacity and is priced at variable costs plus administration costs.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Economy of scale	The principle that larger production facilities have lower unit costs than smaller facilities.	*Energy*
EconoReset	The simplest form of microprocessor supervisory circuit, it monitors the power supply for the microprocessor and provides only a power-on reset function.	*Electrical Engineering*
EconoReset	The simplest form of microprocessor supervisory circuit, it monitors the power supply for the microprocessor and provides only a power-on reset function.	*Electrical Engineering*
EconOscillator	Low-cost, surface-mount, CMOS oscillator family from Maximum EconOscillators replace crystal-based oscillators. They need no external crystals or timing components.	*Electrical Engineering*
Ecosystem	a community of living and non-living things that interact by exchanging matter and energy	*Agriculture*
Ecosystem	The components of a particular habitat, such as a pond or forest, together with the physical environment in which they live.	*Forestry*
Ecosystem services	Indirect benefits provided by the forest ecosystem that help ensure the integrity of critical structure, functions and processes.	*Forestry*
ECU	electronic control units	*Petro-Chemical Abbreviations*
Ecuador (1973-1992 and 2007-present)	Ecuador (1973-1992 and 2007-present)	*Energy*
Eddy current	Fluctuating electrical current in a conductor. A source of energy loss in applications of magnet.	*Material Process*
Eddy current	Electrical current generated (and dissipated) in a conductive material (often a rotor shaft) when it intercepts the electromagnetic field of a displacement or proximity probe.	*Reliability Engineering*
Eddy Current Testing	This is a nondestructive testing method in which eddy current flow is induced in the test object. Changes in the flow caused by variations in the object are reflected into a nearby coil or coils for subsequent analysis by suitable instrumentation and techniques.	*Maintenance and Repair*
Eddy current testing	A type of non destructive testing in which defects are monitored as a result of changes in the impedance of an inspection coil, as the coil carriers an alternating current and passes through the vicinity of the flawed material.	*Material Process*
Edge	The transition between two different types or ages of vegetation.	*Forestry*
Edge (filter)	A filter medium whose passages are formed by the adjacent surfaces of stacked discs, edgewound ribbons, or single-layer filaments.	*Mechanical, Process, and Operations*
Edge coal or edge seams	Edge coal or edge seams, highly inclined seams, which are set at an almost vertical angle.	*Mining*
Edge dislocation	Linear defect with the Burgers vector perpendicular to the dislocation line.	*Material Process*
Edge Joint	A joint between the edges of two or more parallel or nearly parallel members.	*Maintenance and Repair*
Edge Preparation	The contour pre- pared on the edge of a member for welding. See Fig. A1.7.	*Maintenance and Repair*
Edge sealing	The process of sealing the edges of a laminate. It is necessary with certain plastics which absorb moisture from the air.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
EDI	EDI: Electronic Data Interchange	*Energy*
Editor (of a Cochrane Review Group)	A member of the CRG's editorial team, often not located at the editorial base, who not only prepares and maintains one or more Cochrane Reviews as a member of a CRG, but also has responsibilities to support the Co-ordinating Editor in editing Cochrane Reviews prepared by others, and in fostering the smooth running of the CRG.	*Quality Engineering*
Editorial base	Cochrane Review Groups have an editorial base at which their work is coordinated. Usually the Co-ordinating Editor, the Managing Editor, the Trials Search Co-ordinator, secretarial support, and the CRG's trials register are located there. Reviewers/Authors are encouraged to come there to work on their Cochrane Reviews.	*Quality Engineering*
Editorial Management Advisory Group (EMAG)	Formerly called the ModMan Advisory Group (MAG). Advises on the development of software that supports the editorial process of Collaborative Review Groups. Also called: EMAG, MAG, ModMan Advisory Group	*Quality Engineering*
Editorial process	The process by which each individual CRG decides on the criteria for editing and including Cochrane Reviews in its edited module for inclusion in the Cochrane Database of Systematic Reviews. See also: Referee process	*Quality Engineering*
Editorial team (of a Cochrane Review Group)	Normally consists of a Co-ordinating Editor, a Managing Editor, several editors, in most cases a Trials Search Co-ordinator, and in some cases a secretary.	*Quality Engineering*
EEB	European Environmental Bureau	*Petro-Chemical Abbreviations*
EEC	European Economic Community	*Petro-Chemical Abbreviations*
EECS	The Electrical Equipment Certification Service (EECS) is based at the UK Health and Safety Laboratory's Buxton research center. It provides a range of testing and certification services primarily related to equipment and systems intended for use in potentially explosive atmospheres.	*Maintenance*
EELQMS	European Engine Lubricant Quality Management System	*Petro-Chemical Abbreviations*
Eenie coal	coal that is slightly altered in appearance due to the presence of a 'whin'. The broken edge of the coal has bright circular spots, which look like eyes. Also known as 'peacock coal'. (Scot.).	*Mining*
Effect size	1. A generic term for the estimate of effect of treatment for a study .2. A dimensionless measure of effect that is typically used for continuous data when different scales (e.g. for measuring pain) are used to measure an outcome and is usually defined as the difference in means between the intervention and control groups divided by the standard deviation of the control or both groups. See also: Standardized mean difference	*Quality Engineering*
Effective Area	For a diaphragm actuator, the effective area is that part of the diaphragm area that is effective in producing a stem force. Usually the effective area will change as the valve is stroked – being at a maximum at the start and a minimum at the end of the travel range. Flat sheet diaphragms are most affected by this; while molded diaphragms will improve the actuator performance, and a rolling diaphragm will provide a constant stem force throughout the entire stroke of the valve.	*Industrial Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Effective Diameter	This is the diameter of an imaginary cylinder coaxial with the thread, which has equal metal and space widths. It is often referred to as pitch diameter. Sometimes referred to as the simple effective diameter to differentiate from the virtual effective diameter.	*Maintenance*
Effective Face Width	Face Width: That portion of the face width that actually comes into contact with mating teeth, as occasionally one member of a pair of gears may have a greater face width than the other.	*Mechanical Engineering*
Effective Filtration Area (device size)	Filter media and devices are available in a wide range of sizes with different Effective Filtration Areas (EFA). EFA is the filter area that is available for filtration—the larger the filter area, the higher the flow rate at a given differential pressure.	*Contamination Control*
Effective full-power days	The number of effective full-power days produced by a unit is a measure of the unit's energy generation. It is determined using the following ratio Heat generation (planned or actual) in megawatt days thermal (MWdt) (divided by) Licensed thermal power in megawatts thermal (MWt).	*Energy*
Effective Hydraulic Diameter	The area in which water from the aquifer can move freely into a well. If a borehole is completed with a well casing plus surrounded by a filter pack material, the effective hydraulic diameter is equal to the diameter of the borehole.	*Petroleum Engineering*
Effective Number of Bits	An indication of the quality of an analog-to-digital converter (ADC). The measurement is related to the test frequency and the signal-to-noise ratio.	*Electrical Engineering*
Effective Nut Diameter	Twice the effective nut radius.	*Maintenance*
Effective Nut Radius	The radius from the centre of the nut to the point where the contact forces, generated when the nut is turned, can be considered to act.	*Maintenance*
Effective porosity	the amount of interconnected pore space in a soil or rock through which fluids can pass, expressed as a percent of bulk volume. Some of the voids and pores in a rock or soil will be filled with static fluid or other material, so that effective porosity is always less than total porosity.	*Chemical*
Effective Sensing Distance	The difference between nominal sensing distance and the % manufacturing tolerance.	*Electrical Engineering*
Effective Series Resistance	The resistive component of a capacitor's equivalent circuit. A capacitor can be modeled as an ideal capacitor in series with a resistor and an inductor. The resistor's value is the ESR.	*Electrical Engineering*
Effective Series Resistance	is the resistive component of a capacitor's equivalent circuit. A capacitor can be modeled as an ideal capacitor in series with a resistor and an inductor. The resistor's value is the ESR.	*Electrical Engineering*
Effective Size	The 90% retained size of a sediment as determined from a grain-size analysis; therefore, 10% of the sediment is finer and 90% is coarser.	*Petroleum Engineering*
Effective volume	(See Net Effective Volume).	*Facility Engineering*
Effectiveness	A measure of the benefit resulting from an intervention for a given health problem under usual conditions of clinical care for a particular group; this form of evaluation considers both the efficacy of an intervention and its acceptance by those to whom it is offered, answering the question, "Does the practice do more good than harm to people to whom it is offered?" See Intention to treat.	*Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Efficacy	A measure of the benefit resulting from an intervention for a given health problem under the ideal conditions of an investigation; it answers the question, "Does the practice do more good than harm to people who fully comply with the recommendations?"	*Analysis*
Efficiency	The actual torque ratio of a gear set divided by its gear ratio.	*Gears*
Efficiency (filter)	The ability, expressed as a percent, of a filter to remove specified artificial contaminant at a given contaminant concentration under specified test conditions.	*Mechanical, Process, and Operations*
Efficiency Expert	an individual assigned to review the operations of a plant, department, or other production unit to determine the most effective way to perform job duties.	*Industrial Relations*
Efficiency of Labor	the productivity of a worker as measured by his output during a definite time span.	*Industrial Relations*
Efficiency Rating	the periodic appraisal of an employee's work performance.	*Industrial Relations*
Efficiency Service Company	A company that offers to reduce a client's electricity consumption with the cost savings being split with the client.	*Energy*
Effluent	Filtered liquid leaving the filter.	*Filtration*
effluent	something that flows out, especially a liquid or gaseous waste stream.	*Chemical*
Effusion cell	Resistance heated furnace providing a source of atoms or molecule for a deposition process.	*Material Process*
EFTC	Engine Fuels Technical Committee (CEC)	*Petro-Chemical Abbreviations*
Egg gallery	A long, narrow tunnel along the sides of which eggs are deposited in small niches; the pattern of construction is often diagnostic of a particular species of insect. [1] Fin.Swe.	*Forestry*
Egg mass	Cluster of eggs, usually in a matrix of body hairs or wing scales from the female adult and/or a mucilaginous cementing secretion. [1]	*Forestry*
Egg	Female gamete.	*Agriculture*
E-glass	Most generally used glass fiber composition for composite applications.	*Material Process*
EGR	exhaust gas recirculation	*Petro-Chemical Abbreviations*
EHS	extremely hazardous substance	*Petro-Chemical Abbreviations*
EIA	The Energy Information Administration. An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The Agency must meet the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position. See more information about EIA at http://www.eia.gov/about/	*Energy*
Eight-Hour Leagues	organizations formed in 1865 in Massachusetts to get support for the eight-hour day.	*Industrial Relations*
Eight-Hour Movement	the efforts during various periods, particularly in the 1800's, to obtain public support for the eight-hour day.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Eimco	a small tracked bucket loader, often used in headings.	*Mining*
EIS	EIS: Environmental Impact Statement	*Energy*
Ejector Device	from removing a molded piece from the mold.	*Material Process*
Ejector pin	assembly All the parts that help	*Material Process*
Ejector pin	Pin for removing finished piece from mold.	*Material Process*
el	Elevation	*General*
Elastic	A material or structure is said to behave elastically if it returns to its original geometry upon unloading.	*Engineering Physics*
Elastic Deformation	A change in a substance whereby it reverts to its original dimensions on release of an applied stress.	*Electrical*
Elastic deformation	Temporary deformation associated with the stretching of atomic bonds. A deformation in which a substance reverts to its original dimensions on release of the deforming stress.	*Material Process*
Elastic energy	The energy stored in deformed elastic material (e.g., a watch spring). Elastic energy equals where k is the stiffness, and is the associated deflection. Elastic energy is sometimes called elastic potential energy because it can be recovered when the object returns to its original shape; see potential energy.	*Engineering Physics*
Elastic limit	The point beyond which the deformations of a structure or material are no longer purely elastic. E-Modulus: see modulus of elasticity.	*Engineering Physics*
Elastic limit	For a given material, that stress beyond which any increment of stress produces a permanent strain.	*Material Process*
Elasticity	Ability of material to resume its original form after the removal of the force which has produced a change in form.	*Material Process*
Elasticity	The property of certain materials that enables them to return to their original dimensions after an applied stress.	*Paint and Coatings*
Elasticity of Demand	The ratio of the percentage change in the quantity demanded of a good to the percentage change in price.	*Energy*
Elastohydrodynamic Lubrication	In rolling element bearings, the elastic deformation of the bearing (flattening) as it rolls, under load, in the bearing race. This momentary flattening improves the hydrodynamic lubrication properties by converting point or line contact to surface-to-surface contact.	*Lubrication*
Elastohydrodynamic Lubrication (EHD)	A lubricant regime characterized by high unit loads and high speeds in rolling elements where the mating parts deform elastically due to the incompressibility of the lubricant film under very high pressure.	*Lubrication*
Elastomer	A natural or synthetic elastic material, often used for o-ring seals. Typical materials are viton, buna-n, EPDM (ethylene propylene dimonomer),	*General Mechanical*
Elastomer	A material that at room temperature returns rapidly to approximately its initial dimensions and shape after substantial deformation by a weak stress and release of the stress.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Elbow	A pipe fitting installed between two lengths of pipe or tube allowing a change of direction, usually 90° or 45°. The ends may be machined for butt welding, threaded (usually female), or socketed, etc. When the two ends differ in size, it is called a reducing or reducer elbow. Most elbows are available in short radius or long radius of types. The short radius elbows have a center to end distance equal to the NPS in inches, while the long radius is 1.5 times the NPS in inches. Short elbows are universally available; long elbows are readily available in ABS plastic, PVC, CPVC and copper. See also Pipe Fittings	*Industrial*
Elbow	A female threaded or socket fitting used for changing direction in a run of pipe or tubing. See "Ell," "Street Ell."	*Mechanical*
Electioneering	activity designed to influence voting.	*Industrial Relations*
Elections	procedures established by federal and state statutes to determine the organizations properly representative of employees for the purpose of collective bargaining.	*Industrial Relations*
Electric Fusion-Welded Pipe	Pipe having a longitudinal or spiral butt joint in which coalescence is produced in the preformed tube by manual or automatic electric arc welding. The weld may be single or double and may be made with or without the use of filler metal.4	*Maintenance and Repair*
Electric Actuator	Also known as an Electro-Mechanical Actuator uses an electrically operated motor-driven gear train or screw to position the actuator stem. The actuator may respond to either a digital or analogue electrical signal.	*Industrial Engineering*
Electric baseboard	An individual space heater with electric resistance coils mounted behind shallow panels along baseboards. Electric baseboards rely on passive convection to distribute heated air to the space.	*Energy*
Electric Capacity	This refers to the ability of a power plant to produce a given output of electric energy at an instant in time, measured in kilowatts or megawatts (1,000 kilowatts).	*Energy*
Electric current	The flow of electric charge. The preferred unit of measure is the ampere.	*Energy*
Electric Distribution Company	The company that owns the power lines and equipment necessary to deliver purchased electricity to the customer.	*Energy*
Electric energy	The ability of an electric current to produce work, heat, light, or other forms of energy. It is measured in kilowatt hours.	*Energy*
Electric Erosion	Electric erosion is damage to contact steel surfaces caused by the passage of electric current. Small current leakage typically results in small craters, and possibly flutes or discoloration. Large craters can result from excessive voltage leaks.	*Reliability Engineering*
Electric expenses	The cost of labor, material, and expenses incurred in operating a facility's prime movers, generators, auxiliary apparatus, switching gear, and other electric equipment for each of the points where electricity enters the transmission or distribution grid.	*Energy*
Electric generation	See Gross generation and Net generation.	*Energy*

Term	Definition	*Industry*
Electric generation industry	Stationary and mobile generating units that are connected to the electric power grid and can generate electricity. The electric generation industry includes the "electric power sector" (utility generators and independent power producers) and industrial and commercial power generators, including combined-heat-and-power producers, but excludes units at single-family dwellings.	*Energy*
Electric generator	A facility that produces only electricity, commonly expressed in kilowatt hours (kWh) or megawatt hours (MWh). Electric generators include electric utilities and independent power producers.	*Energy*
Electric hot water boiler	Electrical appliances which produce hot water. They are available in the form of instantaneous water heaters or storage tanks.	*Thermal Management*
Electric hybrid vehicle	An electric vehicle that either (1) operates solely on electricity, but contains an internal combustion motor that generates additional electricity (series hybrid); or (2) contains an electric system and an internal combustion system and is capable of operating on either system (parallel hybrid).	*Energy*
Electric industry reregulation	The design and implementation of regulatory practices to be applied to the remaining traditional utilities after the electric power industry has been restructured. Reregulation applies to those entities that continue to exhibit characteristics of a natural monopoly. Reregulation could employ the same or different regulatory practices as those used before restructuring.	*Energy*
Electric industry restructuring	The process of replacing a monopolistic system of electric utility suppliers with competing sellers, allowing individual retail customers to choose their supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of vertically-integrated electric utilities.	*Energy*
Electric motor	A device that converts electrical energy into mechanical energy that can be used to drive mechanical equipment.	*Electrical*
Electric motor vehicle	A motor vehicle powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, photovoltaic arrays, or other sources of electric current.	*Energy*
Electric non-utility	Any entity that generates, transmits, or sells electricity, or sells or trades electricity services and products, where costs are not established and recovered by regulatory authority. Examples of these entities include, but are not limited to, independent power producers, power marketers and aggregators (both wholesale and retail), merchant transmission service providers, self-generation entities, and cogeneration firms with Qualifying Facility Status.	*Energy*
Electric operating expenses	Summation of electric operation-related expenses, such as operation expenses, maintenance expenses, depreciation expenses, amortization, taxes other than income taxes, Federal income taxes, other income taxes, provision for deferred income taxes, provision for deferred income-credit, and investment tax credit adjustment.	*Energy*
Electric permittivity	Proportionality constant in the relationship between charge density and electrical field strength.	*Material Process*
Electric Plant (Physical)	A facility that contains all necessary equipment for converting energy into electricity.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electric plant acquisition adjustment	The difference between (a) the cost to the respondent utility of an electric plant acquired as an operating unit or system by purchase and (b) the depreciated original cost, estimated if not known, of such property.	*Energy*
Electric power	The rate at which electric energy is transferred. Electric power is measured by capacity and is commonly expressed in megawatts (MW).	*Energy*
Electric power grid	A system of synchronized power providers and consumers connected by transmission and distribution lines and operated by one or more control centers. In the continental United States, the electric power grid consists of three systems the Eastern Interconnect, the Western Interconnect, and the Texas Interconnect. In Alaska and Hawaii, several systems encompass areas smaller than the State (e.g., the interconnect serving Anchorage, Fairbanks, and the Kenai Peninsula; individual islands).	*Energy*
Electric power plant	A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.	*Energy*
Electric power sector	An energy-consuming sector that consists of electricity only and combined heat and power(CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public--i.e., North American Industry Classification System 22 plants. See also Combined heat and power (CHP) plant and Electricity only plant.	*Energy*
Electric Power Supplier	Non-utility provider of electricity to a competitive marketplace.	*Energy*
Electric power system	An individual electric power entity--a company; an electric cooperative; a public electric supply corporation as the Tennessee Valley Authority; a similar Federal department or agency such as the Bonneville Power Administration; the Bureau of Reclamation or the Corps of Engineers; a municipally owned electric department offering service to the public; or an electric public utility district (a "PUD"); also a jointly owned electric supply project such as the Keystone.	*Energy*
Electric pump for well water	This pump forces the water from a well below ground level up into the water pipes that circulate through the house. When this pump is not working, there is a limited supply of running water in the house.	*Energy*
Electric Rate	The price set for a specified amount and type of electricity by class of service in an electric rate schedule or sales contract.	*Energy*
Electric Rate Schedule	An electric rate and its contract terms accepted by a regulatory agency.	*Energy*
Electric Reliability Council of Texas (ERCOT)	One of the ten regional reliability councils that make up the North American Electric Reliability Council (NERC).	*Energy*
Electric Resistance-Welded Pipe	Pipe produced in individual lengths or in continuous lengths from coiled skelp and subsequently cut into individual lengths having a longitudinal butt joint in which coalescence is produced by the heat obtained from resistance of the pipe to the flow of electric current in a circuit of which the pipe is a part and by the application of pressure.3	*Maintenance and Repair*
Electric Service Provider	An entity that provides electric service to a retail or end-use customer.	*Energy*

Term	Definition	*Industry*
Electric Supplier	An entity (including an energy marketer or energy services company – or ESCO) licensed or approved by a state utility regulatory agency to provide electricity supply to consumers. With energy choice, consumers can choose their electric supplier. The energy is then delivered by the consumer's utility distribution company	*Energy*
Electric System	This term refers to all of the elements needed to distribute electrical power. It includes overhead and underground lines, poles, transformers, and other equipment.	*Energy*
Electric system loss	Total energy loss from all causes for an electric utility.	*Energy*
Electric system reliability	The degree to which the performance of the elements of the electrical system results in power being delivered to consumers within accepted standards and in the amount desired. Reliability encompasses two concepts, adequacy and security. Adequacy implies that there are sufficient generation and transmission resources installed and available to meet projected electrical demand plus reserves for contingencies. Security implies that the system will remain intact operationally (i.e., will have sufficient available operating capacity) even after outages or other equipment failure. The degree of reliability may be measured by the frequency, duration, and magnitude of adverse effects on consumer service.	*Energy*
Electric Utility	A legal entity that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy.	*Energy*
Electric Utility Affiliate	This refers to a subsidiary or affiliate of an electric utility. Many utilities form affiliates to develop, own, and operate independent power facilities.	*Energy*
Electric utility company	Electric utility company: See Electric utility.	*Energy*
Electric utility divestiture	The separation of one electric utility function from others through the selling of the management and ownership of the assets related to that function. It is most commonly associated with selling generation assets so they are no longer owned or controlled by the shareholders that own the company's transmission and distribution assets.	*Energy*
Electric utility generator	A generator that is owned by an electric utility, (see definition of electric utility) or a jointly owned generator with the greatest share of the generator being electric utility owned. Note: If two or more owners have equal shares of ownership in a generator, it is considered to be an electric utility generator if any one of the owners meets the definition of electric utility.	*Energy*
Electric utility restructuring	The introduction of competition into at least the generation phase of electricity production, with a corresponding decrease in regulatory control.	*Energy*
Electric utility sector	The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Non utility power producers are not included in the electric sector.	*Energy*
Electric Water Heating	Electric water heating is often done by an immersion heater fitted near the bottom of the hot water tank. The immersion heater is a metal tube containing an insulated electric resistance heater.	*Industrial*
Electric Wholesale Generator	A power producer who sells power at cost to a customer.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electric zone	A portion of the grid controlled by the independent system operator.	*Energy*
Electrical balance of plant (eBoP)	The sum of all electrical equipment required for safe and coordinated operation of various parts of a power plant.	*Electrical*
Electrical Conductance	A measure of the ease with which a conducting current can be caused to flow through a material under the influence of an applied electric field. It is the reciprocal of resistivity and is measured in mhos (unit of conductance equal to the reciprocal of the ohm) per foot (meter). The ohm is the SI unit of electrical impedance or, in the direct current case, electrical resistance, named after Georg Simon Ohm. It is defined as the resistance between two points of a conductor when a constant potential difference of one volt, applied to these points, produces in the conductor a current of one ampere. The International System of Units (SI) is the modern form of the metric system and is generally a system devised around the convenience of the number ten.	*Petroleum Engineering*
Electrical conduction	having a measurable conductivity due to the movement of any type of charge carrier.	*Material Process*
Electrical Current Analysis	An investigation of the electric current (spectrum) of electric motors or generators. Through this analysis, irregularities (e.g. broken rotor bars, cracked end-rings, high resistance joints) are detected. Specialized tools and personnel exist for doing these investigations.	*Maintenance*
Electrical drivetrain	In the wind power industry, this term refers to the combination of the a wind turbine's generator, converter and transformer.	*Electrical*
Electrical field strength	Voltage per unit distance.	*Material Process*
Electrical grounding	To connect with the ground to make the earth part of the circuit.	*Mining*
Electrical Insulating Oil	A high-quality oxidation-resistant oil refined to give long service as a dielectric and coolant for electrical equipment, most commonly transformers. An insulating oil must resist the effects of elevated temperatures, electrical stress, and contact with air, which can lead to sludge formation and loss of insulation properties. It must be kept dry, as water is detrimental to dielectric strength – the minimum voltage required to produce an electric arc through an oil sample, as measured by test method ASTM D 877.	*Lubrication*
Electrical Interference	Electrical noise induced upon the signal wires that obscures the wanted information signal.	*Electrical*
Electrical isolation	separating two conductive materials from electrical contact; galvanized steel is sometimes electrically isolated in order to prevent rapid consumption of the zinc coating	*Materials Process*
Electrical Life	The life of a switch under a specified combination of electrical load, actuation, environment and criterion of failure. Synonymous with switch life.	*Electrical Engineering*
Electrical quiescent power	The power required for differential operation of the servovalve when the current through each coil is equal and opposite in polarity.	*Mechanical, Process, and Operations*
Electrical Resistivity	The property of material which resists the flow of electrical current measured per unit length through a cross-sectional area.	*Petroleum Engineering*
Electrical Steel	Steel that includes silicon. The silicon content allows the steel to minimize energy loss during electrical applications.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electrical system energy losses	The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted for use.	*Energy*
Electrical units -	Electrical Units - Watt = Ampere x Volt; 1,000 A = 1 Kiloampere (=kA); 1,000 V = 1 Kilovolt (= kV); 1,000 W = 1 Kilowatt (= kW); 1,000,000 W = 1,000 kW = 1Megawatt (= MW). Some examples – Voltage In a home the voltage in the outlets is normally 220 or 110 Volt. Large power transmission lines have voltages in the range of 220 - 800 kV. Power - A typical incandescent (not fluorescent) light bulb consumes 40 - 100 Watt. A normal home in North America or Europe consumes power in the range of 1 - 10 kW. A large wind power unit can generate 3,000 kW (= 3 MW). A large coal or nuclear power station can generate 500 - 4,000 MW. (Individual nuclear generating units have a capacity of 1 - 1.3 GW).	*Electrical*
Electrically poled	Polycrystalline material having a single, crystalline orientation due to the alignment of the starting powder under a strong electrical field.	*Material Process*
Electric-Arc Furnace (EAF Or EF)	An economical method of steelmaking that is energized by an electric arc flowing between two bottom electrodes. Furnace charges consist of purchased scrap.	*Metallurgy*
Electricity	A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.	*Energy*
electricity (including electricity from solar energy)	electricity (including electricity from solar energy)	*Energy*
Electricity broker	An entity that arranges the sale and purchase of electric energy, the transmission of electricity, and/or other related services between buyers and sellers but does not take title to any of the power sold.	*Energy*
Electricity congestion	A condition that occurs when insufficient transmission capacity is available to implement all of the desired transactions simultaneously.	*Energy*
Electricity demand	The rate at which energy is delivered to loads and scheduling points by generation, transmission, and distribution facilities.	*Energy*
Electricity generation	The process of producing electric energy or the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatt hours(kWh) or megawatt hours (MWh).	*Energy*
Electricity generation, gross	Electricity generation, gross: See Gross generation.	*Energy*
Electricity generation, net	Electricity generation, net: See Net generation.	*Energy*
Electricity only plant	A plant designed to produce electricity only. See also Combined heat and power (CHP) plant.	*Energy*
Electricity paid by household	The household paid the electric utility company directly for all household uses of electricity (such as water heating, space heating, air-conditioning, cooking, lighting, and operating appliances.) Bills paid by a third party are not counted as paid by the household.	*Energy*
Electricity sales	The amount of kilowatt hours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electricity storage	Electricity is difficult to store. The most effective way to store surplus electricity in terms of cost and environmental impact is to use it to pump water uphill into the reservoirs of hydropower plants, a process known as pumped storage. Alternatives include large-scale batteries.	*Electrical*
Electrochemical cell	System providing for connected anodic and cathodic electrode reactions.	*Material Process*
Electrochemical Cell	An electrochemical system consisting of an anode and a cathode in metallic contact and immersed in an electrolyte. (The anode and cathode may be different metals or dissimilar areas on the same metal surface.	*Paint and Coatings*
Electrochemical process	The direct process end use in which electricity is used to cause a chemical transformation. Major uses of electrochemical process occur in the aluminum industry in which alumina is reduced to molten aluminum metal and oxygen, and in the alkalies and chlorine industry, in which brine is separated into caustic soda, chlorine, and hydrogen.	*Energy*
Electrode	Conductor that carries an electrical charge.	*Chemical Engineering*
Electrode	Electrode—See Isopotential point.	*Electronic Process*
Electrode Potential (E)	The difference in potential established between an electrode and a solution when the electrode is immersed in the solution.	*General Engineering*
Electro-hydraulic servo valve	A directional type valve which receives a variable or controlled electrical signal and which controls or meters hydraulic flow.	*Mechanical, Process, and Operations*
Electroless Nickel	A relatively thin, hard coating that can be applied to threads and deposited uniformly. Bright metallic in appearance this coating has excellent resistance to wear and corrosion.	*Maintenance*
Electroless Nickel	The autocatalytic deposition of nickel/phosphorous and nickel/boron have many useful corrosion and tribo/corrosion applications. Unlike the electrolytic processes, they produce a deposit with completely uniform coverage. In the case of Ni P, deposits around 25 to 50 microns thick with a hardness of about 500Hv is obtained, but thermal ageing at temperatures around 400°C can develop hardness values in excess of 1000Hv.	*Paint and Coatings*
Electroless nickel plating	A plating process which requires no external electrical power and is the result of a chemical reaction between the part and the plating solution. A uniform consistent deposit and plating rate can be produced by controlling and adjusting the chemistry of the plating bath.	*Mechanical*
Electroluminescence	Luminescence caused by electrons.	*Material Process*
Electrolysis	Production of chemical changes of the electrolyte by the passage of current through an electrochemical cell.	*Paint and Coatings*
Electrolysis	An electric current is passed through a solution containing dissolved metals, causing the metals to be deposited onto a cathode.	*Mining*
Electrolyte	A chemical compound that dissociates or ionizes in water to produce a solution that will conduct an electric current; an acid, base, or salt.	*Chemical Engineering*
Electrolyte	A conducting medium in which the flow of current is accompanied by movement of matter. A substance that is capable of forming a conducting liquid medium when dissolved or melted.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electrolytic refining	The process of purifying metal ingots that are suspended as anodes in an electrolytic bath, alternated with refined sheets of the same metal which act as starters or cathodes.	*Mining*
Electromagnetic Compatibility	The ability of electronic equipment to be a "good electromagnetic neighbor": It neither causes, nor is susceptible to, electromagnetic interference (within the limits of applicable standards).	*Electrical Engineering*
Electromagnetic fields	All stationary charged particles are surrounded by an electric field (measured in volts/meter). Charged particles in motion (e.g., electrons in an electrical current) are also surrounded by a magnetic field (measured in amps/meter). The combination of an electric field (around the charged particles) and the magnetic field (generated when the charged particles flow) is known as an electromagnetic field (sometimes abbreviated to EMF). Radio waves are a form of electromagnetic radiation. Note - the terms "electric field" and "magnetic field" are not interchangeable.	*Electrical*
Electromagnetic Interference	Unwanted noise from electromagnetic radiation.	*Electrical Engineering*
Electromotive Force (emf)	The potential difference between the two electrodes in a cell. The cell emf is the cell voltage measured when no current is flowing through the cell. It can be measured by means of a pH meter with high input impedance.	*Electrical*
Electromotive force series	Systematic listing of half cell reaction voltages.	*Material Process*
Electromotive Force Series (EMF Series)	A list of elements arranged according to their standard electrode potentials, with "noble" metals such as gold being positive and "active" metals such as zinc being negative.	*Paint and Coatings*
Electron	Negatively charged subatomic particle located in an orbital about a positively charged nucleus.	*Material Process*
Electron acceptor	a chemical entity that accepts electrons transferred to it from another compound. It is an oxidizing agent that, by virtue of its accepting electrons, is itself reduced in the process. See also terminal electron acceptor and oxidation-reduction.	*Chemical*
Electron cloud	Assembly of delocalized electrons in a metallic solid. Electron gas.	*Material Process*
Electron density	Concentration of negative charge in an electron orbital.	*Material Process*
Electron donor	a chemical entity that donates electrons to another compound. It is a reducing agent that, by virtue of its donating electrons, is itself oxidized in the process. (see also electron acceptor and oxidation-reduction.)	*Chemical*
Electron hole	Missing electron in an electron cloud. a charge carrier with an effective positive charge.	*Material Process*
Electron hole pair	Two charge carriers produced when an electron is promoted to the conduction band, leaving behind an electron hole in the valence band.	*Material Process*
Electron orbital	Location of negative charge about a positive nucleus in an atom.	*Material Process*
Electron sharing	Basis of the covalent bond.	*Material Process*
Electron spectroscopy for chemical analysis (ESCA)	X-ray photoelectron spectroscopy (XPS). Chemical analysis by the use of characteristic energy photoelectrons produced by exposure to X-ray photons.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Electron spin	Relativistic effect associated with the intrinsic angular momentum of an electron. For simplicity, can be likened to the motion of a spinning planet.	*Material Process*
Electron transfer	Basis of the ionic bond.	*Material Process*
Electronegative material	is one or more electrons short of filling its outermost sublevel	*Physics*
Electronegativity	the ability of an atom in a covalent bond to attract electrons to itself	*Physics*
Electronegativity	The ability of an atom to attract electrons to itself.	*Material Process*
Electroneutrality condition	Condition that states that the sum of charges in a control volume in an electrolyte should be zero.	*Chemical*
Electronic	Industrial application of high frequency electric current.	*Material Process*
Electronic Brake-Force Distribution	Operates in conjunction with ABS to balance the force applied to brakes at front and rear wheels. Can prevent over-braking, improve brake-pad life, reduce "brake fade" caused by excessive heat, and ensure peak braking efficiency in all conditions.	*Mechanical Engineering*
Electronic ceramic	Ceramic material with an engineering application predominantly based on its electronic properties.	*Material Process*
Electronic conduction	Having a measurable conductivity due specifically to the movement of electrons.	*Material Process*
Electronic Data Interchange (EDI)	(EDI) links-Information-system linkages, based on communication protocols and document formats, which permit inter-company computer-to-computer communications. EDI links not only speed communication, but also eliminate re-keying of information and reduces the opportunity to introduce errors. A typical EDI application might speed information exchange between a customer and supplier company for purchase orders, invoices, or other transactions. EDI communications are often facilitated through "electronic mailbox" systems on third-party value-added networks.	*Maintenance*
Electronic Fuel Injection System	A system that injects fuel into the engine and includes an electronic control unit to time and meter the fuel flow.	*Mechanical Engineering*
Electronic Ignition System	An ignition system that uses transistors and other semiconductor devices as an electronic switch to turn the primary current on and off.	*Mechanical Engineering*
Electronic Industries Association (EIA)	A standards organization specializing in the electrical and functional characteristics of interface equipment.	*General Engineering*
Electronic Materials	materials that possess the ability to conduct electrons, such as semiconductors	*Physics*
Electronic optical and magnetic materials	Those engineering materials used primarily for their electronic, optical, or magnetic properties.	*Material Process*
Electronic polymer	A linear polymer with alternating single and double bonds. The extra electrons associated with the double bonds are relatively conductive.	*Material Process*
Electrons in covalent bonds are most likely to be found....	between the two nuclei	*Physics*
Electroosmosis	Onset of a flow due to the application of an external electric field or due to the formation of an electric field created by ion transport in membranes.	*Chemical*

Term	Definition	*Industry*
Electroosmosis	Onset of a flow due to the application of an external electric field or due to the formation of an electric field created by ion transport in membranes.	*Chemical Engineering*
Electrophoresis	Migration of charged electrolyte ions in an electric field.	*Chemical*
Electroplating	Metal build up at the cathode of an electrochemical cell.	*Material Process*
Electroplating	The electrodeposition of an adherent metallic coating upon an electrode for the purpose of securing a surface with properties or dimensions different from those of the substrate material.	*Paint and Coatings*
Electropneumatic	A type of digital valve positioner that receives an analog signal and converts it to a pneumatic output. That output is used to drive an actuator, which in turn opens or closes a control valve.	*Mechanical*
Electropositive Material	has one or more extra electrons beyond its last completed sublevel	*Physics*
Electrostatic Discharge	Release of stored static electricity. Most commonly the potentially damaging discharge of many thousands of volts that occurs when an electronic device is touched by a charged body.	*Electrical Engineering*
Electrostatic Discharge	Release of stored static electricity. Most commonly the potentially damaging discharge of many thousands of volts that occurs when an electronic device is touched by a charged body.	*Electrical Engineering*
Electrostatic Printer	Sensitized drum attracts toner which is transferred to media.	*Gears*
Electrostatic separator	A separator that removes contaminant from dielectric fluids by applying an electrical charge to the contaminant that is then attracted to a collection device of different electrical charge.	*Oil Analysis*
Element	The device that performs the filtration.	*Filtration*
Element	A component of a device or system.	*Process Control*
Element (Cartridge)	The porous device that performs the actual process of filtration.	*Oil Analysis*
Element (cartridge)	The porous device which performs the actual process of filtration.	*Mechanical, Process, and Operations*
Elements	Substances that cannot be divided into smaller units without nuclear destruction.	*Chemical Engineering*
Elemi	An aromatic balsamic, resinous gum used in some lacquers because of its elasticity and adhesive properties.	*Material Process*
Elevator	A hinged mechanism that is closed around the drill pipe, or other drill string components, to facilitate lowering them into or lifting them out of the wellbore.	*Petroleum Drilling*
Eligibility Date	the date used by the NLRB to determine the eligibility of employees to vote in a representation election.	*Industrial Relations*
Eligibility for Union Membership	most unions permit membership to those employees in the trade, occupation, or plant who pay their initiation fees and dues and live up to the union constitution and bylaws.	*Industrial Relations*
Eligibility List	a list generally used by civil service agencies to determine, after written or oral examination, those eligible to be hired in certain categories.	*Industrial Relations*
Eligibility Stickers to Vote	the Wagner Act was silent on this matter. The Taft-Hartley Act, however, provided that employees on strike who are not entitled to reinstatement "shall not be eligible to vote".	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Eliminator	(See Drift Eliminator).	*Facility Engineering*
Eliminator baffle	(See Eliminator Board).	*Facility Engineering*
Eliminator board	The smallest component in a wood drift eliminator assembly which is usually installed in a fixed position at an angle to the direction of air flow. Also known as Eliminator Baffle (Blade).	*Facility Engineering*
ELL	A pipe or tubing fitting that has the shape of an "L." See "Elbow."	*Mechanical*
Elliott	a hand operated drilling machine for drilling shot holes in hard coal or rock.	*Mining*
Elongation	The fractional increase in length of a material stressed in tension.	*Electrical*
ELTC	Engine Lubricant Technical Committee (CEC)	*Petro-Chemical Abbreviations*
Elution	The process of using a solvent (eluent) to remove select ions (e.g., uranium) from an adsorbent such as ion-exchange resins.	*Energy*
Elytra	The anterior leathery or chitinous wings of beetles and leafhoppers; serve as coverings to the hind wings and commonly meet at rest in a straight line down the middle of the dorsum.	*Forestry*
EM survey	A geophysical survey method which measures the electromagnetic properties of rocks.	*Mining*
EMA	Engine Manufacturers Association	*Petro-Chemical Abbreviations*
EMAG	See Editorial Management Advisory Group (EMAG)	*Quality Engineering*
EMBASE	Excerpta Medica database. A major European database of medical and health research.	*Quality Engineering*
Embedded Cost	A utility's average cost of doing business, which includes the costs of fuel, personnel, plants, poles, and wires.	*Energy*
Embedded System	A system in which the computer (generally a microcontroller or microprocessor) is included as an integral part of the system.	*Electrical Engineering*
Embedment	Localized plastic deformation which occurs in the vicinity of clamped fasteners or in the fastener threads. Embedding is local plastic deformations that occur under the nut face, in the joint faces and in the threads as a result of plastic flattening of the surface roughness. This occurs even when the loading is below the yield point of the bolt or limiting surface pressure of the joint material and is the result of the real area of contact between surfaces being less than the apparent area.	*Maintenance*
Embossing	A means of marker identification by means of thermal indentation leaving raised lettering on the sheath material of cable.	*Electrical*
Embrittlement	reduction in the normal ductility of a metal due to a physical or chemical change that may occur when cold-worked steel is immersed in molten zinc in the galvanizing kettle	*Materials Process*
Emergency	The failure of an electric power system to generate or deliver electric power as normally intended, resulting in the cut-off or curtailment of service.	*Energy*
Emergency backup generation	The use of electric generators only during interruptions of normal power supply.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Emergency Board	a board established under Section 10 of the Railway Labor Act after the procedures of the Act have been followed without agreement between the carrier and the employees.	*Industrial Relations*
Emergency energy	Electric energy provided for a limited duration, intended only for use during emergency conditions.	*Energy*
Emergency Maintenance Task	A Maintenance Task Carried Out In Order To Avert An Immediate Safety Or Environmental Hazard, Or To Correct A Failure With Significant Economic Impact.	*Plant Engineering*
Emergency Pull Cord	Vinyl coated cord that runs along the side of the conveyor that can be pulled at any time to stop the conveyor. Used with an Emergency Stop Switch.	*Manufacturing*
Emergency response plan (ERP)	ERPs are pre-planned responses to incidents to ensure protection of public health, safety, property and the environment and quick and effective responses.	*Petroleum Engineering*
Emergency seat seal	A fitting on the valve body through which sealant can be injected to effect a seat seal in an emergency situation.	*General Mechanical*
Emergency Shut Down Valve (ESD)	A valve that uses energy which is stored in the actuator to close rapidly in an emergency.	*Industrial Engineering*
Emergency Stop Switch	Electrical device used to stop the conveyor in an emergency. Used with an Emergency Pull Cord.	*Manufacturing*
Emergency Work	occasionally has reference to work provided during serious periods of unemployment in order to meet the needs of the community.	*Industrial Relations*
Emerson Efficiency Plan	a wage incentive system developed by Harrington Emerson which pays the day rate to the worker until he reaches the standard.	*Industrial Relations*
EMF	A rise in (electrical) potential energy. The principal unit is the volt.	*Electrical*
EMI	Electromagnetic interference.	*Electrical*
EMI	EMI - Electromagnetic interference.	*Electronic Process*
Emission	The emissions of a heating system are products of combustion that are discharged into the atmosphere through the chimney together with the flue gas.	*Thermal Management*
Emission spectrometer	Works on the basis that atoms of metallic and other particular elements emit light at characteristic wavelengths when they are excited in a flame, arc, or spark. Excited light is directed through an entrance slit in the spectrometer. This light penetrates the slit, falls on a grate, and is dispersed and reflected. The spectrometer is calibrated by a series of standard samples containing known amounts of the elements of interest. By exciting these standard samples, an analytical curve can be established which gives the relationship between the light intensity and its concentration in the fluid.	*Oil Analysis*
Emissions	The release or discharge of substances, effluents or pollutants into the environment.	*Electrical*
Emissions (Mobile Sources)	The combustion of fuel leads to the emission of exhaust gases that may be regarded as pollutants. Water and CO2 are not included in this category but CO, NOx and hydrocarbons are subject to legislative control. All three are emitted by gasoline engines; diesel engines also emit particulates that are controlled.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Emissions (Stationary Sources)	Fuel composition can influence emissions of sulfur oxides and particulates from power stations. Local authorities control the sulfur content of heavy fuel oils used in such applications.	*Lubrication*
Emissions coefficient	A unique value for scaling emissions to activity data in terms of a standard rate of emissions per unit of activity (e.g., pounds of carbon dioxide emitted per Btu of fossil fuel consumed).	*Energy*
Emissivity	The ratio of energy emitted by an object to the energy emitted by a blackbody at the same temperature. The emissivity of an object depends upon its material and surface texture; a polished metal surface can have an emissivity around 0.2 and a piece of wood can have an emissivity around 0.95.	*General Engineering*
Emitter	Region in a transistor that serves as the source of charge carriers.	*Material Process*
EMO –	Electric Motor Operated—The acuation of a valve by electric motor. See "Power Operator."	*Mechanical*
Empirical	Empirical results are based on observation rather than on reasoning alone.	*Quality Engineering*
Empirical	relying upon or gained from experiment or observation.	*Chemical*
Employ	to hire or make use of someone's service.	*Industrial Relations*
Employable	those persons in the population who are able to work and are within certain age limits.	*Industrial Relations*
Employee	a person in a gainful occupation who performs any work during the week when a census or other check is made.	*Industrial Relations*
Employee Associations	groups of workers organized in a single plant or establishment for the purpose of meeting common objectives.	*Industrial Relations*
Employee Benefits	nonwage aids instituted to meet some of the problems of insecurity of workers and at the same time to build better morale in the plant.	*Industrial Relations*
Employee Evaluation	the procedure used to determine an individual's fitness and qualifications for a particular job.	*Industrial Relations*
Employee Handbook	a booklet provided by employers to new employees as part of the orientation program.	*Industrial Relations*
Employee Magazine	a general medium for communication with employees in the plant.	*Industrial Relations*
Employee Representation Plan	programs designed to provide some sense of participation by employees in a particular company.	*Industrial Relations*
Employee Requisition	a procedure used in some companies whereby departments request the personnel office or Division to supply the personnel needs of the operating system.	*Industrial Relations*
Employee Rule Book	a booklet setting forth company rules or detailed information on company procedures.	*Industrial Relations*
Employee Stock Ownership Plan	plan designed to give workers a sense of participation in management of a company.	*Industrial Relations*
Employee Unit	the group of employees determined by the NLRB or a state board.	*Industrial Relations*
Employee Wage Suit	action by a worker against an employer for the recovery of unpaid wages, usually under the Fair Labor Standards Act.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Employees' Annual Report Company	a report directed primarily to the worker in the plant, in language which he can comprehend and which avoids the technical language of finance or accounting, intended to give him some understanding of the operations of the company.	*Industrial Relations*
Employees' Club	a group or association set up within a company or plant whose functions are primarily social and recreational, and generally open to all employees.	*Industrial Relations*
Employer	generally a person, association, or corporation having workers in its employ.	*Industrial Relations*
Employer Association	a group or organization sponsored or supported by employers primarily for the purpose of presenting a united front in dealing with organized employees.	*Industrial Relations*
Employer Petition	a formal request by an employer to the NLRB or a state board requesting the holding of an election to determine the representative, if any, to be recognized for collective bargaining purposes in the plant, or for a smaller unit within the plant.	*Industrial Relations*
Employer Reserve Plan	unemployment tax payments based on the merit rating of the employer.	*Industrial Relations*
Employer Rights	those prerogatives and activities relating to the operation and management of a business which the employer feels are not subject to collective bargaining.	*Industrial Relations*
Employer-Employee Relations	refers to the entire gamut of relationships that exist in, or arise out of, employment of workers by an employer.	*Industrial Relations*
Employer's Final Offer	a procedure set forth in the Taft-Hartley Act as part of the handling of national emergency disputes which assumes that if employees are familiar with the employer's last offer, and have an opportunity to vote by secret ballot in an election conducted, they are likely to accept the offer.	*Industrial Relations*
Employer's Liability	statutes which determine the circumstances under which employers are subject or liable for damages for injuries received by their employees.	*Industrial Relations*
Employer's Liability Insurance	policies taken out by employers to cover industrial accidents which might occur to employees or to outsiders during employment.	*Industrial Relations*
Employment Act of 1946	a federal statute declaring that the government has the responsibility to promote employment opportunities.	*Industrial Relations*
Employment Agencies	organizations established for the purpose of bringing together employers having employment opportunities and workers in need of employment.	*Industrial Relations*
Employment Application	a form used by most companies to determine the qualifications and background of the applicant's employment.	*Industrial Relations*
Employment Contract	the relationship created when an employer hires an employee to perform work.	*Industrial Relations*
Employment Controls	generally applies to those regulations issued during periods of war emergency when the government is seeking to mobilize its manpower into channels producing goods and services for the war effort.	*Industrial Relations*
Employment Division	that section of the personnel department of a large company which handles recruitment and placement.	*Industrial Relations*
Employment Forecasting	projecting for either short or long periods estimates of total employment in a particular industry, region, state, or country.	*Industrial Relations*
Employment Guarantee	a system or plan designed to provide steady employment during the year by assuring a certain number of weeks of work.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Employment History	the individual personnel record of each employee which contains the most important information about the worker.	*Industrial Relations*
Employment Interview	one of the most used techniques in th selection of employees.	*Industrial Relations*
Employment Manager	sometimes used interchangeably with personnel director or personnel manager.	*Industrial Relations*
Employment Stabilization	refers to efforts on the part of employers, employees, and government to achieve greater regularity or stability in employment.	*Industrial Relations*
Employment Statistics	data published by government and private agencies embodying attempts to estimate the total labor force, employment, and unemployment.	*Industrial Relations*
Empowered natural work teams	Teams that share a common workspace and/or responsibility for a particular process or process segment. Typically such teams have clearly defined goals and objectives related to day-to-day production activities, such as quality assurance and meeting production schedules, as well as authority to plan and implement process improvements. Unlike self-directed teams, empowered work teams typically do not assume traditional "supervisory" roles.	*Quality*
EMS Energy Management System	EMS: Energy Management System	*Energy*
Emulsibility	The ability of a non-water-soluble fluid to form an emulsion with water.	*Oil Analysis*
Emulsifier	An emulsifier (or emulsifying agent) is a substance which can be used to produce an emulsion out of two liquids that normally cannot be mixed together (such as oil and water). Emulsifiers are common in foods to maintain consistency within puddings, powders, etc.	*Chemical*
Emulsifier	An emulsifier (or emulsifying agent) is a substance which can be used to produce an emulsion out of two liquids that normally cannot be mixed together (such as oil and water). Emulsifiers are common in foods to maintain consistency within puddings, powders, etc.	*Chemical Engineering*
Emulsifier or emulsifying agent	A substance used to produce an emulsion of two or more immiscible liquids.	*Material Process*
Emulsion	A dispersion of one liquid in another with which it is not miscible. The particles are larger than colloidal size and an emulsifying agent must be added to keep them in suspension.	*Material Process*
Emulsion	A dispersion of small oil particles in a solution.	*Chemistry*
Emulsion, Oil in water	A dispersion of oil in a continuous phase of water. EMULSION, WATER IN OIL - A dispersion of water in a continuous phase of oil.	*Mechanical, Process, and Operations*
En echelon	Roughly parallel but staggered structures.	*Mining*
Enable	The opposite of disable. To allow output in response to an input signal. We often speak of one light source - photoreceiver pair (the "gating" pair) enabling a second pair (the "inspect" pair).	*Electrical Engineering*
Enabling Legislation	a statute passed by a State legislature which makes is possible to receive certain benefits under a federal law, or generally, any act which removes a restriction or disability.	*Industrial Relations*
Enamel	Glass coating on a metal substrate.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Enclosed Switch	A basic switch unit (contact block) enclosed in a durable metal housing. The enclosure protects the switching unit, provides mounting means, and fitting for conduit connection.	*Electrical Engineering*
Enclosure	A housing for components. ENERGY - The capacity for doing work. (See Joule.)	*Mechanical, Process, and Operations*
Enclosure	A rectangle drawn around a graphical component or components to indicate the limits of an assembly.	*Mechanical, Process, and Operations*
End (of the coal)	In driving roads parallel to the 'cleat' or 'grain' of the coal, they are said to be 'on the end of the coal'.	*Mining*
End bevel	Weld end preparations for butt welding. Governed by ANSI B31.4 & B16.25.	*Mechanical*
End cap	A ported or closed cover for the end of a filter element.	*Oil Analysis*
End Connection	The configuration provided to make a pressure-tight joint to the pipe carrying the fluid being controlled. The most common of these connections are threaded, flanged, or welded.	*Industrial Engineering*
End connection	The type of connection supplied on the ends of a valve which allows it to be connected to piping—may be weld end, flanged end, threaded or socket weld.	*General Mechanical*
End face	a face advancing in approximately the same direction as the line of the main cleat. Also called a 'headways face'	*Mining*
End Lines	The lines bounding the ends of a claim.	*Mining*
End Point	Highest vapor temperature recorded during a distillation test of a petroleum stock.	*Lubrication*
End Point (Potentiometric)	The apparent equivalence point of a titration at which a relatively large potential change is observed.	*Electronic Process*
End Points	The end points of a full scale calibration curve.	*General Engineering*
End Points	Outputs at the specified upper and lower limits of the Range.	*Electrical Engineering*
End Preparation	The treatment of the end of a length of wire rope designed primarily as an aid for pulling the rope through a reeving system or tight drum opening. Unlike END TERMINATIONS, these are not designed for use as a method for making a permanent connection.	*Wire Rope & Cable*
End Preparation	End Preparation. The contour prepared on the end of a pipe, fitting, or nozzle for welding. The particular preparation is prescribed by the governing code.	*Maintenance and Repair*
End Termination	The treatment at the end or ends of a length of wire rope, usually made by forming an eye or attaching a fitting and designed to be the permanent end termination on the wire rope that connects it to the load.	*Wire Rope & Cable*
End user	A firm or individual that purchases products for its own consumption and not for resale (i.e., an ultimate consumer).	*Energy*
End wall	The wall on the end of the tower structure.	*Facility Engineering*
Endangered species	Condition that occurs when the total number of a species may not be sufficient to reproduce enough offspring to ensure its survival.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ending stocks	Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.	*Energy*
Endings	narrow strike roadways in coal in the 'Narrow' system of working; or the extreme boundaries of a mine. (Yorks.).	*Mining*
Endless Loop	see Loop, Endless	*General*
Endless Rope	Rope with ends spliced together to form a single continuous loop.	*Wire Rope & Cable*
Endless rope haulage	a system of haulage, normally double track, employing a moving endless rope to which the tubs are clipped either individually or in sets.	*Mining*
Endosperm	Triploid tissue of seeds composed mostly of starch-containing cells, that arises from the fusion of a sperm nucleus with two polar nuclei of the embryo sac. In some seeds, the endosperm persists as a storage tissue and is used to nourish the germinating seedling.	*Agriculture*
Endothermic	A process is said to be endothermic when it absorbs heat.	*Electrical*
Endpoint	See Outcome	*Quality Engineering*
End-Use	The specific purpose for which electric is consumed (I.e. heating, cooling, cooking, etc.).	*Energy*
Endways, Ends or Headways	headings driven in the direction of the cleat, or driving 'on the end'.	*Mining*
Energy	The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatt hours, while heat energy is usually measured in British thermal units (Btu).	*Energy*
Energy	Three types of energy are available in modern hydraulics (of the normal hydrostatic pipe). 1. Potential Energy - Pressure energy. The static energy of oil which is standing but is pressurized and ready to do work. Example: oil in a loaded accumulator. 2. Heat Energy - Friction or resistance to flow. (An energy loss in terms of output.) Example: friction between moving oil and the confines of lines or passages produces heat energy. 3. Kinetic Energy - The energy of the moving liquid. Varies with the velocity (speed) of the liquid.	*Mechanical, Process, and Operations*
Energy assistance program	See Low Income Home Energy Assistance Program.	*Energy*
Energy audit	A program carried out by a utility company in which an auditor inspects a home and suggests ways energy can be saved.	*Energy*

Term	Definition	*Industry*
Energy band	A range of electron energies in a solid associated with an energy level in an isolated atom.	*Material Process*
Energy band gap	Range of electron energies above the valence band and below the conduction band.	*Material Process*
Energy broker system	Introduced into Florida by the Public Service Commission, the energy broker system is a system for exchanging information that allows utilities to efficiently exchange hourly quotations of prices at which each is willing to buy and sell electric energy. For the broker system to operate, utility systems must have in place bilateral agreements between all potential parties, must have transmission arrangements between all potential parties, and must have transmission arrangements that allow the exchanges to take place.	*Energy*
Energy charge	That portion of the charge for electric service based upon the electric energy (kWh) consumed or billed.	*Energy*
Energy Charge	The amount of money owed by an electric customer for kilowatt-hours consumed.	*Energy*
Energy conservation features	This includes building shell conservation features, HVAC conservation features, lighting conservation features, any conservation features, and other conservation features incorporated by the building. However, this category does not include any demand-side management (DSM) program participation by the building. Any DSM program participation is included in the DSM Programs.	*Energy*
Energy Conservation	Actions that are taken to reduce or manage energy consumption in a cost-effective and efficient manner. Methods of reducing energy include using insulation, increasing energy efficiency and changing patterns of use.	*Energy*
Energy consumption	The use of energy as a source of heat or power or as a raw material input to a manufacturing process.	*Energy*
Energy Consumption	The amount of energy consumed in the form in which it is acquired by the user. The term excludes electrical generation and distribution losses.	*Energy*
Energy cost effectiveness	This is a key performance indicator used to judge the productivity of a proves in terms of financial gain per unit of energy consumed.	*Electrical*
Energy Costs	Costs, such as for fuel, that are related to and vary with energy production or consumption.	*Energy*
Energy Deliveries	Energy generated by one system delivered to another system.	*Energy*
Energy demand	The requirement for energy as an input to provide products and/or services.	*Energy*
Energy dispersive	X-ray spectrometry (EDX) Chemical analysis by the use of characteristic x-ray photon produced by exposure to high energy electrons.	*Material Process*
Energy Effects	: Changes at the consumer meter that reflect activities undertaken in response to utility-administered programs.	*Energy*
Energy efficiency	Defined as output energy divided by input energy, and, if necessary, averaged over time. The electrical efficiency of an appliance is defined as the amount of that energy that is converted into a useful form, divided by the total energy it draws. For example, an incandescent light bulb (one with a filament inside the bulb) is said to be inefficient because much of the energy it uses (around 95 percent) is converted into heat rather than light. A fluorescent lamp that works on a different principle is somewhat more efficient because more of the energy it uses is converted into light and less is lost as heat (around 80 percent).	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Energy Efficiency Programs	Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatt or kilowatt hours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.	*Energy*
Energy Efficiency	Programs that reduce consumption.	*Energy*
Energy efficiency, Electricity	Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatt hours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technologically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.	*Energy*
Energy efficient motors	Are also known as "high-efficiency motors" and "premium motors." They are virtually interchangeable with standard motors, but differences in construction make them more energy efficient.	*Energy*
Energy exchange	Any transaction in which quantities of energy are received or given up in return for similar energy products. See exchange, electricity; exchange, petroleum; and exchange, natural gas.	*Energy*
Energy expenditures	The money directly spent by consumers to purchase energy. Expenditures equal the amount of energy used by the consumer multiplied by the price per unit paid by the consumer.	*Energy*
Energy Harvesting	Energy harvesting (also known as power harvesting or energy scavenging) is the process in which energy is captured from a system's environment and converted into usable electric power. Energy harvesting allows electronics to operate where there's no conventional power source, eliminating the need to run wires or make frequent visits to replace batteries. An energy harvesting system generally includes circuitry to charge an energy storage cell, and manage the power, providing regulation and protection.	*Electrical Engineering*
Energy information	Includes (A) all information in whatever form on fuel reserves, extraction, and energy resources (including petrochemical feedstocks) wherever located; production, distribution, and consumption of energy and fuels wherever carried on; and (B) matters relating to energy and fuels, such as corporate structure and proprietary relationships, costs, prices, capital investment, and assets, and other matters directly related there to, wherever they exist.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Energy Information Administration (EIA)	An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and does analytical and modeling analyses of energy issues. The Agency must satisfy the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position.	*Energy*
Energy Intensity	A ratio of energy consumption to another metric, typically national gross domestic product in the case of a country's energy intensity. Sector-specific intensities may refer to energy consumption per household, per unit of commercial floorspace, per dollar value industrial shipment, or another metric indicative of a sector. Improvements in energy intensity include energy efficiency and conservation as well as structural factors not related to technology or behavior.	*Energy*
Energy intensity (Commercial Buildings Energy Consumption Survey)	The ratio of consumption to floor space.	*Energy*
Energy level	Fixed binding energy between an electron and its nucleus.	*Material Process*
Energy loss	Deleted because there is no need for a general term to encompass all forms of energy loss. Terms referring to losses specific to particular energy sources are defined separately.	*Energy*
Energy loss	Area contained within the hysteresis loop of a ferromagnetic material.	*Material Process*
Energy loss (power)	Energy loss (power): See Power loss.	*Energy*
Energy management and control system (EMCS)	An energy conservation feature that uses mini/microcomputers, instrumentation, control equipment, and software to manage a building's use of energy for heating, ventilation, air conditioning, lighting, and/or business-related processes. These systems can also manage fire control, safety, and security. Not included as EMCS are time-clock thermostats.	*Energy*
Energy management practices	Involvement, as a part of the building's normal operations, in energy efficiency programs that are designed to reduce the energy used by specific end-use systems. This includes the following EMCS, DSM Program Participation, Energy Audit, and a Building Energy Manager.	*Energy*
Energy performance certificate	The energy performance certificate shows the energy efficiency of a building. It contains all relevant energy data of a building.	*Thermal Management*
Energy Policy Act of 1992	This act which was the first comprehensive federal energy law promulgated in more than a decade will help create a more competitive U.S. electric power marketplace by removing barriers to competition. By doing so, this act allows a broad spectrum of independent energy producers to compete in wholesale electric power markets. The act also made significant changes in the way power transmission grids are regulated. Specifically, the law gives the Federal Energy Regulatory Commission the authority to order electric utilities to provide access to their transmission facilities to other power suppliers.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Energy Policy Act of 1992 (EPACT)	This legislation creates a new class of power generators, exempt wholesale generators, that are exempt from the provisions of the Public Holding Company Act of 1935 and grants the authority to the Federal Energy Regulatory Commission to order and condition access by eligible parties to the interconnected transmission grid.	*Energy*
Energy production	See production terms associated with specific energy types.	*Energy*
Energy Receipts	Energy generated by one utility system that is received by another through transmission lines.	*Energy*
Energy reserves	Estimated quantities of energy sources that are demonstrated to exist with reasonable certainty on the basis of geologic and engineering data (proved reserves) or that can reasonably be expected to exist on the basis of geologic evidence that supports projections from proved reserves (probable/indicated reserves). Knowledge of the location, quantity, and grade of probable/indicated reserves is generally incomplete or much less certain than it is for proved energy reserves. Note: This term is equivalent to "Demonstrated Reserves" as defined in the resource/reserve classification contained in the U.S. Geological Survey Circular 831,1980. Demonstrated reserves include measured and indicated reserves but exclude inferred reserves.	*Energy*
Energy Reserves	The portion of total energy resources that is known and can be recovered with presently available technology at an affordable cost.	*Energy*
Energy Resources	Everything that could be used by society as a source of energy.	*Energy*
Energy sale(s)	The transfer of title to an energy commodity from a seller to a buyer for a price or the quantity transferred during a specified period.	*Energy*
Energy savings	A reduction in the amount of electricity used by end users as a result of participation in energy efficiency programs and load management programs.	*Energy*
Energy service provider	An energy entity that provides service to a retail or end-use customer.	*Energy*
Energy Services Companies (ESCOs)	ESCOs would be created in a deregulated, openly competitive electric marketplace. The Energy Services industry would be made up of power aggregators, power marketers and brokers, whose job is to match buyers and sellers, tailor both physical and financial instruments to suit the needs of particular customers, and to allow even the smallest residential customers to form buying groups or cooperatives that will give them the same bargaining power as large industrial customers.	*Energy*
Energy Services Company (ESCO)	A company offering electricity, specialized or customized energy services by providing advice and products to customers.	*Energy*
Energy source	Any substance or natural phenomenon that can be consumed or transformed to supply heat or power. Examples include petroleum, coal, natural gas, nuclear, biomass, electricity, wind, sunlight, geothermal, water movement, and hydrogen in fuel cells.	*Energy*
Energy Source	A source that provides the power to be converted to electricity.	*Energy*
Energy supplier	Fuel companies supplying electricity, natural gas, fuel oil, kerosene, or LPG (liquefied petroleum gas) to the household.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Energy supply	Energy made available for future disposition. Supply can be considered and measured from the point of view of the energy provider or the receiver.	*Energy*
Energy through Energy well	The region around the energy minimum in a bonding energy curve.	*Material Process*
Energy Use	Energy consumed during a specified time period for a specific purpose (usually expressed in kWh).	*Energy*
Energy used in the home	For electricity or natural gas, the quantity is the amount used by the household during the365- or 366-day period. For fuel oil, kerosene, and liquefied petroleum gas (LPG), the quantity consists of fuel purchased, not fuel consumed. If the level of fuel in the storage tank was the same at the beginning and end of the annual period, then the quantity consumed would be the same as the quantity purchased.	*Energy*
Energy	This is broadly defined as the capability of doing work. In the electric power industry, energy is more narrowly defined as electricity supplied over time, express in kilowatt-hours.	*Energy*
Energy-use sectors	A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: residential, commercial, industrial, transportation, and electric power.	*Energy*
Energy-weighted industrial output	The weighted sum of real output for all two-digit Standard Industrial Classification(SIC) manufacturing industries plus agriculture, construction, and mining. The weight for each industry is the ratio between the quantity of end-use energy consumption to the value of real output.	*Energy*
Enforced Membership	a procedure usually under the provisions of the collective bargaining agreement whereby all new employees were required to be or to become members of the union.	*Industrial Relations*
Enforcement of Agreement	collective bargaining agreements are generally self-enforceable.	*Industrial Relations*
Enforcement of Arbitration Agreement	the procedure available to the parties to carry out their agreement for final and binding determination of various types of labor disputes.	*Industrial Relations*
Enforcement Strike	a concerted stoppage of work for the purpose of maintaining existing conditions of employment.	*Industrial Relations*
Engel's Law	a generalization arrived at by Fredrich Engels, German economist and statistician, based on studies of Prussian family budgets.	*Industrial Relations*
Engine Deposits	Hard or persistent accumulation of sludge, varnish and carbonaceous residues due to blow-by of unburned and partially burned fuel, or the partial breakdown of the crankcase lubricant. Water from the condensation of combustion products, carbon, residues from fuel or lubricating oil additives, dust and metal particles also contribute.	*Lubrication*
Engine deposits	Hard or persistent accumulation of sludge, varnish, lacquer and carbonaceous residues due to blow-by of unburned and partially burned fuel, or the partial breakdown of the crankcase lubricant. Water from the condensation of combustion products, carbon, residues from fuel or lubricating oil additives, dust and metal particles also contribute.	*Mechanical, Process, and Operations*
Engine pit/shaft or Pumping pit	a pit or shaft, the whole or part of which was used for pumping, in which a pumping engine was placed.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Engine size	The total volume within all cylinders of an engine when pistons are at their lowest positions. The engine is usually measured in "liters" or "cubic inches of displacement (CID)." Generally, larger engines result in greater engine power, but less fuel efficiency. There are 61.024 cubic inches in a liter.	*Energy*
Engineering Design	The detailed design developed from process requirements and conforming to established design criteria, including all necessary drawings and specifications, governing a piping installation.5	*Maintenance and Repair*
Engineering polymer	Polymer with sufficient strength at a given load divided by the original stress free length.	*Material Process*
Engineering Procurement and Construction (EPC)	Term used to describe contracts in which a company assumes full responsibility for project engineering, material procurement and construction. The term is also used for companies contracted to perform these services.	*Electrical*
Engineering strain	Increase in sample length at a given load divided by the stress free length.	*Material Process*
Engineering stress	Load on a sample divided by the original stress free area.	*Material Process*
Engineering units	Units that are decided upon by an individual user or by agreement among users. Examples include inches/second, mm/s, g, Hz, Tu, etc.	*Reliability Engineering*
Engineering Work Order	The Prime Document Used To Initiate An Engineering Investigation, Engineering Design Activity Or Engineering Modifications To An Item Of Equipment.	*Plant Engineering*
Engineman	the person who operates a haulage system, i.e. operates the engine/motor.	*Mining*
English units	it is expressed in pounds per cubic foot (lb/ft3).	*Maintenance and Repair*
English Workweek	the term applied to the working practice in England in the 1920's which set the workweek at eight hours for Monday through Friday and four hours on Saturday morning.	*Industrial Relations*
Engraver	Beetle which feeds in the phloem-cambium region of woody plants, often scoring or engraving adjacent sapwood tissues.[1]	*Forestry*
Enhanced Data Rates for GSM Evolution	An enhanced modulation technique designed to increase network capacity and data rates in GSM networks. EDGE should provide data rates up to 384Kbps.	*Electrical Engineering*
Enhanced Oil Recovery	A process whereby oil is recovered other than by the natural pressure in a reservoir.	*Petroleum Drilling*
Enhanced oil recovery	A process whereby oil is recovered other than by the natural pressure in a reservoir.	*Petroleum Drilling*
Enhanced Recovery	The increased recovery from an oil pool achieved by artificial means or by the application of outside energy sources to the pool.	*Petroleum Drilling*
Enjoin	a court action designed to prevent a union from engaging in economic or strike action.	*Industrial Relations*
Enriched uranium	Uranium in which the U-235 isotope concentration has been increased to greater than the 0.711 percent U-235 (by weight) present in natural uranium.	*Energy*
Enrichment feed deliveries	Uranium that is shipped under contract to a supplier of enrichment services for use in preparing enriched uranium product to a specified U-235 concentration and that ultimately will be used as fuel in a nuclear reactor.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Enrichment tails assay	A measure of the amount of fissile uranium (U-235) remaining in the waste stream from the uranium enrichment process. The natural uranium "feed" that enters the enrichment process generally contains 0.711 percent (by weight) U-235. The "product stream" contains enriched uranium (more than 0.711 percentU-235) and the "waste" or "tails" stream contains depleted uranium (less than 0.711 percent U-235). At the historical enrichment tails assay of 0.2 percent, the waste stream would contain 0.2 percent U-235. A higher enrichment tails assay requires more uranium feed (thus permitting natural uranium stockpiles to be decreased), while increasing the output of enriched material for the same energy expenditure.	*Energy*
Entering air	Air from the atmosphere surrounding the cooling tower which enters through the louvers on an Induced draft tower or is discharged into the tower by a fan on a Forced Draft Tower.	*Facility Engineering*
Entering wet-bulb temperature	Average wet-bulb temperature of the entering air. Includes any effects of recirculation.	*Facility Engineering*
Enterprise Asset Management (EAM) Systems	Software application to support enterprise wide asset management philosophy. A computerized maintenance management system with extended functionality which typically includes timekeeping, project management, human resources issues, payroll, core financial data, etc.	*Maintenance*
Enterprise integration (EI)	A broad implementation of information technology to link various functional units within a business enterprise; on a wider scale, it may also integrate strategic partners in an inter-enterprise configuration. In a manufacturing enterprise, EI may be regarded as an extension of CIM that integrates financial or executive decision-support systems with manufacturing tracking and inventory systems, product-data management, and other information systems.	*Quality*
Enterprise resource planning (ERP)	An extension of MRP II software designed to operate on enterprise-wide computing platforms. ERP systems typically claim the ability to achieve tighter (or "seamless") integration between a greater variety of functional areas, including materials management, supply-chain management, production, sales and marketing, distribution, finance, field service, and human resources. They also provide information linkages to help companies monitor and control activities in geographically dispersed operations.	*Quality*
Enterprise Resource Planning (ERP) system	An Enterprise Resource Planning system refers to a system comprised of a single or integrated suite of applications to manage enterprise business functions, including finance, human resources, and order fulfillment.	*Maintenance*
Enthalpy	The sum of the internal energy of a body and the product of its volume multiplied by the pressure.	*General Engineering*
Entities	The term used for registered groups in The Cochrane Collaboration (Review Groups, Centers, Fields, and Methods Groups. Also called: Cochrane Groups	*Quality Engineering*
Entitlement	Electric energy or generating capacity that a utility has a right to access under power exchange or sales agreements.	*Energy*
Entrained	particulates or vapor transported along with flowing gas or liquid.	*Chemical*
Entrained Air	A mechanical mixture of air bubbles having a tendency to separate from the liquid phase.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Entrance Cable/Service Entrance Conductor	This is the cable running down the side of a customer's house into the meter. This cable is owned by the customer and its maintenance is the customer's responsibility. Work on this cable should be performed only by a licensed electrician.	*Energy*
Entrance Rate	the hourly rate of pay an employee receives when first hired by the company.	*Industrial Relations*
Entrepreneur	technically an undertaker or enterpriser, the person, group, or organization which brings together the other factors in production in order to provide goods or services.	*Industrial Relations*
Entropy	Entropy is a thermodynamic quantity that represents the amount of energy in a system that is no longer available for mechanical output.	*Industrial*
Entry	An underground horizontal or near-horizontal passage used for haulage, ventilation, or as a mainway; a coal heading; a working place where the coal is extracted from the seam in the initial mining; same as "gate" and "roadway," both British terms.	*Mining*
Environment	physical surroundings; all that is around you	*Agriculture*
Environment	The interaction of climate, soil, topography, and other plants and animals in any given area.	*Forestry*
Environment protection	Environment protection means pollution control. Environmental protection engineering develops methods for pollution removal.	*Material Process*
Environmental Attributes	Environmental attributes quantity the impact of various options on the environment. These attributes include particulate emissions, SO2 or Nox, and thermal discharge (air and water).	*Energy*
Environmental Conditions	All conditions in which a transducer may be exposed during shipping, storage, handling, and operation.	*Electronic Process*
Environmental Consequences	A Failure Has Environmental Consequences If It Could Cause A Breach Of Any Known Environmental Standard Or Regulation.	*Plant Engineering*
Environmental contaminant	All material and energy present in and around an operating system, such as dust, air moisture, chemicals, and thermal energy.	*Oil Analysis*
Environmental engineering specialist	One whose principal work assignment lies in the technical area of natural and induced environments and their relation to military equipment. A person who has expertise in measuring and analyzing field environmental conditions, formulating environmental test criteria, specifying laboratory simulation of environments, and evaluating the effects of environments on equipment.	*Reliability Engineering*
Environmental impact assessment (EIA)	An evaluation of the potential impact of emission associated with an engineering process for the purpose of identifying major problem.	*Material Process*
Environmental impact statement	A report that documents the information required to evaluate the environmental impact of a project. It informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the environment.	*Energy*
Environmental impact study	A written report, compiled prior to a production decision, that examines the effects proposed mining activities will have on the natural surroundings.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Environmental Protection Agency (EPA)	Federal agency that regulates industrial impacts on the environment. Despite its environmental mandate, the EPA has shown little activity in Pennsylvania since Marcellus shale drilling began in 2005. The federal agency began a two-year study this summer aimed at considering new rules for the industry after 2012.	*Petroleum Drilling*
Environmental protection agency (EPA) certification files	Computer files produced by EPA for analysis purposes. For each vehicle make, model and year, the files contain the EPA test MPGs (city, highway, and 55/45 composite). These MPG's are associated with various combinations of engine and drive-train technologies (e.g., number of cylinders, engine size, gasoline or diesel fuel, and automatic or manual transmission). These files also contain information similar to that in the DOE/EPA Gas Mileage Guide, although the MPGs in that publication are adjusted for shortfall.	*Energy*
Environmental restoration	Although usually described as "cleanup," this function encompasses a wide range of activities, such as stabilizing contaminated soil; treating groundwater; decommissioning process buildings, nuclear reactors, chemical separations plants, and many other facilities; and exhuming sludge and buried drums of waste.	*Energy*
Environmental restrictions	In reference to coal accessibility, land-use restrictions that constrain, postpone, or prohibit mining in order to protect environmental resources of an area; for example, surface- or ground water quality, air quality affected by mining, or plants or animals or their habitats.	*Energy*
Environmental Stress Cracking Resistance	he ability of a material to resist crack formation and crack propagation when subjected to stress within a contaminating environment.	*Electrical*
Environmental stress screening (ESS)	A post-production process in which produced units are subjected to stresses more severe than anticipated in service. The object is to precipitate latent defects into recognizable failures, so that that particular unit does not proceed further in production nor reach the customer.	*Reliability Engineering*
Environmental testing	Subjecting a sample of products to a simulation of anticipated storage, transport and service environments (such as vibration, shock, temperature, altitude, humidity, etc.)	*Reliability Engineering*
Environmentally Assisted Cracking (EAC)	A process that can occur with the use of high strength steel fasteners in which crack initiation and growth occurs in the fastener at a comparatively low stress level as a result of interactions that occur with the environment. Hydrogen is suspected of causing EAC in high strength steel fasteners, the hydrogen being produced as a result of chemical reactions (galvanic corrosion in a moist environment) or being present from a plating process that may have been applied to the fastener.	*Maintenance*
Environment-Proof Switch	A switch which is completely sealed to ensure constant operating characteristics. Sealing normally includes and "O" ring on actuator shaft and fused glass-to-metal terminal seals or complete potting and an elastomer plunger-case seal.	*Electrical Engineering*
Enzyme	(a) any of numerous proteins or conjugated proteins produced by living organisms and functioning as biochemical catalysts. (b) a protein that a living organism uses in the process of degrading a specific compound. The protein serves as a catalyst in the compound's biochemical transformation.	*Chemical*
Enzyme	A protein or combination of individual proteins that catalyzes a biochemical reaction.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Enzymes	proteins that start a chemical reaction	*Agriculture*
EO-L/M	Mack heavy-duty diesel engine oil specifications	*Petro-Chemical Abbreviations*
EOLCS	Engine Oil Licensing and Certification System (EOLCS) - API's system that permits engine oil marketers that meet specified requirements to use the API Engine Oil Quality Marks.	*Mechanical, Process, and Operations*
EOR	**EOR:** Enhanced Oil Recovery	*Energy*
EP	end point	*Petro-Chemical Abbreviations*
EP (Extreme Pressure) Lubricants	Lubricants that impart to rubbing surfaces the ability to carry appreciably greater loads than would be possible with ordinary lubricants without excessive wear or damage.	*Lubrication*
EP Additive (Extreme Pressure Agent)	Lubricant additive that prevents sliding metal surfaces from seizing under extreme pressure conditions.	*Lubrication*
EP Energy Provider	EP: Energy Provider	*Energy*
EPA	**EPA:** Environmental Protection Agency	*Energy*
EPA	US Environmental Protection Agency - one function is measurement of vehicle fuel efficiency and exhaust gas discharge.	*Mechanical, Process, and Operations*
EPA certification	A permanent label on fireplace inserts and freestanding wood stoves manufactured after July1, 1988, indicating that the equipment meets EPA standards for clean burning.	*Energy*
EPA Complex Model	Scheduled for implementation January 1, 1997. The model is more restrictive than the simple model, and contains limits on RVP, oxygen, olefins, benzene, sulfur, and T-90. In addition, it will include requirements on aromatic content and T-50 temperatures.	*Lubrication*
EPA composite MPG	The harmonic mean of the EPA city and highway MPG (miles per gallon), weighted under the assumption of 55 percent city driving and 45 percent highway driving.	*Energy*
EPA Simple Model	Used to define reformulated gasoline effective January 1, 1995. The model includes RVP and oxygen content requirements to reduce volatile organic compound emissions. It caps oxygen, benzene, sulfur, olefins, and T-90 content at levels equal to or lower than a refiner's 1990 baseline.	*Lubrication*
EPACT	EPACT: Energy Policy Act of 1992	*Energy*
EPEFE	European Programme on Emissions, Fuels	*Petro-Chemical Abbreviations*
Ephemeral stream	Water that flows in natural channels only during significant rainfall.	*Forestry*
Ephemeral Union	a labor organization which has only a brief period of existence.	*Industrial Relations*
Epicormic branching	Branches arising from buds in bark along mainstem, most commonly occurring in trees under crown stress; also called water sprouts.	*Forestry*
Epidemic	A change, usually a sudden increase, in a disease within a population.[1] Fin. Swe.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Epidemiology	The study of the health of populations and communities, not just particular individuals.	*Quality Engineering*
Epigenetic	Ore bodies formed by hydrothermal fluids and gases that were introduced into the host rocks from elsewhere, filling cavities in the host rock.	*Mining*
Epitaxy	A vapor deposition technique involving the buildup of thin film layers of one semiconductor on another while maintaining some particular crystallographic relationship between the layer and the substrate.	*Material Process*
Epithermal deposit	A mineral deposit consisting of veins and replacement bodies, usually in volcanic or sedimentary rocks, containing precious metals or, more rarely, base metals.	*Mining*
Epoxy	Epoxies are used in numerous ways. In combination with glass fibers, it is capable of producing composites that are of high strength and that are heat resistant. This composite is typically used for filament wound rocket motor casings in missiles, in aircraft components, and in tanks, pipes, tooling jigs, pressure vessels, and fixtures. Epoxies are also found in gymnasium floors, industrial equipment, sealants, and protective coatings in appliances.	*Material Engineering*
EPRI	Electric Power Research Institute	*Petro-Chemical Abbreviations*
Eprom	Erasable Programmable Read-Only Memory. The PROM can be erased by ultraviolet light or electricity.	*General Engineering*
EPROM (Erasable Programmable Read-Only Memory)	A memory device with information placed into it during manufacture that cannot be altered by the computer. It can only be erased and reprogrammed with special equipment.	*Electrical Engineering*
Equal Distribution of Work	procedures designed to provide an opportunity for all employees to share equally in the work that is available.	*Industrial Relations*
Equal Loudness Curves	Graphs of pure tone (constant or steady) sound pressure levels (labeled as to loudness level in phons) vs. frequency, with each graph representing equal loudness.	*Reliability Engineering*
Equal Pay Act of 1963	a law enacted June 10, 1963, aimed at the elimination of differentials in pay based solely on sex.	*Industrial Relations*
Equal Pay for Equal Work	a principle which seeks to establish job rates which are not dependent upon factors unrelated to quality of work.	*Industrial Relations*
Equal Percentage	A term used to describe a type of valve flow characteristic where for equal increments of valve plug travel the change in flow rate with respect to travel may be expressed as a constant percent of the flow rate at the time of the change. The change in flow rate observed with respect to travel will be relatively small when the valve plug is near its seat and relatively high when the valve plug is nearly wide open.	*Industrial Engineering*
Equalizing Sheave	The sheave at the center of a rope system over which no rope movement occurs other than equalizing movement. It is frequently overlooked during crane inspections, with disastrous consequences. It can be a source of severe degradation.	*Wire Rope & Cable*
Equalizing Thimble	Special type of fitting used as a component part of some wire rope slings.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Equilay conductor	Conductor constructed with a central core surrounded by more than one layer of helically laid wires, all layers having a common length of lay, direction of lay being reversed successive layers.	*Electrical*
Equilibrium	An object is in equilibrium if the resultant of the system of forces acting on it has zero magnitude. See static equilibrium and dynamic equilibrium.	*Engineering Physics*
Equilibrium Constant	The product of the concentrations (or activities) of the substances produced at equilibrium in a chemical reaction divided by the product of concentrations of the reacting substances, each concentration raised to that power which is the coefficient of the substance in the chemical equation.	*General Engineering*
Equilibrium cycle	An analytical term that refers to fuel cycles that occur after the initial one or two cycles of a reactor's operation. For a given type of reactor, equilibrium cycles have similar fuel characteristics.	*Energy*
Equipment Connection	An integral part of such equipment as pressure vessels, heat exchangers, pumps, etc., designed for attachment of pipe or piping components.	*Maintenance and Repair*
Equipment Life	This Term Often Is not Very Useful, In A Practical Sense. For Example, If I Was To Tell You That My Aunt Has An Axe That She Uses For Chopping Firewood, And In The Last 40 Years It Has Had 2 New Axeheads And 5 New Handles, How Would You Define The Life Of The Axe? Perhaps It Makes More Sense To Talk About Component Life. Also See Economic Life, Useful Life And Average Life For Some More Practical Definitions.	*Plant Engineering*
Equipment Lifetime	Span of time over which equipment is expected to fulfill its intended purpose.	*Reliability Engineering*
Equipment Maintenance Strategies	The Choice Of Routine Maintenance Tasks And The Timing Of Those Tasks, Designed To Ensure That An Item Of Equipment Continues To Fulfill Its Intended Functions.	*Management*
Equipoise	A state of uncertainty where a person believes it is equally likely that either of two treatment options is better. See also: Data monitoring committee	*Quality Engineering*
Equipotential Line	A contour line on the water table or potentiometric surface; a line along which the pressure head of groundwater in an aquifer is the same. Fluid inflow is normal to these lines in the direction of decreasing fluid potential.	*Petroleum Engineering*
Equipped with speed sensors. When a sensor determines that a wheel is decelerating so rapidly that	equipped with speed sensors. When a sensor determines that a wheel is decelerating so rapidly that	*Mechanical Engineering*
Equitransference	Equal diffusion rates of the positively and negatively charged ions of an electrolyte across a liquid junction without charge separation.	*Electronic Process*
Equity	- a procedure and principle said to stem from the days of the King's courts in England. The regular courts which concerned themselves with statutory and common law were not equipped to mete justice, particularly in cases involving property, and the King asked his Chancellor to see that justice was done.	*Industrial Relations*
Equity (financial)	Ownership of shareholders in a corporation represented by stock.	*Energy*
Equity capital	The sum of capital from retained earnings and the issuance of stock.	*Energy*
Equity crude oil	The proportion of production that a concession owner has the legal and contractual right to retain.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Equity financing	The provision of funds by buying shares.	*Mining*
Equity in earnings of unconsolidated affiliates	A company's proportional share (based on ownership) of the net earnings or losses of an unconsolidated affiliate.	*Energy*
Equivalence trial	A trial designed to determine whether the response to two or more treatments differs by an amount that is clinically unimportant. This is usually demonstrated by showing that the true treatment difference is likely to lie between a lower and an upper equivalence level of clinically acceptable differences. See also: Non-inferiority trial	*Quality Engineering*
Equivalent Barrels	Quantities of natural gas and natural gas liquids translated into barrels of oil based on equal energy content. The energy content of six thousand cubic feet of gas (6 MCF) is the rough equivalent of one barrel of oil.	*Petroleum Drilling*
Equivalent Conductance (I)	Equivalent conductance of an electrolyte is defined as the conductance of a volume of solution containing one equivalent weight of dissolved substances when placed between two parallel electrodes 1 cm apart, and large enough to contain between them all of the solution. l is never determined directly, but is calculated from the specific conductance (Ls). If C is the concentration of a solution in gram equivalents per liter, then the concentration of a solution in gram equivalents per liter, then the concentration per cubic centimeter is C/1000, and the volume containing one equivalent of the solute, is, therefore, 1000/C.	*General Engineering*
Equivalent Conductance (I)	Equivalent conductance of an electrolyte is defined as the conductance of a volume of solution containing one equivalent weight of dissolved substances when placed between two parallel electrodes 1 cm apart, and large enough to contain between them all of the solution. l is never determined directly, but is calculated from the specific conductance (Ls). If C is the concentration of a solution in gram equivalents per liter, then the concentration of a solution in gram equivalents per liter, then the concentration per cubic centimeter is C/1000, and the volume containing one equivalent of the solute, is, therefore, 1000/C.	*Electronic Process*
Equivalent Dead Time	To a controller, a process may appear to have more dead time than what it actually has. That is, the controller cannot be tuned tight enough (without going unstable) to make the process variable respond appreciably before an equivalent dead time. More accurately, the characteristic time of the loop is determined by equivalent dead time consisting of pure dead time plus process components contributing more than 180 degrees of phase lag. The phase of dead time increases proportionally with frequency. Any process having more than 180 degrees phase lag has equivalent dead time.	*Process Control*
Equivalent Employment	a job which in most aspects, such as wages, hours of work, opportunity for advancement, seniority, status, etc., is similar to the one held by an employee prior to his discharge or separation.	*Industrial Relations*
Equivalent weight	Molecular or atomic weight divided by the valence of the substance being considered.	*Chemical Engineering*
Era	A large division of geologic time - the Precambrian era, for example.	*Mining*
ERC	emissions reduction credits	*Petro-Chemical Abbreviations*
ERCOT	ERCOT: Electric Reliability Council of Texas	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Erdman Act	Federal Act of Congress passed in 1898 which is replaced the Arbitration Act on 1888.	*Industrial Relations*
Erection	The complete installation of a piping system, including any field assembly, fabrication, testing, and inspection of the system.5	*Maintenance and Repair*
Erosion	to wear away topsoil by water or wind and can be caused by intensive farming and overgrazing	*Agriculture*
Erosion	The wearing away of land or soil by the action of wind, water, or ice.	*Forestry*
Erosion	The breaking down and subsequent removal of either rock or surface material by wind, rain, wave action, freezing and thawing and other processes.	*Mining*
Erosion, Contact	A general loss of material from one or both working surfaces of a pair of mating contacts, as a result of switching an electrical load.	*Electrical Engineering*
Erosion	Destruction of materials by the abrasive action of moving fluids, usually accelerated by the presence of solid particles.	*Maintenance and Repair*
Erosion-corrosion	This effect is a combination of corrosion and mechanical wear effects.	*Material Process*
Erosion-corrosion	Associated action involving corrosion and erosion in the presence of a corrosive substance.	*Paint and Coatings*
ERP	Enterprise Resource Planning.	*Control Engineering*
Erratic	Either a piece of visible gold or a large glacial boulder.	*Mining*
Error	The difference between the value indicated by the transducer and the true value of the measurand being sensed. Usually expressed in percent of full scale output.	*General Engineering*
Error	The difference between the value indicated by the transducer and the true value of the measurand being sensed. Usually expressed in percent of full scale output.	*Electronic Process*
Error	The algebraic difference between the indicated value and the true value of the input pressure. Usually expressed in percent of full scale output, sometimes expressed in percent of the sensor output reading.	*Electrical Engineering*
Error Signal	The signal resulting from the difference between the setpoint reference signal and the process variable feedback signal in a controller.	*Electrical Engineering*
Error (signal)	The signal which is the algebraic summation of an input signal and a feedback signal. F	*Mechanical, Process, and Operations*
Error Band	The allowable deviations to output from a specific reference norm. Usually expressed as a percentage of full scale.	*General Engineering*
Error Band	The band of maximum deviations of the output values from a specified reference line or curve due to those causes attributable to the sensor. Usually expressed as "+ - % of full scale output." The error band should be specified as applicable over at least two calibration cycles, so as to include repeatability, and verified accordingly.	*Electrical Engineering*
Error detection	See probability for error detection.	*Quality*
Error Vector Magnitude	A measure of the difference between the (ideal) waveform and the measured waveform. The difference is called the error vector, usually referred to with regard to M-ary I/Q modulation schemes like QPSK, and shown on an I/Q "constellation" plot of the demodulated symbols.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Error, Zero	The error of a device operating under the specified conditions of use when the input is at the lower range-value.	*Process Control*
Escalator Clause	a provision found in many collective bargaining agreements which is designed to keep the "real income" of the worker reasonably stable during the term of the agreement in the face of price fluctuations.	*Industrial Relations*
Escape Clause	any provision in a contract which permits either party to be relieved of any obligation previously incurred or agreed to.	*Industrial Relations*
Escape Provision	A contract clause allowing one to break a contract, usually with a penalty.	*Energy*
Escape Provision	**A** contract provision which allows a party, such as an electric customer, to get out of it. Usually, there is a penalty.	*Energy*
Escapement	In a gravity or power operated package conveyor, a device to permit the release of packages one at a time on demand.	*Equipment*
Esch-Cummins Act	also known as the Transportation Act of 1920. The Act required employers and unions to exert "every reasonable effort" to avoid strikes and lockouts and to settle disputes through negotiation and collective bargaining.	*Industrial Relations*
ESCIT	Emission System Compatibility Improvement Team - an ASTM team responsible for establishing a method to minimize engine oil effects on emissions control systems.	*Mechanical, Process, and Operations*
Escrow Agreement	an arrangement whereby two parties agree to place a sum of money or valuable documents in the hands of a third party for conditional delivery under specified circumstances.	*Industrial Relations*
Escrowed shares	Shares deposited in trust pending fulfillment of certain conditions, and not ordinarily available to trading until released.	*Mining*
ESD	Emergency Shut Down.	*Control Engineering*
ESDV – Emergency Shut Down Valves	A valve or a system of valves which, when activated, initiate a shut-down of the plant, process, or platform they are tied to.	*Mechanical*
ESI	ESI: Electric Service Identifier	*Energy*
ESP	electrostatic precipitator	*Petro-Chemical Abbreviations*
Espionage	the custom of using or hiring spies in order to thwart or break efforts at unionization.	*Industrial Relations*
Espley Rock	multi-colored, coarse lenticular sandstones found in the Etruria Marl. Exhausted, a word used to describe reserves of coal that have been 'worked out'.	*Mining*
Essential machinery	Essential machinery. See Critical Machinery.	*Reliability Engineering*
Essential Occupations	jobs held by the War Manpower Commission to be vital to the effective prosecution of the war effort during WWII.	*Industrial Relations*
Establishment	An economic unit, generally, at a single physical location where business is conducted or where services or industrial operations are performed. However, "establishment" is not synonymous with "building."	*Energy*
Establishment	Ester	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ester	Any of a class of organic compounds made from the chemical reaction between an alcohol and an organic acid.	*Chemical*
Ester gum	An artificial gum resin, produced by the reaction of a gum resin such as resin, with an alcohol such as glycerin. Used chiefly in the preparation of varnishes and lacquers.	*Material Process*
Esterification	The process of producing an ester.	*Material Process*
Estimate of effect	The observed relationship between an intervention and an outcome expressed as, for example, a number needed to treat to benefit, odds ratio, risk difference, risk ratio, standardized mean difference, or weighted mean difference. Also called: Treatment effect	*Quality Engineering*
Estimated additional resources (EAR)	Uranium in addition to **RAR** that is expected to occur, mostly on the basis of geological evidence, in extensions of well-explored deposits, in little-explored deposits, and in undiscovered deposits believed to exist along well-defined geological trends with known deposits. This uranium can subsequently be recovered within the given cost ranges. Estimates of tonnage and grade are based on available sampling data and on knowledge of the deposit characteristics, as determined in the best-known parts of the deposit or in similar deposits. *Note*: **EAR** corresponds to DOE's probable potential resources category.	*Energy*
Estimated Plant Replacement Value	The Estimated Cost Of Capital Works Required To Replace All The Existing Assets With New Assets Capable Of Producing The Same Quantity And Quality Of Output. This Is A Key Value Often Used In Benchmarking Activities.	*Plant Engineering*
Estimated Plant Replacement Value (EPRV)	The ERV of a plant. A plant can represent part of, or a complete, production facility. To calculate the ERV, determine if the original equipment investment figures reasonably agree with equipment actually in use. Then identify clusters of equipment by the year in which they were acquired. Consider each cluster of investment and escalate it to a current value using a selected inflation index (e.g., the Bureau of Labor Statistics Construction Cost Index (BLS CCI)). Then the indexed clusters of investment are totaled to get the current value of plant and/or equipment. The indexed value of the plant could be compared with other plants recently built, adjusting for size and available insurance values. Even when a company is self-insured, there is normally an established "insurance value" to help define the financial exposure the company risks. An insurance underwriter typically prepares these values, even if the plant is self-insured. Underwriters follow a procedure very similar to the one described. ERV is often used to normalize maintenance cost as a convenient basis for comparing plants of a similar type that vary in size. The rationale for using the ERV rather than the original cost of the plant is to account for construction cost escalation over time (inflation). Two relatively new plants built 10 years apart could have original costs that vary by 50 to 100 percent. Maintenance cost/ERV can be used to set long-term goals, and targets for plant reliability. World-class plants tend to fall in the range of 1 to 2.5 percent.	*Maintenance*
Estimated Recoverable Reserves (coal)	An estimate of coal reserves, based on a demonstrated reserve base, adjusted for assumed accessibility and recovery factors, and does not include any specific economic feasibility criteria.	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
Estimating Index	The Ratio Of Estimated Labor Hours Required To Complete The Work Specified On Work Orders To The Actual Labor Hours Required To Complete The Work Specified On Those Work Orders, Commonly Expressed As A Percentage. This Is A Commonly Used Measure Of Labor Productivity, Particularly When There Are Well-Defined Estimating Standards. A Figure Of Greater Than 100% For The Estimating Index Indicates A Higher Than Standard Level Of Productivity, While A Figure Of Less Than 100% Indicates A Lower Than Standard Level Of Productivity.	*Plant Engineering*
Eta layer	the fourth, outer layer of the galvanized coating solely comprised of zinc	*Materials Process*
ETBE	ETBE**:** ethyl tertiary butyl ether	*Energy*
ETBE (ethyl tertiary butyl ether)	$(CH_3)_3COC_2H$: An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.	*Energy*
etc.	etc.	*General Mechanical*
Etch	A roughened surface produced by chemical, electrochemical or mechanical means. To dissolve unevenly a part of the surface of a material to highlight microstructure in metallography.	*Paint and Coatings*
Ethane (C_2H_6)	A straight-chain saturated (paraffinic) hydrocarbon extracted predominantly from the natural gas stream, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of -127 degrees Fahrenheit.	*Energy*
Ethanol	a form of natural gas that can be produced from corn	*Agriculture*
Ethanol (C_2H_5OH)	A clear, colorless, flammable alcohol. Ethanol is typically produced biologically from biomass feedstocks such as agricultural crops and cellulosic residues from agricultural crops or wood. Ethanol can also be produced chemically from ethylene. See Biomass, Fuel Ethanol, and Fuel Ethanol Minus Denaturant.	*Energy*
Ether	A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).	*Energy*
Ether	Any organic compound characterized by the grouping C-O-C, specifically, ethyl ether.	*Material Process*
Ethernet	A family of network protocols based on asynchronous frames. The Ethernet framing structure provides a flexible payload container with basic addressing and error detection mechanisms.	*Electrical Engineering*
Ethocel	Trade name for ethyl cellulose plastics.	*Material Process*
Ethos	Integrity, ethics	*Management Discussion*
Ethyl acetate	A solvent-ester. A colorless liquid with fruity odor, green apple.	*Material Process*
Ethyl aceto-acetate	A colorless liquid, solvent ester.	*Material Process*
Ethyl alcohol	A solvent alcohol. Colorless liquid.	*Material Process*
Ethyl benzene (C2H5C6H5)	Colorless liquid. A raw material for the preparation of vinyl benzene or styrene, which is polymerized to form polystyrene.	*Material Process*
Ethyl cellulose	A thermoplastic material prepared by the ethylation of cellulose by diethyl sulfate or ethyl halides and alkali.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ethyl chloride (CH3CH2Cl)	Colorless liquid or gas. Gaseous ethyl chloride is reacted with sodium cellulose under heat and pressure to yield ethyl cellulose for the production of ethyl cellulose plastics	*Material Process*
Ethyl crotonate	A solvent, ester	*Material Process*
Ethyl ether	A colorless, volatile liquid.	*Material Process*
Ethyl formate	A solvent, ester, colorless liquid.	*Material Process*
Ethyl lactate (CH3CH(OH) COOC2H5)	A colorless liquid, very soluble in ethanol.	*Material Process*
Ethyl phthalyl ether	A solvent for cellulose acetate. Colorless liquid.	*Material Process*
Ethyl phthalyl ethyl glycollate (C2H5 OCOC6H4 COOCH2COOC2H5)	A plasticizer, colorless liquid. Also known as Santicizer E-15.	*Material Process*
Ethylene (C_2H_4)	An olefinic hydrocarbon recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Ethylene is used as a petrochemical feedstock for many chemical applications and the production of consumer goods.	*Energy*
Ethylene (CH2 CH2)	Colorless gas. An unsaturated gaseous hydrocarbons used as a starting material in numerous organic synthesis, such as the synthesis of acrylic esters.	*Material Process*
Ethylene chloride (CH2ClCH2Cl)	A compound formed by the direct combination of ethylene and chlorine or by heating glycol with hydrochloric acid. Vinyl chloride may be prepared by treating ethylene dichloride with alcoholic potassium hydroxide. Colorless liquid.	*Material Process*
Ethylene chlorohydrin (CH2ClCH2OH)	An intermediate product in the synthesis of acrylic esters for plastics. Also a solvent –halogenated compound. Colorless liquid.	*Material Process*
Ethylene diamine	A colorless liquid. A solvent -amine.	*Material Process*
Ethylene dibromide	A solvent –halogenated compound. Colorless liquid.	*Material Process*
Ethylene dichloride	A colorless, oily liquid used as a solvent and fumigant for organic synthesis, and for ore flotation.	*Energy*
Ethylene dichloride	A solvent-halogenated compound. Colorless liquid.	*Material Process*
Ethylene glycol	A solvent - glycol. Colorless liquid.	*Material Process*
Ethylene glycol diacetate (CH3OCOCH3)3	A colorless liquid. A solvent -ester.	*Material Process*
Ethylene glycol diethyl ether	A solvent- ether.	*Material Process*
Ethylene glycol dipropionate (CH2OCOC2H5)2	A plasticizer.	*Material Process*
Ethylene glycol mono phenyl ether	Solvent-ether.	*Material Process*
Ethylene Propylene Rubber	A synthetic rubber insulation based upon ethylene propylene hydrocarbon.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
ETLP	Engine Tests of Lubricants Panel (IP)	*Petro-Chemical Abbreviations*
ETS	Engineering Test Services	*Petro-Chemical Abbreviations*
ETV	Environmental Technology Verification program	*Petro-Chemical Abbreviations*
EU	**EU:** European Union	*Energy*
EU Directive on the "Energy performance of buildings"	The EU Directive on the "energy performance of buildings" or EU Buildings Directive, as it is known for short, came into force in January 2003 with the aim of reducing energy consumption in buildings As a matter of principle, the Directive was to be transposed into national law in all EU Member States by the beginning of 2006.	*Thermal Management*
Eucaryotes	An organism having one or more cells with well-defined nuclei.	*Chemical*
Eucolloid	A highly polymerized substance, degree of polymerization over 1000, whose solid is very tough and hard and whose solutions are very viscous.	*Material Process*
Euler flow	Flow at high velocities, where incompressibility of the fluid is of importance whereas the influence of viscous momentum transport is negligible.	*Chemical*
Euler flow	Flow at high velocities, where incompressibility of the fluid is of importance whereas the influence of viscous momentum transport is negligible.	*Chemical Engineering*
EUR Estimated Ultimate Recovery	Refers to the ultimate oil and gas production of the well over its lifetime. Companies may project EUR across a field to show investors how returns on investment will likely occur over a period of time.	*Petroleum Drilling*
Eurasia	The physical land mass containing the continents of Europe and Asia. For Energy Information Administration reporting, it includes the former parts of the Union of Soviet Socialist Republics (U.S.S.R): Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.	*Energy*
European chemicals legislation	Mainly based on four legal instruments on chemicals currently in force in the Community	*Chemical*
European chemicals legislation	Mainly based on four legal instruments on chemicals currently in force in the Community	*Chemical Engineering*
EUROPIA	European Petroleum Industry Association	*Petro-Chemical Abbreviations*
Eutectic	That is a mixture of two or more substances which has two lowest melting point of any mixture of those substances.	*Material Process*
Eutectic composition	Composition associated with the minimum temperature at which a binary system is fully melted.	*Material Process*
Eutectic diagram	Binary phase diagram with the characteristic eutectic reaction.	*Material Process*
Eutectic reaction	The transformation of a liquid to two solid phases upon cooling.	*Material Process*
Eutectic Temperature	The lowest possible melting point of a mixture of alloys.	*General Engineering*
Eutectic temperature	Minimum temperature at which a binary system is fully melted.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Eutectoid diagram	Binary phase diagram with the eutectoid reaction.	*Material Process*
EV	electric vehicle	*Petro-Chemical Abbreviations*
EVA	ethyl vinyl acetate	*Petro-Chemical Abbreviations*
Evacuated-tube collector	A collector in which solar thermal heat is captured by use of a collector fluid that flows through an absorber tube contained inside an evacuated glass tube.	*Energy*
Evaluation Kit	Evaluation Kit (EV Kit, Development Kit), A printed circuit board with an integrated circuit and support components to produce a working circuit for evaluation and development. Most Evaluation Kits are fully assembled and tested.	*Electrical Engineering*
Evaluation System	Evaluation kits that also include an interface board for connecting to a personal computer and Windows-based EVKit software.	*Electrical Engineering*
Evaluation System	Evaluation kits that also include an interface board for connecting to a personal computer and Windows-based EVKit software.	*Electrical Engineering*
Evaluation	The work involved in gaining a knowledge of the size, shape, position and value of coal.	*Mining*
Evaporation	Part of the water cycle where water (liquid) from the earth's surface (e.g. water surfaces, land surfaces, snow fields) is transformed to water vapor and added to the atmosphere.	*Petroleum Engineering*
Evaporation	the process by which a liquid enters the vapor (gas) phase.	*Chemical*
Evaporation loss	Water evaporated from the circulating water into the atmosphere by the cooling process.	*Chemical Engineering*
Evaporation pits	A common brine disposal technique intended to recover the brine product (water evaporates leaving behind a concentrated salt solution). Best used in arid regions because rainfall will hinder the process. As with containment ponds, there are concerns regarding leaching and overflow, as well as air pollution.	*Petroleum Drilling*
Evaporation pond	A containment pond (that preferably has an impermeable lining of clay or synthetic material such as hypalon) to hold liquid wastes and to concentrate the waste through evaporation.	*Energy*
Evaporation rate	The rate at which a liquid turns into gas and leaves a system.	*Chemical Engineering*
Evaporative cooler (swamp cooler)	An air-cooling unit that turns air into moist, cool air by saturating the air with water vapor. It does not cool air by use of a refrigeration unit.	*Energy*
Evaporative Loss	The loss of a portion of a lubricant due to volatization (evaporation). Test methods include ASTM D 972 and ASTM D 2595.	*Lubrication*
Evapotranspiration	The transformation of water (liquid) from both the earth's surface (evaporation) and from the surfaces of plants (transpiration) to the atmosphere.	*Petroleum Engineering*
Evapotranspiration	The evaporation of water from the soil and the transpiration of water from the plants that live in that soil.	*Forestry*
Even-age management	A forest management method in which all trees in an area are harvested at one time or in several cuttings over a short time to produce stands that are all at or near the same age.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	Industry
Event Space Method	This is a method for determining the reliability of complex systems. In this method, all mutually exclusive events are determined. The reliability of the system is simply the probability of the union of all mutually exclusive events that yield a system success and vice versa.	*Reliability Engineering*
Event Tree Analysis (ETA)	Starting with an initiating event, event trees employ forward logic to construct a graphical representation of subsequent consequences. If successful operation of a system depends on an approximately chronological, but discrete, operation of its units or subsystems, then an event tree can be an appropriate analysis technique.	*Maintenance*
Eviction From Plant	the physical removal of an individual or group from the plant.	*Industrial Relations*
Evidence	materials presented to a tribunal or court for the purpose of establishing certain facts or refuting factual materials presented by the opposition.	*Industrial Relations*
EWG	EWG: Exempt Wholesale Generator	*Energy*
EWO	See Engineering Work Order	*Plant Engineering*
EWS	Engineering Work Station	*Control Engineering*
ex situ	moved from its original place; excavated; removed or recovered from the subsurface.	*Chemical*
Examination	The procedures for all visual observation and nondestructive testing.	*Maintenance and Repair*
Examination procedure	Set of operations having the objective of determining the value or characteristics of a property. [ISO]	*Quality*
Example - DC-to-DC Converter Combats EMI -	Example - DC-to-DC Converter Combats EMI -	*Electrical Engineering*
Example - Internet access	Example - Internet access	*Electrical Engineering*
Examples - In NTSC television, a 3.579545MHz color subcarrier is quadrature-modulated by two color-difference signals and added to the luminance signal. The PAL television standard uses a subcarrier frequency of 4.43362MHz	Examples - In NTSC television, a 3.579545MHz color subcarrier is quadrature-modulated by two color-difference signals and added to the luminance signal. The PAL television standard uses a subcarrier frequency of 4.43362MHz.	*Electrical Engineering*
Examples	Examples:	*Energy*
Excess Gain	The ratio of optical power available at a given emitter-to-receiver range to the minimum optical power required to trigger the receiver.	*Electrical Engineering*
Excess Measured Depth	the amount of actual hole drilled subtracted by the corresponding planned measured length of drill hole. This value is reported on the THD log header.	*Petroleum Drilling*
Excess statutory depletion	The excess of estimated statutory depletion allowable as an income tax deduction over the amount of cost depletion otherwise allowable as a tax deduction, determined on a total enterprise basis.	*Energy*
Excess zinc	extra amounts of zinc that may accumulate on the steel because of chemical composition of the steel or the profile/design of the steel and/or fabrication	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Exchange	Exchange: See energy exchange.	*Energy*
Exchange agreement	A contractual agreement in which quantities of crude oil, petroleum products, natural gas, or electricity are delivered, either directly or through intermediaries, from one company to another company, in exchange for the delivery by the second company to the first company of an equivalent volume or heat content. The exchange may take place at the same time and location or at different times and/or locations. Such agreements may also involve the payment of cash. Note: EIA excludes volumes sold through exchange agreements to avoid double counting of data. See energy exchange.	*Energy*
Exchange energy	Exchange energy: See exchange, electricity.	*Energy*
Exchange interaction	Phenomenon among adjacent electron spins in adjacent atoms that leads to aligned magnetic moments.	*Material Process*
Exchange, electricity	A type of energy exchange in which one electric utility agrees to supply electricity to another. Electricity received is returned in kind at a later time or is accumulated as an energy balance until the end of a specified period, after which settlement may be made by monetary payment. Note: This term is also referred to as exchange energy.	*Energy*
Exchange, natural gas	A type of energy exchange in which one company agrees to deliver gas, either directly or through intermediaries, to another company at one location or in one time period in exchange for the delivery by the second company to the first company of an equivalent volume or heat content at a different location or time period. Note: Such agreements may or may not include the payment of fees in dollar or volumetric amounts.	*Energy*
Exchange, petroleum	A type of energy exchange in which quantities of crude oil or any petroleum product(s) are received or given up in return for other crude oil or petroleum products. It includes reciprocal sales and purchases.	*Energy*
Exchange, power	Delete in favor of the already-defined term exchange energy, which should be renamed exchange electricity or exchange, electricity.	*Energy*
Excipient	Any substances other than the active drug or product which have been appropriately evaluated for safety and are included in a drug delivery system.	*Chemical*
Excipient	Any substances other than the active drug or product which have been appropriately evaluated for safety and are included in a drug delivery system.	*Chemical Engineering*
Excitation	The external application of electrical voltage current applied to a transducer for normal operation.	*Electronic Process*
Excitation	The external source of energy (e.g., electrical voltage or current) applied to a sensor for its operation.	*Electrical Engineering*
Exclusion Criteria	Conditions which preclude entrance of candidates into an investigation even if they meet the inclusion criteria.	*Analysis*
Excrete	to get rid of waste, such as manure	*Agriculture*
Ex-dividend	On stocks selling "ex-dividend", the seller retains the right to a pending dividend payment.	*Mining*
Executive Bargaining Agent	where a union is certified as the collective bargaining agent in a particular unit, it is the "exclusive" bargaining agent for all employees in the unit.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Executive Boards	most international unions are governed by executive boards. These boards are in control of union policy and programs in the interim between convention, which are the final authority within the union.	*Industrial Relations*
Executive Employees	certain classes of workers exempt from minimum wage and overtime hours under section 13 of the Fair Labor Standards Act.	*Industrial Relations*
Executive Order 13101	Entitled Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, Executive Order (E.O.) 13101 (PDF) (11 pp, 83K, About PDF) was signed on September 14, 1998. This Order replaces E.O. 12873 (PDF) (9 pp, 36K, About PDF)and reinforces the federal government's buy-recycled efforts. E.O. 13101 establishes a process for amending the CPG originally promulgated under E.O. 12873. E.O. 13101 requires EPA to amend the CPG every 2 years, or as appropriate. The Order also requires EPA to issue RMANs concurrent with the CPG amendments, and to update them periodically.	*Environmental Engineering*
Exempt haulers	Truckers who aren't regulated by the Interstate Commerce Commission.	*Agriculture*
Exempt Wholesale Generator	Created under the 1992 Energy Policy Act, these wholesale generators are exempt from certain financial and legal restrictions stipulated in the Public Utilities Holding Company Act of 1935.	*Energy*
Exempt Wholesale Generator (EWG)	An EWG is a category of power producer defined by the Energy Policy Act of 1992. EWG's are independent power facilities that generate electricity for sale in wholesale power markets at market-based rates. The Federal Energy Regulatory Commission is responsible for determining EWG status.	*Energy*
Exfoliation	Corrosion that proceeds laterally from the sites of initiation along planes parallel to the surface, generally at grain boundaries or coating interfaces, forming corrosion products that force metal or coating away from the body of the material, giving rise to a layered appearance.	*Paint and Coatings*
Exhaust air	The mixture of air and its associated vapor leaving the tower (See Air Flow).	*Facility Engineering*
Exhaust fan	Small fans located in the wall or ceiling that exhaust air, odors, and moisture from the bathroom, kitchen, or basement to the outside.	*Energy*
Exhaust Gas Recirculation (EGR)	System to reduce automotive emission of nitrogen oxides (NOx). It routes exhaust gases into the carburetor or intake manifold where they dilute the air/fuel mixture and reduce peak combustion temperatures, thereby reducing the tendency for NOx to form.	*Lubrication*
Exhaust Manifold	The network of passages that gathers the exhaust gases from the various exhaust ports and routes them toward the catalyst, the muffler and the exhaust system.	*Mechanical Engineering*
Exhaust Manifold	The network of passages that gathers the exhaust gases from the various exhaust ports and routes them toward the catalyst, the muffler and the exhaust system.	*Mechanical Engineering*
Exhaust wet-bulb temperature	Average wet-bulb temperature of the air discharged from the tower.	*Facility Engineering*
Exhaustion range	Temperature range over which conductivity in an n-type semiconductor is relatively constant due to the fact that impurity donated electrons have all been promoted to the conduction band.	*Material Process*
Exit basin temperature	Temperature of the circulating water leaving the cold water basin if blowdown or make-up is added to the basin, the temperature will be affected accordingly.	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Exit diameter	Diameter of the shell at the top in a hyperbolic natural draft tower or at the top of a fan stack.	*Facility Engineering*
Exit Interview	a meeting between an employee who is leaving the employ of the company, voluntarily or for other reasons, and someone from the personnel office.	*Industrial Relations*
Exothermic	A process is said to be exothermic when it releases heat.	*Electrical*
Exothermic	term indicating the liberation of heat. A reaction which liberates heat.	*Material Process*
Exothermic (Reaction or Material)	Certain materials undergo chemical reactions when thermally sprayed and produce extra heating. This can be useful in improving adhesion of the coating to the substrate.	*Paint and Coatings*
Expanded uncertainty	Quantity defining an interval about the result of a measurement that may be expected to encompass a large fraction of the distribution of values that could reasonably be attributed to the measurand.	*Quality*
Expanding gate valve	A gate valve that is comprised of a separate gate and segment that as the valve operates the gate and segment move without touching the seats, permitting the valve to be opened and closed without wear. In the closed position the gate and segment are forced against the seat. Continued downward movement of the gate causes the gate and segment to expand against the seats. When the valve reaches its full open position, the gate and segment seal off against the seats while the flow is isolated from the valve body.	*Mechanical*
Expansion Joint	A flexible piping component which absorbs thermal and/or terminal movement.	*Maintenance and Repair*
Expansion Factor	Correction factor for the change in density between two pressure measurement areas in a constricted flow.	*General Engineering*
Expansion Joint	a bitumious fiber strip used to separate blocks or units of concrete to prevent cracking due to expansion caused by temperature changes.	*Petroleum Drilling*
Expected date (of a Cochrane Review)	The date by which a user of the Cochrane Database of Systematic Reviews (CDSR) can expect to have access to a completed review. This date appears on Protocols in CDSR.	*Quality Engineering*
Expected Earning Level	a target or standard set under a pieve-rate system which permits an employee to earn a fixed percentage above the base rate.	*Industrial Relations*
Expedite	The act of contacting a supplier or carrier with the goal of speeding up the delivery date of an inbound shipment.	*Procurement*
Expenditure	The incurrence of a liability to obtain an asset or service.	*Energy*
Expenditures per million Btu	The aggregate ratio of a group of buildings' total expenditures for a given fuel to the total consumption of that fuel.	*Energy*
Expenditures per square foot	The aggregate ration of a group of buildings' total expenditures for a given fuel to the total floor space in those buildings.	*Energy*
Expense	**c**ost or charge of money	*Agriculture*
Experience	information, knowledge, and ability obtained through actual work or job performance.	*Industrial Relations*
Experience Rating	a procedure or device used in connection with state unemployment compensation laws to determine the tax rate of an employer.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Experimental intervention	An intervention under evaluation. In a controlled trial, an experimental intervention arm is compared with one or more control arms, and possibly with additional experimental intervention arms. See also: Intervention, Treatment	*Quality Engineering*
Experimental study	A study in which the investigators actively intervene to test a hypothesis. In a controlled trial, one type of experiment, the people receiving the treatment being tested are said to be in the experimental group or arm of the trial.	*Quality Engineering*
Expert System	A Software Based System Which Makes Or Evaluates Decisions Based On Rules Established Within The Software. Typically Used For Fault Diagnosis.	*Management*
Expert Systems	See Knowledge Based Systems (KBS).	*Control Engineering*
Explanatory trial	A trial that aims to test a treatment policy in an ideal situation where patients receive the full course of therapy as prescribed, and use of other treatments may be controlled or restricted. See also: Pragmatic trial	*Quality Engineering*
Explanatory variable	See Independent variable	*Quality Engineering*
Exploration	The search for mineral deposits and the work done to prove or establish the extent of a mineral deposit. Alt: Prospecting and subsequent evaluation.	*Mining*
Exploration	The prospecting, diamond drilling and other work involved in searching for ore.	*Mining*
Exploration and Production companies (E & P)	hey are the first step in the process of harvesting natural gas; they find the natural gas, drill, and get the gas out of the ground. Midstream companies then collect and process the natural gas (using cryogenic or non-cryogenic plants). Pipeline companies then take over and transport the gas.	*Petroleum Drilling*
Exploration drilling	Drilling done in search of new mineral deposits, on extensions of known ore deposits, or at the location of a discovery up to the time when the company decides that sufficient ore reserves are present to justify commercial exploration. Assessment drilling is reported as exploration drilling.	*Energy*
Exploration drilling	Drilling carried out to determine whether hydrocarbons are present in a particular area or structure.	*Petroleum Drilling*
Exploration Phase	The phase of operations which covers the search for oil or gas by carrying out detailed geological and geophysical surveys followed up where appropriate by exploratory drilling.	*Petroleum Drilling*
Exploration phase	The phase of operations which covers the search for oil or gas by carrying out detailed geological and geophysical surveys followed up where appropriate by exploratory drilling.	*Petroleum Drilling*
Exploration Well	A well drilled in an unproven area. Also known as a wildcat well.	*Petroleum Drilling*
Exploration well	A well drilled in an unproven area. Also known as a “wildcat well”.	*Petroleum Drilling*
Exploration	Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.	*Mining*
Exploratory	Drilling to locate probable mineral deposits or to establish the nature of geological structures; such wells may not be capable of production if minerals are discovered.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Exploratory well	A hole drilled a) to find and produce oil or gas in an area previously considered unproductive area; b) to find a new reservoir in a known field, i.e., one previously producing oil and gas from another reservoir, or c) to extend the limit of a known oil or gas reservoir.	*Energy*
Explosion proof	The prevention of explosion, triggered by electrical components, through containment in special housings. A requirement for electrical devices, such as solenoids and switches, when exposed to a potentially explosive environment.	*Mechanical*
Explosion-Proof	Equipment designed in accordance with existing codes and standards such that it will operate in a specified hazardous environment without causing an explosion. For further information, contact the National Electrical Manufacturers Association	*Equipment*
Explosion-Proof	A certification that ensures a device has the ability to contain an explosion within itself so it does not ignite its hazardous surroundings.	*Mechanical*
Explosion-proof Enclosure	An enclosure that can withstand an explosion of gases within it and prevent the explosion of gases surrounding it due to sparks, flashes or the explosion of the container itself, and maintain an external temperature which will not ignite the surrounding gases.	*General Engineering*
Explosion-Proof Switch	A UL listed switch capable of withstanding an internal explosion of a specified gas without ignition of surrounding gases.	*Electrical Engineering*
Explosive	Any rapidly combustive or expanding substance. The energy released during this rapid combustion or expansion can be used to break rock.	*Mining*
Explosives casting	a technique designed to blast up to 65 percent of the overburden into the mine pit for easier removal. It differs from conventional overburden blasting, which only fractures the overburden before it is removed by excavating equipment.	*Energy*
Exponential Distribution	This is a lifetime statistical distribution that assumes a constant failure rate for the units being modeled	*Reliability Engineering*
Export packing	Special packing and crating that is required for export shipping. Includes sealing against a salt atmosphere (sea air).	*Mechanical*
Export Revenues	All revenues received by an exporter for the reported quantity exported	*Energy*
Exports	Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.	*Energy*
Exposed Coalfield	the area of the coalfield where coal measures are present at the surface. -See also 'Concealed Coalfield'.	*Mining*
Exposed Junction	A form of construction of a thermocouple probe where the hot or measuring junction protrudes beyond the sheath material so as to be fully exposed to the medium being measured. This form of construction usually gives the fastest response time.	*General Engineering*
Exposed Pad	Offered in some packages to improve thermal dissipation or lower the impedance of the ground connection. Normally not electrically isolated, it typically needs to be connected to a ground or power plane, depending on the device. Example: Unit of capacitance.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Expulsion From Union	action by a union under its constitution and bylaws revoking and individual's membership in the union.	*Industrial Relations*
Extended BDV (Blow Down Valve)	EXTENDED BDV (Blow Down Valve)	*Mechanical*
Extender	A substance, often having some bonding properties, added to a plastic composition to reduce the amount of primary binders required.	*Material Process*
Extendible Conveyor	Roller or wheel conveyor that may be lengthened or shortened within limits to suit operating needs. Standard extended lengths are 20 ft., 30 ft., and 40 ft.	*Manufacturing*
Extending length	Length of polymeric molecule that is extended as straight as possible.	*Material Process*
Extension Agency	an outreach arm of an agricultural university which provides educational programs on farming and does research	*Agriculture*
Extension agent	an employee of the Cooperative Extension Service. They go by various names in different states. In Washington they are formally called county faculty because they hold faculty appointments at Washington State University	*Agriculture*
Extension Bonnet	A bonnet with a packing box that is extended above the body-to-bonnet connection so as to maintain the temperature of the packing above (cryogenic service) or below (high-temp service) the temperature of the process fluid.	*Industrial Engineering*
Extension of Collective Agreement	provisions in some contracts setting out the conditions under which the provisions of agreement will be extended to new plants or new members of an employer association.	*Industrial Relations*
Extensions	Any new reserves credited to a previously producing reservoir because of enlargement of its proved area. This enlargement in proved area is usually due to new well drilling outside of the previously known productive limits of the reservoir.	*Energy*
Extensions, discoveries, and other additions	Additions to an enterprise's proved reserves that result from(1) extension of the proved acreage of previously discovered (old) reserves through additional drilling in periods subsequent to discovery and (2) discovery of new fields with proved reserves or of new reservoirs of proved reserves in old fields.	*Energy*
External coating	Coating applied to protect valves against various environments – sea air, salt water, earth buried, normal air exposure.	*Mechanical*
External force	A surface force or body force acting on an object. External forces are sometimes called applied forces.	*Engineering Physics*
External Force Or Load	Forces exerted on a fastener as a result of an applied loading to the joint.	*Maintenance*
External Gear	A gear with teeth on the outer cylindrical surface.	*Mechanical Engineering*
External peer reviewer (of a Cochrane Review)	A person with relevant content, methodological, or user expertise who critically examines Cochrane Reviews in her/his area of expertise. See also: Peer review, Review	*Quality Engineering*
External Thread	A screw thread which is formed on an external cylinder, such as on bolts, screws, studs etc.	*Maintenance*
External validity	The extent to which results provide a correct basis for generalizations to other circumstances. For instance, a meta-analysis of trials of elderly patients may not be generalizable to children. See also: Internal validity, Reference population, Validity Also called: Applicability, Generalizability (also: applicability, external validity)	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
External venting	holes that prevent high-pressure gas buildup in enclosed fabrications dipped in the molten zinc of the galvanizing bath	*Materials Process*
Externalities	Benefits or costs, generated as a byproduct of an economic activity, that do not accrue to the parties involved in the activity. Environmental externalities are benefits or costs that manifest themselves through changes in the physical or biological environment.	*Energy*
Externally Pressurized Seal	A seal that has pressure acting on the seal parts from an external independent source of supply.	*Lubrication*
Extinguishing Agents	Media suitable for controlling or putting out a fire, when properly applied.	*Chemical*
Extra High Strength Strand	A grade of galvanized or bright strand.	*Wire Rope & Cable*
Extra Improved Plow, Steel	A specific wire rope grade.	*Wire Rope & Cable*
Extra Strong	(XS) also referred to as Extra Heavy (XH); A specification of pipe wall specified in API Spec 5L thicknesses. See our table of Carbon Steel Pipe Dimensions.	*Petroleum Engineering*
Extraction	The process of mining and removal of cal or ore from a mine.	*Mining*
Extraction loss	See Natural gas plant liquids (NGPL) production.	*Energy*
extraction well	a well employed to extract fluids (either water, gas, free product, or a combination of these) from the subsurface. Extraction is usually accomplished by either a pump located within the well or suction created by a vacuum pump at the ground surface.	*Chemical*
Extractive industries	Industries involved in the activities of (1) prospecting and exploring for wasting (non-regenerative) natural resources, (2) acquiring them, (3) further exploring them, (4) developing them, and (5) producing (extracting) them from the earth. The term does not encompass the industries of forestry, fishing, agriculture, animal husbandry, or any others that might be involved with resources of a regenerative nature.	*Energy*
Extramural	Outside (the walls or boundaries of) a community or institution. Refers to 'external' sources of support (such as funding) as opposed to 'internal' (intramural) support.	*Quality Engineering*
Extranet	An exclusionary Internet-like network that securely connects customers and suppliers to a corporate or plant intranet in order to access information deemed sharable by the intranet operators.	*Quality*
Extraordinary income deductions (electric utility)	Those items related to transactions of a nonrecurring nature that are not typical or customary business activities of the utility and that would significantly distort the current year's net income if reported other than as extraordinary items.	*Energy*
Extreme pressure (EP) additive	Lubricant additive that prevents sliding metal surfaces from seizing under conditions of extreme pressure. At the high local temperatures associated with metal-to-metal contact, an EP additive combines chemically with the metal to form a surface film that prevents the welding of opposing asperities, and the consequent scoring that is destructive to sliding surfaces under high loads. Reactive compounds of sulfur, chlorine, or phosphorus are used to form these inorganic films.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Extreme Pressure Property (EP)	That property of a grease that, under high applied loads, reduces scuffing, scoring and seizure of contacting surfaces. Common laboratory tests are Timken OK Load (ASTM D 2509 and ASTM D 2782) and Four Ball Load Wear Index (ASTM D 2596 and ASTM D 2783).	*Lubrication*
Extrinsic gettering	The capture of oxygen in a silicon device by using mechanical damage to produce dislocations as gettering sites.	*Material Process*
Extrinsic semiconductor	Semiconducting material with a purposeful impurity addition that, over a certain temperature range, establishes the level of conductivity.	*Material Process*
Extrude	To force of substance through a confined opening, such as a die.	*Material Process*
Extruded Pipe	Pipe produced from hollow or solid round forgings, usually in a hydraulic extrusion press. In this process the forging is contained in a cylindrical die. Initially a punch at the end of the extrusion plunger pierces the forging. The extrusion plunger then forces the contained billet between the cylindrical die and the punch to form the pipe, the latter acting as a mandrel.	*Maintenance and Repair*
Extruded Nozzles	The forming of nozzle (tee) outlets in pipe by pulling hemi- spherically or conically shaped dies through a circular hole from the inside of the pipe. Although some cold extruding is done, it is generally performed on steel after the area to be shaped has been heated to temperatures between 2000 and 1600°F (1093 and 871°C).	*Maintenance and Repair*
Extrusion	The process of continuously forcing either a plastic or elastomer and a conductor or core through a die, thereby applying an insulation or jacket to the conductor or core.	*Electrical*
Extrusion molding	Processing technique for thermoplastic polymers. A molding procedure for producing rods, tubes, etc., whereby a heat softened plastic is forced through on orifice to produce the cross section of the article desired. Sometimes used in place of injection.	*Material Process*
Extrusive Rocks	Igneous rocks formed from magma that flows out on the earth's surface. These rocks cool rapidly, producing a fine crystalline structure.	*Petroleum Engineering*
Eye	the top or mouth of a shaft; or the opening out of the mainway to the foot of the shaft. (Yorks.); or the central or intake opening of a radial-flow fan.	*Mining*
Eye Or Eye Splice	A loop, with or without a thimble, formed at the end of a wire rope.	*Wire Rope & Cable*
Eyring model	An accelerated life testing model based on quantum mechanics for use when temperature is the accelerating factor.	*Reliability Engineering*
Ezlogic	Electronic Zero Pressure Logic for zero pressure accumulation conveyor systems.	*Manufacturing*
F	F	*Forestry*
--F--	--F--	*Petroleum Drilling*
F.A.S	F.A.S.: See Free Alongside Ship.	*Energy*
F.A.S. – Free Along Side	Term used for ocean shipment. Vendor pays transportation only to shipping dock alongside vessel.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
f.a.s. value.	Free alongside ship value. The value of a commodity at the port of exportation, generally including the purchase price plus all charges incurred in placing the commodity alongside the carrier at the port of exportation in the country of exportation.	*Energy*
F.E. – Flanged End	F.E. – Flanged End - See "R.F." & "RTJ"	*Mechanical*
F.E.R.C.	Federal Energy Regulatory Commission - A United States government agency which has the final approval of new pipelines, right of ways, etc.	*Mechanical*
F.O.B	F.O.B: See Free On Board.	*Energy*
F.O.B.	Prices denote the so-called free-on-board payment, for material that a consumer or agent will give when he picks it up at a dealer's dock. The f.o.b. prices are usually less than delivered-to-works prices for the same items.	*Metallurgy*
F.O.B. – Free on Board	Transportation charges are absorbed by vendor to the F.O. B. point. Usually shipment is F.O.B. factory. In which case, title and transportation charges pass to the customer when shipment leaves the factory.	*Mechanical*
f.o.b. price	The price actually charged at the producing country's port of loading. The reported price should be after deducting any rebates and discounts or adding premiums where applicable and should be the actual price paid with no adjustment for credit terms.	*Energy*
f.o.b. value (coal)	Free-on-board value. This is the value of coal at the coal mine or of coke and breeze at the coke plant without any insurance or freight transportation charges added.	*Energy*
F.P.C. – Federal Power Commission	The United States government agency which governs and regulates the natural gas and pipeline industry, as well as other energy industries.	*Mechanical*
F=PxA	F=PxA	*Mechanical, Process, and Operations*
F-18	Aviation gasoline (low lead) in limited use by certain NATO nations. Also known as AVGAS 100LL.	*NATO Fuel*
F-34	A military kerosene type aviation turbine fuel with Fuel System Icing Inhibitor FSII (NATO Code S-1745. Additive to aviation turbine fuels as system icing inhibitor) used by land based military gas turbine engined aircraft in all NATO countries. (Until 1986, F-40 was used by land based gas turbine engined aircraft in all NATO countries except France and the United Kingdom which had converted to F-34 some 15 years earlier. Following a decision by NATO Defence Ministers all nations except Turkey switched from F-40 to F-34. The conversion (known as Stage 1 of the Single Fuel Concept) was completed in 1988. Turkey completed its conversion from F-40 to F-34 in 1996.) Also known as JP-8 or AVTUR/FSII.JET A-1 or AVTUR + Additives (The term "additives" used in this Aide Memoire can include FSII corrosion inhibitor/lubricity improver additive and static-dissipator additive or SDA) = JP-8 or AVTUR/FSII.	*NATO Fuel*
F-35	A military kerosene type aviation turbine fuel equivalent to that used by most civil operators of gas turbine engined aircraft. Also known as JET A-1 or AVTUR. JET A-1 or AVTUR; therefore F-34 = F-35 + Additives.	*NATO Fuel*

Term	Definition	*Industry*
F-40	A military wide cut type aviation turbine fuel with FSII used by land based military gas turbine engined aircraft (NOTE 2). Also known as JP-4 or AVTAG/FSII. Within NATO it is an emergency substitute for F-34/F-35.	*NATO Fuel*
F-44	A military high flash point kerosene type aviation turbine fuel with FSII used by ship borne military gas turbine engine aircraft in most NATO countries. Also known as JP-5 or AVCAT/FSII JET A and JET B (See NOTES 4 and 5)	*NATO Fuel*
F-46	A military gasoline fuel used in certain armored and non-armored vehicle spark ignition engines in NATO Europe areas outside Denmark and the United Kingdom. Also known as gasoline automotive: Military (91 RON) or COMBATGAS. Availability of this fuel is now limited and has been replaced by F-57.	*NATO Fuel*
F-54	A military diesel fuel used in compression ignition engines in NATO Europe areas outside Denmark, Greece, Italy, Portugal, Spain and the United Kingdom. Also known as Diesel Fuel: MILITARY or DF-2. It has a Pour Point specification of 18oC maximum.	*NATO Fuel*
F-57	A low leaded gasoline introduced to replace F-46. It is interchangeable with commercial gasoline automotive (98 RON).	*NATO Fuel*
F-65	A low temperature diesel/kerosene fuel blend.	*NATO Fuel*
F-67	An unleaded gasoline automotive interchangeable with commercial gasoline (95 RON).	*NATO Fuel*
F-75	A military diesel fuel used in compression ignition engines in Denmark and Greece. It is normally referred to as FUEL NAVAL DISTILLATE, low pour point. (See Naval fuels).	*NATO Fuel*
F-76	The primary naval fuel used as for F-75 above but it may require special handling and storage due to low temperature characteristics. Also known as FUEL, NAVAL DISTILLATE (Alternative turbine/diesel engine fuel for use in certain naval helicopters).	*NATO Fuel*
F-77	A naval residual fuel used for boiler steam raising for certain ships in France, Greece and Turkey. Also known as FUEL, RESIDUAL, light viscosity boiler or 50/50 FFO (F-77 may also be used in slow speed diesel engines).	*NATO Fuel*
Fabianism	the term applied to the doctrined of a group of socialist organized in 1884 as the Fabian Society.	*Industrial Relations*
Fabricate	To work of material into a finished form by machining, drawing or other operation.	*Material Process*
Fabricated fuel	Fuel assemblies composed of an array of fuel rods loaded with pellets of enriched uranium dioxide.	*Energy*
Fabricated valve	One in which the body and hub parts are not cast – but rather are formed from plate or pipe and the welded, or bolted together.	*Mechanical*
Fabrication	To construct equipment from a set of instructions or blueprints from supplied parts by a manufacturer or expert.	*Procurement*
Fabrication	Primarily, the joining of piping components into integral pieces ready for assembly. It includes bending, forming, threading, welding, or other operations upon these components, if not part of assembly. It may be done in a shop or in the field.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fabrication (UC)	UC "constructed" using equipment and supplies from many vendors under a fabrication number issued by Equipment Management. All orders are inventoried under the same number.	*Procurement*
Fabrication Integrity Point	The differential gas pressure at which the first stream of gas bubbles are emitted from a wetted filter element under standard test conditions.	*Lubrication*
Fabricator	A producer of intermediate products that does not also produce primary metal. Examples include brass, wire and rod mills, which buy copper and other primary or secondary metals to produce brass and other copper alloys, or take raw forms of metal and make building, magnet, telecommunications and/or industrial wire, rod, and similar products.	*Metallurgy*
Face	As applied to a drift, crosscut or stope, is the end in which work is progressing.	*Mining*
Face	Veneers on the exposed surface of plywood or other bonded laminates.	*Material Process*
Face airing	the practice of maintaining a good flow of ventilation air along the coalface and only allowing a small proportion of the total ventilation, or a leakage, to pass through the waste.	*Mining*
Face centered cubic	Common atomic arrangement for metals.	*Material Process*
Face channel or channel sample	a sample taken at the exposed coal in a mine by cutting away any loose or weathered coal then collecting on a clean surface a sample of the coal seam by chopping out a channel of uniform width and depth; a face channel or face sample is taken at or near the working face, the most freshly exposed coal where actual removal and loading of mined coal is taking place. Any partings greater than 3/8 inch and/or mineral concretions greater than 1/2 inch thick and 2 inches in maximum diameter are normally discarded from a channel sample so as better to represent coal that has been mined, crushed, and screened to remove at least gross non-coal materials.	*Energy*
Face cleat	The principal cleavage plane or joint at right angles to the stratification of the coal seam.	*Mining*
Face conveyor	Any conveyor used parallel to a working face which delivers coal into another conveyor or into a car.	*Mining*
Face drill	used in conventional mining to drill shot holes in the coalbed for explosive charges.	*Energy*
Face entry,	the place where men access the coal face.	*Mining*
Face line	the position of a longwall face in relation to other underground features such as roadways, cleat, dip etc; or a term meaning the coalface itself.	*Mining*
Face of Tooth	That surface of the tooth which is between the pitch circle and the top of the tooth.	*Mechanical Engineering*
Face of Weld	Face of Weld. The exposed surface of a weld on the side from which the welding was done.	*Maintenance and Repair*
Face on	the direction that is at right angles to the 'cleat' or 'grain' of the coal seam.	*Mining*
Face room	the total length or productive capacity of all faces available in a mine from which coal can be won.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Face Seal	A device that prevents leakage of fluids along rotating shafts. Sealing is accomplished by a stationary primary seal ring bearing against the face of a mating ring mounted on a shaft. Axial pressure maintains the contact between the seal ring and the mating ring.	*Lubrication*
Face thing	Face thing, -see 'Buttock thing (N. Staffs.).	*Mining*
Face to face	The overall dimension from the inlet face of a valve to the outlet face of a valve (one end to another) allowing valves of the same size and pressure class to be mutually interchangeable, regardless of manufacturer.	*General Mechanical*
Face	The end of a drift, crosscut or stope in which work is taking place.	*Mining*
Face-To-Face	Is the distance between the face of the inlet opening and the face of the outlet opening of a valve or fitting. These dimensions are governed by ANSI/ISA specifications. The following uniform face-to-face dimensions apply.	*Industrial Engineering*
Face-to-face	The overall dimension from the inlet face of a valve to the outlet face of the valve (one end to the other). This dimension is governed by ANSI B16.10 and API-6D to ensure that such valves are mutually interchangeable, regardless of the manufacturer.	*Mechanical*
Face-to-Face Pay	a method of determining compensation in mining operarations based solely on work performed at the face where the ore actually is mined.	*Industrial Relations*
Faceway drift	a face of coal advancing at right angles to a 'Buttock-thing'.	*Mining*
Facilities charge	An amount to be paid by the customer in a lump sum, or periodically as reimbursement for facilities furnished. The charge may include operation and maintenance as well as fixed costs.	*Energy*
Facility	A location where electric energy is generated from energy sources.	*Energy*
Facility data link	Embedded communications channel in ESF DS1 framing. Used to convey both bit-oriented and message-oriented signals.	*Electrical Engineering*
Facing	The finish of the gasket contact surface of a flange.	*General Mechanical*
Facings	another word for joints or cleats.	*Mining*
Fact-Finding Board	a special panel, usually of three or five persons, appointed to review the positions of labor and management in a particular dispute.	*Industrial Relations*
Factionalism	within a union, groups of members who differ on solutions of common problems.	*Industrial Relations*
Factor Comparison Method	one of the methods used in job evaluation.	*Industrial Relations*
Factor of material safety	The ratio of the ultimate strength of a material to its working stress.	*Material Process*
Factor of safety	The ratio of the ultimate breaking strength of the material to the force exerted against it. If a rope will break under a load of 6000 lbs., and it is carrying a load of 2000 lbs., its factor of safety is 6000 divided by 2000 which equals 3.	*Mining*
Factorial design	A trial design used to assess the individual contribution of treatments given in combination, as well as any interactive effect they may have. Most trials only consider a single factor, where an intervention is compared with one or more alternatives, or a placebo. In a trial using a 2x2 factorial design, participants are allocated to one of four possible combinations. For example in a 2x2 factorial	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	RCT of nicotine replacement and counseling, participants would be allocated to: nicotine replacement alone, counseling alone, both, or neither. In this way it is possible to test the independent effect of each intervention on smoking cessation and the combined effect of (interaction between) the two interventions. This type of study is usually carried out in circumstances where no interaction is likely. See also: Interaction	
Factory Inspection	a procedure for periodic checking of facilities used for the production of goods and services to determine if they meet health and safety standards determined by law.	*Industrial Relations*
FACTS (Flexible Alternating Current Transmission Systems)	Refers to a group of technologies that enhance the security, capacity and flexibility of power transmission and distribution systems. The technologies can be installed in new or existing power transmission and distribution lines. Examples of FACTS devices are—Static var compensation (SVC), uses an electrical device (see Static var compensator) to regulate and stabilize voltage in bulk power systems. The most advanced version of this technology is called SVC Light and has additional features, in particular more powerful flicker compensation to stabilize heavy and rapidly fluctuating loads, for example arc furnaces, and to smooth voltage flicker. Series Compensation can be fixed or controllable. The latter is called Thyristor Controlled Series Capacitor (TCSC). Series compensation is a straightforward and cost effective way to improve power transmission capacity and preserve voltage stability, particularly in bulk transmission corridors. Thyristor-controlled series compensation is especially useful for damping power oscillation over interconnections between transmission girds.	*Electrical*
Facultative	used to describe organisms that are able to grow in either the presence or absence of a specific environmental factor (e.g., oxygen). See also facultative anaerobe.	*Chemical*
Facultative anaerobes	microorganisms that can grow in either the presence or the absence of molecular oxygen. In the absence of oxygen these microorganism can utilize another compound (e.g., sulfate or nitrate) as a terminal electron acceptor.	*Chemical*
Fading	Any lightening of an initial color possessed by a plastic.	*Material Process*
Fahrenheit	A temperature scale on which the boiling point of water is at 212 degrees above zero on the scale and the freezing point is at 32 degrees above zero at standard atmospheric pressure.	*Energy*
Fail safe valve	A valve designed to fail in a preferred position (open or closed) in order to avoid an undesirable consequence in a piping system.	*Mechanical*
Fail-Closed	Or normally closed. Another way of describing an air-to-open actuator. Approximately 80% of all spring-return diaphragm operators in the field are of this construction.	*Industrial Engineering*
Fail-In-Place	A term used to describe the ability of an actuator to stay at the same percent of travel it was in when it lost its air supply. On spring return actuators this is accomplished by means of a lock-up valve. On piston actuators a series of compressed air cylinders must be employed.	*Industrial Engineering*
Fail-Open	Or normally open. Another way of describing an air-to-close actuator.	*Industrial Engineering*
Fail-Safe	A technique used in RS-485 interface transceivers which forces the output to a predefined state in the event of a line short or open circuit.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Failure	A lack of success in something, or an unsuccessful attempt at doing something. A breakdown or decline in the performance of something, or an occasion when something stops working or stops working adequately. Note that "failure" is an event, as distinguished from "fault" which is a "state."	*Maintenance*
Failure analysis	A systematic methodology for characterizing the failure of the system, process or engineering materials.	*Material Process*
Failure catastrophic	A failure that can cause loss.	*Reliability Engineering*
Failure Cause	The apparent cause of a functional failure, not to be confused with the root cause, which is only determined through a Root Cause Failure Analysis (RCFA). (Used interchangeably with Failure Reason).	*Maintenance*
Failure Characteristics	These are terms used to describe the characteristics of a failure. They include hidden, predictable, preventable and random. A hidden failure singularly results in a complete loss of function without being immediately evident. A predictable failure displays some evidence, at an early stage, of the potential for failure, and a reasonable estimate of the time interval before full functional failure occurs. The term "preventable" describes those failures for which there is a reliable time interval or usage (such as number of cycles) before functional failure occurs. Random refers to a failure that occurs at any time and is not necessarily constrained by time or usage.	*Reliability Engineering*
Failure Code	An alphanumeric code typically entered against a work order in a computerized maintenance management system (CMMS), which indicates the failure cause (e.g. lack of lubrication, metal fatigue, etc.). These codes are employed to facilitate analysis of plant history.	*Maintenance*
Failure Consequences	A term originating from reliability-centered maintenance (RCM). The consequences of all failures are classified as being either hidden, safety, environmental, operational, or non-operational.	*Maintenance*
Failure Descriptor	The term failure descriptor refers to the apparent observation of a failure. The failure descriptor must answer the question of what caused the equipment to fail to perform or fulfill the required function(s).	*Maintenance*
Failure distribution	This is a mathematical model which describes the probability f failures occurring over time. It is also known as the probability density function (PDF), which ids integrated to obtain the probability that the failure time takes a value in a given time interval. It is the basis for other reliability functions, including the reliability function, mean life and the failure rate function.	*Reliability Engineering*
Failure Effect	A description of the events that transpire after a failure has occurred as a result of a specific failure mode.	*Maintenance*
Failure Finding Interval	How often a failure finding task is performed. It is determined by the frequency of failure of the protective device, and the desired availability required of that protective device.	*Maintenance*
Failure Finding Task	A routine maintenance task, normally an inspection or a testing task, designed to determine, for hidden failures, whether an item or component has failed. A failure finding task should not be confused with an on-condition task, which is intended to determine whether an item is about to fail. Failures finding tasks are used in reliability-centered maintenance (RCM), and are sometimes referred to as functional tests.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Failure mechanism	This is the mechanical, chemical , physical or other processes that results in failure	*Reliability Engineering*
Failure Mode	Any Event Which Causes A Failure.	*Plant Engineering*
Failure mode analysis	A procedure aimed at determining why a failure occurred.	*Reliability Engineering*
Failure Mode and Effect Analysis (FMEA)	This is a bottom-ups method for analyzing system design and performance in other to study failures and determine the effects of various types of failures on a system.	*Reliability Engineering*
Failure mode and effects analysis (FMEA)	A procedure by which each potential failure mode in a system is analyzed to determine the resulting effects thereof on the system and to classify each potential failure mode according to its severity.	*Reliability Engineering*
Failure Mode, Effects (& Criticality) Analysis (FME(C)A)	FME(C)A is a procedure that analyzes failures (failure modes) and determines their impact (effect) at both the local and system levels. The analysis can be carried out from the lowest to the highest level of the system (bottom up), which is commonly referred to as a hardware analysis. Alternatively, the analysis can be carried out from the highest level to the lowest level (top down) of the system, which is commonly referred to as a functional FMEA. The functional FMEA considers the functional failure of components within a system.	*Maintenance*
Failure Mode, Effects and Criticality Analysis (FMECA)	This is a procedure that analyzes system design and performance in other to study failures and determine the effects of various types of failures on a system. A criticality factor assigned to each failure mode permits the ranking of failure modes into the most severe and the ones most likely to occur. This aids the identification and subsequent implementation of strategies to reduce their probability of occurrence.	*Reliability Engineering*
Failure Modes and Effects Analysis	A Structured Method Of Determining Equipment Functions, Functional Failures, Assessing The Causes Of Failures And Their Failure Effects. The First Part Of A Reliability Centered Maintenance Analysis Is A Failure Modes And Effects Analysis.	*Plant Engineering*
Failure Modes and Effects Analysis (FMEA)	It is a disciplined approach used to identify possible failures of a product or service and then determine the frequency and impact of the failure.	*Reliability Engineering*
Failure Modes, Effects and Criticality Analysis	A Structured Method Of Assessing The Causes Of Failures And Their Effect On Production, Safety, Cost, Quality Etc.	*Plant Engineering*
Failure or hazard	Any electric power supply equipment or facility failure or other event that, in the judgment of the reporting entity, constitutes a hazard to maintaining the continuity of the bulk electric power supply system such that a load reduction action may become necessary and reportable outage may occur. Types of abnormal conditions that should be reported include the imposition of a special operating procedure, the extended purchase of emergency power, other bulk power system actions that may be caused by a natural disaster, a major equipment failure that would impact the bulk power supply, and an environmental and/or regulatory action requiring equipment outages.	*Energy*
Failure Pattern	The Relationship Between The Conditional Probability Of Failure Of An Item, And Its Age. Failure Patterns Are Generally Applied To Failure Modes. Research In The Airline Industry Established That There Are Six Distinct Failure Patterns. The Type Of Failure Pattern That Applies To Any Given Failure Mode Is Of Vital Importance In Determining The Most Appropriate Equipment Maintenance Strategy. This Fact Is One Of The Key Principles Underlying Reliability Centered Maintenance.	*Plant Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Failure Patterns	See Patterns of Failure.	*Maintenance*
Failure prevention	The application of knowledge obtained by failure analysis to prevent future catastrophes.	*Material Process*
Failure Rate	Failure rate refers to the overall speed of failures, or the number of failures that occur in a given time frame, usually expressed in years. The total number of failures within an item population is divided by the total time expended by that population during a particular measurement interval under stated conditions. Failure rate is the ratio of the number of failures that occur in an interval to the size of the original population, divided by the length of the time interval. Other formats include the number of failures per year, and in some cases, it is common to express failure rate as the number of failures per hour, or the number of failures of an item per unit time. This can be applied to: Observed failure rate: as computed from a sample.	*Maintenance*
Failure Reason	Sometimes used to refer to the apparent root cause of a functional failure, but not to be confused with the real root cause obtained from a thorough root cause failure analysis (RCFA). Used interchangeably with Failure Cause.	*Maintenance*
Failure Scenario	This is a description of a series of events which may lead to a system failure. It may contain a single event or a combination of sequential events	*Reliability Engineering*
Fair Day's Pay	a wage which is regarded by workers as being just and fair for the type of work being performed.	*Industrial Relations*
Fakes	a well-laminated sandy siltstone or sandstone. (Scot.).	*Mining*
Fakey blaes	a banded and cross-bedded stone bind, similar to fakes, but muddier; shale interbedded with more sandy material. (Scot.).	*Mining*
Fakey rock, flaggy sandstone.	Fakey rock, flaggy sandstone.	*Mining*
Fall	A mass of roof rock or coal which has fallen in any part of a mine.	*Mining*
Fall Time	A measure of the time required for the output voltage of a circuit to change from a high voltage level to a low voltage level, once a level change has started (90% to 10%).	*Electrical Engineering*
Fallers	a term used in Lancs. for the keps. Also called 'cage props'.	*Mining*
Falling	that part of the roof that falls, or comes down, on the extraction of the seam. Also called 'Following'. (Scot.).	*Mining*
Fallow	left without tilling or sowing after plowing	*Agriculture*
Fallow	Idle crop land. The most common reasons in modern agriculture are to conserve moisture for future use and for weed control. In extremely dry areas, for instance, wheat is grown every other year. Fields lie fallow.	*Agriculture*
False Brinelling	Fretting of one bearing component against another; may appear as a dent, but original surface finish is worn away.	*Lubrication*
False Brinelling	False brinelling of needle roller bearings is actually a fretting corrosion of the surface since the rollers are the I.D. of the bearing. Although its appearance is similar to that of brinelling, false brinelling is characterized by attrition of the steel, and the load on the bearing is less than that required to produce the	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	resulting impression. It is the result of a combination of mechanical and chemical action that is not completely understood, and occurs when a small relative motion or vibration is accompanied by some loading, in the presence of oxygen.	
False Brinneling	False brinneling occurs in rolling element bearing contact areas due to micro movements under cyclic vibrations, at times when the machine is not rotating. Depending on the intensity of the vibrations, lubrication / preservative condition, and load, a combination of corrosion and wear occurs, which forms shallow depressions in the raceways. In the case of a stationary bearing, the depressions appear at rolling element pitch and may be discolored (red) and shiny.	*Maintenance*
False Information Act	criminal statute making it a crime for an individual to make a false statement to any government department or agency on a matter properly within its jurisdiction.	*Industrial Relations*
False negative	A falsely drawn negative conclusion. [In diagnostic tests:] A conclusion that a person does not have the disease or condition being tested, when they actually do. [In clinical trials:] See also: Type ll error	*Quality Engineering*
False positive	A falsely drawn positive conclusion. [In diagnostic tests:] A conclusion that a person does have the disease or condition being tested, when they actually do not. [In clinical trials:] See also: Type I error	*Quality Engineering*
False Pulse Protection	The circuitry designed to clamp output Off until the power supply has time to reach proper voltage level. Typically 200-500 msec.	*Electrical Engineering*
False Pulse Protection (2)	An improper change of state of the output, usually associated with Turn-Off or Turn-On.	*Electrical Engineering*
False Pulsing	Circuitry designed to clamp output Off until the power supply has time to reach proper voltage level. Typically 200-500 msec.	*Electrical Engineering*
False rejection	See probability for false rejection.	*Quality*
Family Allowances	wage payments, is excess of regular pay for the job, given to employees on the basis of the number of dependents.	*Industrial Relations*
Family of directions	A set of structurally equivalent crystallographic directions.	*Material Process*
Family of planes	A set of structurally equivalent crystallographic planes.	*Material Process*
Famp	thin beds of shale. (N. East).	*Mining*
Fan	A device for moving air in a mechanical draft tower. The fan design may be either an axial flow propeller or centrifugal blower. The fan can be applied as induced draft or forced draft.	*Facility Engineering*
Fan blast	a term used for the forcing of a current of air into the mine by means of wooden or iron pipes (N. Wales).	*Mining*
Fan Controller	An integrated circuit that varies the speed and airflow of a cooling fan using a variable voltage in response to temperature or system commands.	*Electrical Engineering*
Fan Controller – PWM	An integrated circuit that varies the speed and airflow of a cooling fan using a pulse-width-modulated (PWM) voltage in response to temperature or system commands.	*Electrical Engineering*

Term	Definition	*Industry*
Fan deck	The surface enclosing the top of an induced draft tower. In a counterflow tower, the fan deck covers the entire top surface of the tower. In a crossflow tower, the open fan deck covers only the tower plenum area, leaving the distribution system exposed. An extended fan deck encloses the distribution system and covers the entire top surface of the tower.	*Facility Engineering*
Fan drift	the enclosed airtight passage, roadway or gallery leading from the upcast shaft to the ventilation fan.	*Mining*
Fan drive assembly	Mechanical components furnishing power to the fan, usually consisting of driver, drive shaft, speed reducer, and supporting members.	*Facility Engineering*
Fan driver input	Horsepower input to the driver. For 3-phase alternating current (ac) motors:	*Facility Engineering*
Fan driver output	Brake horsepower output of the driver to the drive shaft. Fan driver input x motor efficiency.	*Facility Engineering*
Fan guard	A protective screen installed either at the inlet of a forced draft fan or at the exit of an induced draft fan.	*Facility Engineering*
Fan pitch	The angle that a fan blade makes with the plane of rotation.	*Facility Engineering*
Fan signal	Automation device designed to give alarm if the main fan slows down or stops.	*Mining*
Fan stack	Cylindrical or modified cylindrical structure in which the fan operates. Fan stacks are used on both induced draft and forced draft axial flow propeller fans. Also known as Cylinder.	*Facility Engineering*
Fan stack height	Distance from top of fan deck to top of fan stack.	*Facility Engineering*
Fan support	(See Mechanical Equipment Support).	*Facility Engineering*
Fan, auxiliary	A small, portable fan used to supplement the ventilation of an individual working place.	*Mining*
Fan, booster	A large fan installed in the main air current, and thus in tandem with the main fan.	*Mining*
Fang	a channel cut in the side of an adit or shaft to act as an air course. (Derbys.).	*Mining*
Fangs	the levers at the top of a shaft on which the cage rests when being loaded and off-loaded (S. Wales)—see also 'keps'.	*Mining*
Fanny work	a method of timbering sometimes pronounced 'Panny work'. (Lancs.).	*Mining*
Fans	Fans, -see Keps.	*Mining*
Fare	standing coal that has not been holed or undercut (S. Wales).	*Mining*
farm agent	Term used in some states for county agent, extension agent, or county faculty.	*Agriculture*
Farm Bureau	a non-governmental political agency that works for farmers' rights	*Agriculture*
Farm In	When a company acquires an interest in a block by taking over all or part of the financial commitment for drilling an exploration well.	*Petroleum Drilling*
Farm in	When a company acquires an interest in a block by taking over all or part of the financial commitment for drilling an exploration well.	*Petroleum Drilling*
Farm out (in) arrangement	An arrangement, used primarily in the oil and gas industry, in which the owner or lessee of mineral rights (the first party) assigns a working interest to an operator (the second party), the consideration for which is specified exploration	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	and/or development activities. The first party retains an overriding royalty or other type of economic interest in the mineral production. The arrangement from the viewpoint of the second party is termed a "farm-in arrangement."	
Farm Stand	a location at or near the point of production where Californian farmers and ranchers are allowed to sell their fresh produce and eggs directly to consumers, exempt from packaging, sizing, and labeling regulations. New state regulations also allow growers to sell certain processed agricultural products.	*Agriculture*
Farm use	Energy use at establishments where the primary activity is growing crops and/or raising animals. Energy use by all facilities and equipment at these establishments is included, whether or not it is directly associated with growing crops and/or raising animals. Common types of energy-using equipment include tractors, irrigation pumps, crop dryers, smudge pots, and milking machines. Facility energy use encompasses all structures at the establishment, including the farm house.	*Energy*
farmer	A noun that seems to be losing popularity to such nouns as grower and producer, especially in academic circles. These terms also avoid the need to distinguish between farmers and ranchers, which terms aren't interchangeable.	*Agriculture*
farmers' market	A market at which farmers sell their produce directly to consumers. Punctuation is a frequently debated issue among writers. There is a great deal of inconsistency. On Web pages one often finds farmers both with and without the apostrophe on the same page. The Associated Press Stylebook 2003 doesn't directly answer the question; but a reading of the "possessives" entry (p201) suggests the proper news style would be to place an apostrophe after the s in farmers. Farmers' market.	*Agriculture*
Farm-Labor Party	an outgrowth of the Labor Party of Illinois which organized in 1918.	*Industrial Relations*
farmstead	Farm land with its buildings.	*Agriculture*
Far-set	to timber-up and spragg the face of a stall ready for undercutting. (Mids.).	*Mining*
Farwell v. Boston and Worcester Railroad Co.	A decision of the Massachusetts Supreme Court in 1842 setting out the principle that a worker assumes the ordinary risks involved in his employment.	*Industrial Relations*
FAS	Foreign Agricultural Service, an agency of the USDA.	*Agriculture*
FASB	Financial Accounting Standards Board	*Energy*
Fast	having a solid side more or less at right angles to the working face. - see also Narrow work; or a heading or stall driven in the solid coal. (Scots.); or the first bed of rock met with when sinking through soft ground on which the wedging curb can be laid. (Lancs.).	*Mining*
Fast breeder reactor (FBR)	A reactor in which the fission chain reaction is sustained primarily by fast neutrons rather than by thermal or intermediate neutrons. Fast reactors require little or no moderator to slow down the neutrons from the speeds at which they are ejected from fissioning nuclei. This type of reactor produces more fissile material than it consumes.	*Energy*
Fast end	the dead end of a roadway; or the part of a rib side adjacent to a coalface, the corner between the face line and the rib side.	*Mining*
Fast jenkin or Jenkin	a roadway driven through a pillar to split it into two smaller pillars.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fast Plant Test	A process test designed to quickly gather process model information from slow processes. This method works well with slow loops such as temperatures, compositions, and some tank levels.	*Process Control*
Fast shot	when a shot of explosive fails to have the desired effect, either it is too weak or the stemming is blown out. - see also Standing bobby.	*Mining*
Fast side	the end of the face where there is a solid face more or less at right angles. Also called the 'butt end' or 'fast end'; or the side of a face gate roadway in solid coal, also called a 'rib side' or 'cutting side'.	*Mining*
Fasteners	manufactured steel products (bolts, nails, etc.) used to connect two or more steel members	*Materials Process*
Fat	An animal or vegetable oil which will combine with an alkali to saponify and form a soap.	*Lubrication*
Fat Work	work which pays more money without any extra effort.	*Industrial Relations*
FATG	Fuel Additives Task Group (CMA)	*Petro-Chemical Abbreviations*
Fathom	Six feet square on the vein.	*Mining*
Fatigue	the inability of a worker to continue the level of output due to hours of work without adequate rest or relaxation.	*Industrial Relations*
Fatigue	The general phenomenon of material failure after several cycles to failure.	*Material Process*
Fatigue (Subsurface initiated)	Under the influence of repetitive (especially high) loads in any metallic contact, structural changes occur in steel, and cracks are initiated at a certain depth under the surface, due to volume changes of the altered material. Cracks propagate through the material until they reach the surface. In extreme cases, cracks further propagate until the component completely fractures (ISO/CD 15243).	*Maintenance*
Fatigue (Surface initiated)	Surface initiated fatigue or surface distress refers to the failure of any metal surface contact due to a fatigue process started from the surface. Generally, a surface defect, such as a foreign particle indentation or a corrosion pit, is the initiator. The fatigue process is especially accelerated by a reduced lubrication regime (ISO/CD 15243).	*Maintenance*
Fatigue assessment	Fatigue resistance verification of a component subjected to a number of operating cycles.	*Mechanical*
Fatigue Chunks	Thick three-dimensional particles exceeding 50 microns indicating severe wear of gear teeth.	*Lubrication*
Fatigue Costs	those costs of operation which may be directly or indirectly attributed to the effects of fatigue.	*Industrial Relations*
Fatigue curve	Characteristic plot of stress versus number of cycles to failure.	*Material Process*
Fatigue failure	The fracture of a metal part by a mechanism of slow crack growth with a resulting clamshell fracture surface.	*Material Process*
Fatigue life	The amount of time under defined operational conditions that a product is expected to survive before wear out.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fatigue Life	The theoretical number of revolutions (or hours of operation) a bearing will last under a given constant load and speed before the first evidence of fatigue develops on one or more of the components.	*Lubrication*
Fatigue Platelets	Normal particles between 20 and 40 microns found in gear box and rolling element bearing oil samples observed by analytical ferrography. A sudden increase in the size and quantity of these particles indicates excessive wear.	*Lubrication*
Fatigue Ratio	The dimensionless fatigue ratio f is the ratio of the stress required to cause failure after a specific number of cycles to the yield stress of a material. Fatigue tests are generally run through 107 or 108 cycles. A high fatigue ratio indicates materials which are more susceptible to crack growth during cyclic loading.	*Metallurgy*
Fatigue Resistance	The ability of a repeatedly deformed material to resist crystallization and accompanying failure.	*Electrical*
Fatigue strength	the maximum stress that can be sustained for a specified number of cycles without failure, the stress being completely reversed within each cycle unless otherwise stated	*Materials Process*
Fatigue strength (endurance limit)	Lower limit of the applied stress at which a ferrous alloy will fail by cyclic loading.	*Material Process*
Fatigue Study	efforts to measure the cause and the extent of fatigue and its effect on workers.	*Industrial Relations*
Fatigue Wear	Wear of a solid surface caused by fracture arising from material fatigue.	*Paint and Coatings*
Fatigue, corrosion	The weakening of a piece of metal or pipe due to corrosion.	*Chemical Engineering*
Fatigued	A structural failure of the filter medium due to flexing caused by cyclic differential pressure.	*Lubrication*
fatty acid	A chain of 8 to 30 linked carbons that terminate with a carboxylic acid.	*Agriculture*
Fault	A defect or imperfection. A fault develops when physical degradation has occurred, but the degradation is not severe enough to be termed as failure. A fault is absolute. This means there is a sufficiently high degree of confidence that a detailed physical examination of the component in question will show a fault that is absolutely supported by the symptom(s).	*Maintenance*
Fault Blanking	A function that ignores a fault for a predetermined period. This is done to eliminate nuisance fault indication.	*Electrical Engineering*
Fault casing	Alongside a fault there is often observed a layer of hardened clay or powder formed by the grinding of the edges of rocks in contact. This layer often exhibits grooving and striae due to rock movement along the line of dislocation.	*Mining*
Fault Current	The maximum electrical current that will flow in a short-circuited system prior to the actuation of any current-limiting device. It is far in excess of normal current flow and is limited only by a system's generating capacity and a cable's impedance.	*Electrical*
Fault ride-through (FRT)	Refers to the ability of an electrical device (such as a wind turbine converter) to respond to a temporary fault or voltage change in the transmission and distribution grid, including a zero-voltage dip, and to help the system return to normal operation. Fault ride-through specifications are part of many grid code requirements.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fault Tolerant	Fault tolerant architecture allows the system to continue working even when part of the system fails. This is usually done by having multiple components running in parallel; when one part fails the redundant devices can take over, allowing engineers to repair the system without disrupting the process.	*Control Engineering*
Fault Trap	A structural trap in the earth, favorable for the retention of petroleum, formed by the cracking and breaking of a rock plane.	*Petroleum Drilling*
Fault tree	The sequence of events that leads to a hazardous incident, logic tree.	*Material Process*
Fault Tree Analysis	Fault Tree Analysis This is a systematic deductive process used to obtain the probability and rate of a failure using the concept of cause-effect relationships. It usually begins with a top-event which is postulated, and the possible ways for this event to occur are systematically deduced	*Reliability Engineering*
Fault Tree Analysis (FTA)	Fault tree analysis is a deductive process by means of which an undesirable event, called the top-event, is postulated, and the possible ways for this event to occur are systematically deduced	*Maintenance*
Fault zone	A fault, instead of being a single clean fracture, may be a zone hundreds or thousands of feet wide. The fault zone consists of numerous interlacing small faults or a confused zone of gouge, breccia, or mylonite.	*Mining*
Fault	A slip-surface between two portions of the earth's surface that have moved relative to each other. A fault is a failure surface and is evidence of severe earth stresses.	*Mining*
Fault-closing device	A system of circuit breakers that serves to contain a fault in a grid, preventing it from spreading to other areas and causing widespread disruption.	*Electrical*
Favoritism	action by the employer or supervisor which is based on considerations other than fairness or equity to all employees involved.	*Industrial Relations*
Faying surfaces	the surface of a piece of metal (or a member) in contact with another to which it is or is to be joined	*Materials Process*
FBC	fuel borne catalyst	*Petro-Chemical Abbreviations*
fbm	Feet board measure (board feet)	*General*
FBP	final boiling point	*Petro-Chemical Abbreviations*
FBR	Fast Breeder Reactor	*Energy*
FBRU	fuel boiling range unleaded gasoline	*Petro-Chemical Abbreviations*
FCC	fluid catalytic cracker	*Petro-Chemical Abbreviations*
FCF	fuel correction factor	*Petro-Chemical Abbreviations*
FCU	Field Control Unit.	*Control Engineering*
FDA	Food and Drug Administration	*Quality*
FDA-cleared or approved test system	A test system cleared or approved by the Food and Drug Administration through the pre-market notification (510k) or pre-market approval (PMA) process for in-vitro diagnostic use.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
FDD controller	abbreviation for our patented Fuzzy Logic Drilling Direction controller.	*Petroleum Drilling*
FDDI	A Fiber Distributed Data Interface is a type of LAN.	*Control Engineering*
FDS Data.MDB	the Microsoft Access database file, in which the FDS user's well data is stored.	*Petroleum Drilling*
FDS	abbreviation for Friendly Drilling Software.	*Petroleum Drilling*
FDS.MDE	the run-time file for the daily drilling report software called Friendly Drilling Software. To run FDS, double-click this file (or a Windows Shortcut thereto), or open it from within Microsoft Access. You may download and use FDS for FREE by clicking here.	*Petroleum Drilling*
FE	fuel economy	*Petro-Chemical Abbreviations*
FEA – Finite Element Analysis	A state of the art method of analyzing complex shapes by organizing the shapes into a series of smaller elements which can be more accurately analyzed to determine whether or not components are suitable for their intended purpose.	*Mechanical*
Feasibility Factor	A factor used to adjust potential energy savings to account for cases where it is impractical to install new equipment. For example, certain types of fluorescent lighting require room temperature conditions. They are not feasible for outdoor or unheated space applications. Some commercial applications, such as color-coded warehouses, require good color rendition, so color distortions could also make certain types of lighting infeasible. The feasibility factor equals 100 percent minus the percent of infeasible applications.	*Energy*
Featherbedding	practices on the part of some unions to make work for their members through the limitation or production.	*Industrial Relations*
Federal coal lease	A lease granted to a mining company to produce coal from land owned and administered by the Federal Government in exchange for royalties and other revenues.	*Energy*
Federal Contracts And Grants	Extramural agreements that fund selected campus activities, and prime contracts governing National Laboratory operations.	*Procurement*
Federal electric utility	A utility that is either owned or financed by the Federal Government.	*Energy*
Federal Emergency Relief Administration	an independent agency of the federal government established in May 1933 to coordinate and subsidize relief programs to the states.	*Industrial Relations*
Federal Employment Stabilization Board	a board set up under the Federal Employment Stabilization Act of 1931.	*Industrial Relations*
Federal Energy Regulatory Commission (FERC)	The regulatory agency, in the U.S. Department of Energy, that has jurisdiction over interstate electricity sales, wholesale rates, licensing, etc.	*Energy*
Federal Labor Unions	local unions which were affiliated with and chartered directly by the American Federation of Labor.	*Industrial Relations*
Federal Mediation and Conciliation Services	an independent agency created under Title II of the Taft-Hartley Act.	*Industrial Relations*
Federal Power Act	An act that includes the regulation of interstate transmission of electrical energy and rates. This act is administered by the Federal Energy Regulatory Commission.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Federal Power Commission (FPC)	The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.	*Energy*
Federal region	In a Presidential directive issued in 1969, various Federal agencies (among them the currently designated Department of Health and Human Services, the Department of Labor, the Office of Economic Opportunity, and the Small Business Administration) were instructed to adopt a uniform field system of 10 geographic regions with common boundaries and headquarters cities. The action was taken to correct the evolution of fragmented Federal field organization structures that each agency or component created independently, usually with little reference to other agencies' arrangements. Most Federal domestic agencies or their components have completed realignments and relocations to conform to the Standard Federal Administration Regions (SFARs).	*Energy*
Federal Security Agency	an independent government agency created in 1939 under the President's first reorganization plan.	*Industrial Relations*
Federal Works Program	a program authorized by Congress in the early 1930's which had as a major objective employment for those idle and without finds who were receiving relief.	*Industrial Relations*
Federal-State Jurisdiction	the division of jurisdiction over labor-management relations between the Federal and state governments.	*Industrial Relations*
Federation	a league or alliance of national and international unions designed to provide mutual assistance on the federal level.	*Industrial Relations*
Federation of Organized Trades and Labor Unions	an organization formed in 1881 by skilled craftsmen in many trades who felt that it was important to protect the special needs of skilled workers.	*Industrial Relations*
Fee	to load the coal into tubs. So, Feer, the man who 'fees' or loads the coal into the tubs. (Mids.)	*Mining*
Fee interest	The absolute, legal possession and ownership of land, property, or rights, including mineral rights. A fee interest can be sold (in its entirety or in part) or passed on to heirs or successors.	*Energy*
Feed	a mixture or preparation used for feeding livestock	*Agriculture*
Feed grains	Grain grown to be fed to animals. Examples include corn, and sorghum. Most barley is grown for this purpose. But barley also is grown to make malt or beer, in which case it is classified as a small grain.	*Agriculture*
Feed Lots	a small area where cattle are confined and fed carefully mixed, high-concentrate feed to fatten them	*Agriculture*
Feed temperature	The feed temperature is the temperature of the heating water when it leaves the boiler.	*Thermal Management*
Feedability	The ease with which a grease flows within a dispensing pump.	*Lubrication*
Feedback	The output from a position sensor indicating the position, or state, of the valve.	*General Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Feedback (or feedback signal)	The output signal from a feedback element.	*Mechanical, Process, and Operations*
Feedback Control	A type of control whereby the controller receives a feedback signal representing the condition of the controlled process variable, compares it to the setpoint, and adjusts the controller output accordingly.	*Electrical Engineering*
Feedback loop	Any closed circuit consisting of one or more forward elements and one or more feedback elements.	*Mechanical, Process, and Operations*
Feedback Management Advisory Group (FMAG) (formerly Criticism Management Advisory Group (CMAG))	Formerly an advisory group to the CCSG. FMAG's remit was to advise on policies and procedures for managing comments and criticisms of Cochrane Reviews. Responsibilities now part of the remit of the CEU. Also called: CMAG, Criticism Management Advisory Group, FMAG	*Quality Engineering*
Feedback Signal	The return signal that results from a measurement of the directly controlled variable. An example would be where a control valve is equipped with a positioner. The return signal is usually a mechanical indication of valve plug stem position which is fed back into the positioner.	*Industrial Engineering*
Feeder	Overhead lines or cables that are used to distribute electrical power to consumers. Feeders connect distribution substations and consumers.	*Electrical*
Feeder cattle	cattle, ready to be finished for market, weighing 550-650 pounds or heavier	*Agriculture*
Feeder line	An electrical line that extends radially from a distribution substation to supply electrical energy within an electric area or sub-area.	*Energy*
Feeder Lockout	This happens when a main circuit is interrupted at the substation by automatic protective devices and cannot be restored until crews investigate. This indicates a serious problem on the circuit, usually equipment failure or a broken conductor.	*Energy*
Feeder	A small vein joining a larger one.	*Mining*
Feedforward Control	A type of control which takes corrective action based on disturbances before the process variable is upset.	*Electrical Engineering*
Feedstock	A term that refers to crude oil, natural gas liquids, natural gas or other materials used as raw ingredients for making gasoline, other refined products or chemicals.	*Electrical*
Feedstock	Stock from which material is taken to be fed (charged) into a processing unit.	*Petroleum Engineering*
Feedwater	Feedwater maintains water levels in the boiler. Feedwater consists of varying proportion of recovered condensed water (return water) and fresh water, which has been purified in varying degrees (make up water). The make-up water is usually natural water either in its raw state, or treated by some process before use. Feed-water composition therefore depends on the quality of the make-up water and the amount of condensate returned to the boiler. See also Raw Water	*Industrial*
Fees	pay or fixed charges for specific services to be performed.	*Industrial Relations*
Feigh	refuse, rubble or rubbish. (Derbys.), (N. East).	*Mining*
FEL	family emission limit	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Feldspar	A group of common rock-forming minerals that includes microcline, orthoclase, plagioclase and others.	*Mining*
Fellow Servant Doctrine	the principle or doctrine in common law which held that the employer could not be held responsible for accidents suffered by a worker resulting from the negligence of the worker.	*Industrial Relations*
Felsic	Term used to describe light-colored rocks containing feldspar, feldspathoids and silica.	*Mining*
Female thread	An internal screw thread designed to mate with a component having male (external) threads of the same size and type.	*Mechanical*
Femto Base Station	A femto base station (also called an Access Point Base Station, femtocell, femto base station or femto basestation) is an in-home base station. Like a standard base station, it connects cell phone voice and data to the cell phone network, but it serves a smaller area (the home). A femto base station benefits the service provider because it offloads cell tower traffic. Subscribers benefit from superior signal strength, due to the proximity of the unit -- especially where a cellular signal is weak or not available. Femto base stations augment the normal network and replicates the usual telecommunications infrastructure. Connection to the cell phone network is provided by VoIP over the Internet.	*Electrical Engineering*
Fence gates	vertically acting security 'curtain' at both ends of the cage for the safety of the men during man-riding.	*Mining*
Fender	a very narrow pillar of coal left between adjacent workings.	*Mining*
FERC	Federal Energy Regulatory Commission	*Petro-Chemical Abbreviations*
FERC guidelines	A compilation of the Federal Energy Regulatory Commission's enabling statutes; procedural and program regulations; and orders, opinions, and decisions.	*Energy*
Fermi function	temperature dependent function that indicates the extent to which a given electron energy level is filled.	*Material Process*
Fermi level	Energy of an electron in the highest filled state in the valence energy band at 0 K.	*Material Process*
Ferrimagnetism Phenomenon	Phenomenon of sharp rise in induction with applied magnetic field strength. Ferromagnetic like behavior that includes some antiparallel spin pairing.	*Material Process*
Ferrimagnetism Phenomenon of sharp	Ferrimagnetism Phenomenon of sharp rise in induction with applied magnetic field strength. Ferromagnetic like behavior that includes some antiparallel spin pairing.	*Material Process*
Ferrite	Ferrous alloy based on the structure of pure iron at room temperature. Also, ferrimagentic ceramic based on the inverse spinel structure.	*Material Process*
Ferritic stainless steel	Corrosion resistant ferrous alloy with a predominant body centered cubic (a) phase.	*Material Process*
Ferroalloy	A metal product commonly used as a raw material feed in steelmaking, usually containing iron and other metals to aid various stages of the steelmaking process such as deoxidation, desulfurization and adding strength. Examples: ferrochrome, ferromanganese and ferrosilicon.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ferrobacillus	A type of iron-reducing bacteria.	*Chemical Engineering*
Ferroelectric	Material that exhibits spontaneous polarization under an applied electrical field.	*Material Process*
Ferrography	Magnetic particle analysis.	*Lubrication*
Ferrography	An analytical method of assessing machine health by quantifying and examining ferrous wear particles suspended in the lubricant or hydraulic fluid.	*Lubrication*
Ferromagnetism	Permanent and large magnetizations found in some metals (e.g., Fe, Ni, and Co), which result from the parallel alignments of neighboring magnetic moments.	*Engineering Physics*
Ferrous	Containing iron.	*Mining*
Ferrous alloy	Metal alloy composed of predominantly iron.	*Material Process*
Ferrous metals	metals containing iron	*Materials Process*
Ferrule	A compressible tubular fitting that is compressed onto a probe inside a compression fitting to form a gas-tight seal.	*General Engineering*
Fertile material	Material that is not itself fissionable by thermal neutrons but can be converted to fissile material by irradiation. The two principal fertile materials are uranium-238 andthorium-232.	*Energy*
Fertilizer	Substance that adds inorganic or organic plant nutrients to soil and improves its ability to grow crops, trees, or other vegetation.	*Chemical*
Fertilizer	organic or inorganic nutrients that are added to the soil to help the growth of crops	*Agriculture*
Fetch	the face of an unworked area of coal also called a breast. (Scot.).	*Mining*
Fettle	to put in order, clean or prepare. (Yorks.).	*Mining*
FF	Fieldbus Foundation.	*Control Engineering*
FFI	Pronounced "Fifi", But Has Nothing To Do With A French Maid. See Failure Finding Interval	*Plant Engineering*
FFT or Fast Fourier Transform	A popular computer method of shifting data from the time domain to the frequency domain.	*Reliability Engineering*
FFV	flexible fueled vehicle	*Petro-Chemical Abbreviations*
FFV, Flex Fuel Vehicle	A vehicle capable of running on a multiplicity of gasoline based fuels ranging from 100% gasoline to E85.	*Mechanical, Process, and Operations*
FGD	Flue-Gas Desulfurization	*Energy*
FGIS	Federal Grain Inspection Service.	*Agriculture*
Fiber	Any material that has been drawn into a cylinder with a length-to-diameter ratio greater than about ten.	*Engineering Physics*
FIBER	For the purpose of microscopic particle counting a fiber is a particle whose length is greater than 100 micrometers but at least ten times greater than its width.	*Mechanical, Process, and Operations*
Fiber Center	Cord or rope of vegetable or synthetic fiber used as the axial member of a strand.	*Wire Rope & Cable*
Fiber Core	Cord or rope of vegetable or synthetic fiber used as the axial member of a rope.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	Industry
Fiber Distributed Data Interface	A standard for transmitting data on optical fiber cables at a rate of around 100,000,000 bits-per-second (10 times as fast as 10 Base-T Ethernet; about twice as fast as T-3).	*Electrical Engineering*
Fiber Distributed Data Interface	A standard for transmitting data on optical fiber cables at a rate of around 100,000,000 bits-per-second (10 times as fast as 10 Base-T Ethernet; about twice as fast as T-3).	*Electrical Engineering*
Fiber Grease	A grease with a distinctly fibrous structure, which is noticeable when portions of the grease are pulled apart.	*Lubrication*
Fiber Optics	The transparent fibers of glass or plastic used for conducting and guiding light energy. Fiber optics are used in photoelectrics as light pipes consisting of a bundle of small optical fibers (glass) or single strand (plastic) housed inside a flexible sheathing.	*Electrical Engineering*
Fiber reinforced composite	a composite in which the one material forms the outer matrix forms the outer matrix and transfers any loads applied to the stronger, more brittle fibers	*Physics*
Fiberglass	Composite system composed of a polymeric matrix reinforced with glass fibers.	*Material Process*
Fiber-to-the-home	A method for broadband data (voice, Internet, multimedia, etc.) delivery to the home via optical fiber. Contrast with FTTN (fiber-to-the-node) which uses fiber up to a node outside the home and uses copper to bring the data into the home.	*Electrical Engineering*
Fibonacci series	Mathematical series in which term is the sum of the two previous terms. the limiting value of the ratio of two consecutive terms is the golden ratio (1.618).	*Material Process*
Fibre Channel	A highly-reliable, gigabit interconnect technology that allows concurrent communications among workstations, mainframes, servers, data storage systems, and other peripherals using SCSI and IP protocols. It provides interconnect systems for multiple topologies that can scale to a total system bandwidth on the order of a terabit per second. (The standardized spelling is "fibre channel" but often misspelled as "fiber channel.")	*Electrical Engineering*
Fibril	A tiny fiber barely visible even with an electron microscope. Fibers may be formed by bundles of fibrils that collect together.	*Lubrication*
Fibrous Filler	A material used to fill interstices in cables made from fibers, such as jute, polypropylene, cotton, glass, etc.	*Electrical*
Fick's first and second laws	The basic mathematical description of diffusional flow.	*Material Process*
Fick's law	The first law relates the concentration gradients to the diffusive flux of a solute infinitely diluted in a solvent. The second law introduces the first law into a differential material balance for the solute.	*Chemical*
Fick's First Law	an equation describing the rate at which a gas transfers into solution. The change in concentration of gas in solution is proportional to the product of an overall mass transfer coefficient and the concentration gradient.	*Chemical*
Fick's Second Law	an equation relating the change of concentration with time due to diffusion to the change in concentration gradient with distance from the source of concentration.	*Chemical*
Fieg	a type of slip fault running across the roof above the coal. Although not a major fault, which did not disturb the coal seam, it was often the source of a feeder, bringing surface water into the mine (S. Wales.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Field	An area consisting of a single reservoir or multiple reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. There maybe two or more reservoirs in a field that are separated vertically by intervening impervious strata or laterally by local geologic barriers, or by both.	*Energy*
Field	Fields (which can also be called Networks) are Cochrane entities that focus on dimensions of health care other than health problems, such as the setting of care (e.g. primary care), the type of consumer (e.g. older people), the type of provider (e.g. nursing), the type of intervention (e.g. complementary medicine), or a broad area of health care (e.g. cancer). Among their tasks, people working in Fields handsearch specialist journals, help to ensure that priorities and perspectives in their field of interest are reflected in the work of Cochrane Review Groups, compile specialist databases, co-ordinate activities with relevant agencies outside the Collaboration, and comment on Cochrane Reviews relating to their particular area. Also called: Networks	*Quality Engineering*
Field	A geographical area under which an oil or gas reservoir lies.	*Petroleum Drilling*
Field area	A geographic area encompassing two or more pools that have a common gathering and metering system, the reserves of which are reported as a single unit. This concept applies primarily to the Appalachian region.	*Energy*
Field Balancing Equipment	An assembly of measuring instruments for performing balancing operations on assembled machinery which is not mounted in a balancing machine.	*General Engineering*
Field capacity	the maximum amount of water that a soil can retain after excess water from saturated conditions has been drained by the force of gravity.	*Chemical*
Field crops	Originally defined as any crop grown on a larger scale than in gardens. Modern usage may vary, but generally refers to small grains, hay and cotton.	*Agriculture*
Field discovery year	The calendar year in which a field was first recognized as containing economically recoverable accumulations of oil and/or gas.	*Energy*
Field effect transistor	Solid state amplifier.	*Material Process*
Field of View	A volume in space defined by an angular cone extending from the focal plane of an instrument.	*General Engineering*
Field production	Represents crude oil production on leases, including lease condensate. Excludes plant condensate and other processed liquids. **Note: In some EIA publications, field production includes NGPL production, in accordance with definitions used prior to January 2014.**	*Energy*
Field Programmable Gate Array	A family of general-purpose logic devices that can be configured by the end user to perform many, different, complex logic functions. It is often used for prototyping logic hardware.	*Electrical Engineering*
Field Programmable Gate Array	A family of general-purpose logic devices that can be configured by the end user to perform many, different, complex logic functions. It is often used for prototyping logic hardware.	*Electrical Engineering*
Field separation facility	A surface installation designed to recover lease condensate from a produced natural gas stream usually originating from more than one lease and managed by the operator of one or more of these leases.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Field serviceable	A statement indicating that normal repair of the valve or replacement of operating parts can be accomplished in the field without return to the manufacturer.	*Mechanical*
Fieldbus	Fieldbus is a generic term used to describe a common communications protocol for control systems and/or field instruments. Although some standard forms have been agreed for instruments, the DCS industry as a whole have so far no agreed fieldbus. Often, the Foundation Fieldbus is referred to simply as the Fieldbus.	*Control Engineering*
Fiery mine	a colliery in which a seam or several seams give off large amounts of methane and were prone to explosions, also, 'Fiery seam', an individual seam within a mine, which gives off large amounts of methane	*Mining*
Fiery seam	Fiery seam, -see Fiery Mine.	*Mining*
Fifth Wheel	Provides a connection (flexible) between the tractor and the trailer. Pivot mounted, it contains provision for accepting and holding the kingpin of a trailer, Center of the fifth wheel should always be located ahead of the centerline of the rear axle.	*Mechanical Engineering*
Figure 1502	A hammer union model number typically 15,000 psi rated (but down rated (or H2S service).	*Petroleum Engineering*
Figure 2202	A hammer union model number typically 20,000 psi rated (but down rated (or H2S service)	*Petroleum Engineering*
Figure 602	A hammer union model number 6,000 psi rated. Held in stock by	*Petroleum Engineering*
Filamentous bacteria	Bacteria with a long, threadlike shape.	*Chemical Engineering*
File	A set of related records or data treated as a unit.	*General Engineering*
File rate schedule	The rate for a particular electric service, including attendant contract terms and conditions, accepted for filing by a regulatory body with appropriate oversight authority.	*Energy*
Filing	Any written application, complaint, declaration, petition, protest, answer, motion, brief, exception, rate schedule, or other pleading, amendment to a pleading, document, or similar paper that is submitted to a utility commission.	*Energy*
Filing Requirements	provisions of the Labor-Management Reporting and Disclosure Act requiring labor unions to file reports containing financial information with the Department of Labor.	*Industrial Relations*
Fill	Any material that is put back in place of the extracted ore to provide ground support.	*Mining*
Fill bars	The assembly of splash bars comprising the tower filling. Fill bars intercept the downward fall of water at regular intervals, forming splash surfaces which cause water drops to break into smaller droplets, and provide wetted surfaces for air-water contact.	*Facility Engineering*
Fill hanger	Support system in a crossflow tower for fill bars which hold fill in place.	*Facility Engineering*
Fill or Filling	hand loading with a shovel.	*Mining*
Fill support	(See Deck Support).	*Facility Engineering*
Fill-deck	The assembly of splash bars comprising the tower filling. (See Fill Bars for description of operation in a crossflow tower.)	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Filler	An inert foreign substance added to a matrix to improve or modify its properties.	*Engineering Physics*
Filler	Any material used in multiconductor cables to occupy interstices between insulated conductors or form a core into a desired shape (usually circular). Also, any substance, often inert, added to a plastic or elastomer to improve its properties or decrease its cost.	*Electrical*
Filler Metal	Filler Metal. Metal to be added in welding, soldering, brazing, or braze welding.	*Maintenance and Repair*
Filler ring	A ring which fills the recess of a "V" or "U" type seal.	*Mechanical, Process, and Operations*
Filler specks	Visible specks of a filler used, such as wood flour or asbestos, which stand out in color contrast against a background of plastics binder. It should be stated whether the specks are visible before or only after removal of the surface film.	*Material Process*
Filler Wire	Small spacer wires within a strand which help position and support other wires. Also the name for the type of strand pattern utilizing filler wires.	*Wire Rope & Cable*
Fillet	A rounded inside corner. The rounding of an outside corner is called beveling.	*Material Process*
Fillet Weld	A weld of an approximately triangular cross section joining two surfaces approximately at right angles to each other in a lap joint, tee joint, corner joint, or socket weld.	*Maintenance and Repair*
Fillet Curve	The concave portion of the tooth profile where it joins the bottom of the tooth space. The approximate radius of this curve is called the Fillet Radius.	*Mechanical Engineering*
Fillet Stress	The maximum tensile stress in the gear tooth fillet.	*Mechanical Engineering*
Filling	That part of a crossflow, counterflow, or natural draft tower consisting of splash bars, vertical sheets of various configurations, or honeycomb assemblies, tile or other materials, which are placed within the tower to effect heat and mass transfer between the circulating water and the air flowing through the tower.	*Facility Engineering*
Filling shift	the shift on which coal is loaded on the face (into either pans, tubs or onto a conveyor).	*Mining*
Filling Solution	A solution of defined composition to make contact between an internal element and a membrane or sample. The solution sealed inside a pH glass bulb is called an internal filling solution. This solution normally contains a buffered chloride solution to provide a stable potential and a designated zero potential point. The solution which surrounds the reference electrode internal and periodically requires replenishing is called the reference filling solution. It provides contact between the reference electrode internal and sample through a junction.	*General Engineering*
Film	In the plywood industry, this term refers to a dry sheet of paper coated on both sides with a resin such as phenol formaldehyde. A well known example is the proprietary product Tego. Film also refers to a thin sheet of plastic.	*Material Process*
Film	Thin, plastic sheeting having nominal thickness usually not greater than 0.010 inch.	*Electrical*
Film Strength	The ability of a lubricant film to withstand the effects of load, speed, and temperature without breaking down or rupturing.	*Lubrication*
Film Strength	Property of a lubricant that acts to prevent scuffing or scoring of metal parts.	*Lubrication*
Filter	See Strainer	*Industrial*

Term	Definition	*Industry*
Filter bed	A pond or tank having a false bottom covered with sand and serving to filter river or pond waters.	*Civil Engineering*
Filter Cake	Debris collected on the surface of the filter.	*Filtration*
Filter Efficiency	Method of expressing a filter's ability to trap and retain contaminants of a given size.	*Oil Analysis*
Filter Efficiency	The amount of removal of particles, at or above a certain diameter, from the fluid by the filter. Efficiency is generally measured in terms of the percentage removal of the particles by weight, and therefore does not reveal the number of particles which may pass through the filter. Efficiency % = (b – 1)/ b x 100. Submicron filters are often rated using titer reduction values. For filters that remove microbes from a fluid, efficiency is often stated as titer reduction. Titer reduction is calculated by the following equation: TR = Total number of CFU influent to the filter, Total number of CFU effluent to the filter where TR is Titer Reduction, CFU is Colony Forming Unit. For compactness, these ratings are often stated as powers of 10, or as logs. If a filter removes 999,999 out of 1,000,000 Brevundimonas diminuta, that filter has a TR value of 106, or a six-log reduction.	*Contamination Control*
Filter head	An end closure for the filter case or bowl that contains one or more ports.	*Oil Analysis*
Filter housing	A ported enclosure that directs the flow of fluid through the filter element.	*Oil Analysis*
Filter Life	A measure of how long a filter will last before replacement or cleaning. It can be stated either in terms of time (30 days between changes) or volume of fluid filtered (10,000 liters processed between filter changes). A filter's actual life will depend on what particulates and conditions it is exposed to in actual usage, so filter life ratings from lab testing with standard contaminants can be used for comparison, but do not necessarily predict actual service life. To predict actual life, testing with the actual application fluids under actual operating conditions is required.	*Contamination Control*
Filter life test	A type of filter capacity test in which a clogging contaminant is added to the influent of a filter, under specified test conditions, to produce a given rise in pressure drop across the filter or until a specified reduction of flow is reached. Filter life may be expressed as test time required to reach terminal conditions at a specified contaminant addition rate.	*Oil Analysis*
Filter media, surface	Porous materials which primarily retain contaminants on the influent face, performing the actual process of filtration.	*Oil Analysis*
Filter Pack	Sand or gravel that is smooth, uniform, clean, well-rounded and siliceous. It is placed in the annulus of the well between the borehole wall and the well screen to prevent formation material from entering the screen.	*Petroleum Engineering*
Filter press	This is used to filter out impurities out of gold.	*Mining*
Filter Regulator	See airset.	*Industrial Engineering*
Filterable solids	The solids retained on a membrane for analysis by weight, count, or observation as it applies to the section on contamination measurement.	*Mechanical, Process, and Operations*
Filtered Water/Permeate/ Filtrate	The treated or clean water produced by membrane filtration.	*Contamination Control*
Filtration	The physical or mechanical process of separating insoluble particulate matter from a fluid, such as air or liquid, by passing the fluid through a filter medium that will not allow the particulates to pass through it.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Filtration (Beta) ratio	The ratio of the number of particles greater than a given size in the influent fluid to the number of particles greater than the same size in the effluent fluid.	*Oil Analysis*
Filtration Degree	The size of the pores in the filtration medium.	*Filtration*
Filty, Filtry or Filthy	all terms used in Somerset for firedamp or an accumulation of gas.	*Mining*
Fin	Ridge or line left on plastics by the mold parts where they meet in the closing of the mold. Also, known as flash.	*Material Process*
Final Control Element	That component of a control system (such as a valve) which directly changes the manipulated variable.	*Electrical Engineering*
Final order	A final ruling by FERC that terminates an action, decides some matter litigated by the petitioning parties, operates to some right, or completely disposes of the subject matter.	*Energy*
Finances	management of money affairs	*Agriculture*
Financial Accounting Standards Board (FASB)	An independent board responsible, since 1973, for establishing generally accepted accounting principles. Its official pronouncements are called "Statements of Financial Accounting Standards" and "Interpretations of Financial Accounting Standards."	*Energy*
Financial Attributes	Financial attributes measure the financial health of the company. Utility management, security analysts, investors, and regulators use these attributes to evaluate a utility's performance against its historic records and industry averages. Key financial attributes include capital requirements, earnings per share of common equity, capitalization ratios, and interest coverage ratios.	*Energy*
Fine gold	Almost pure gold. Fineness is the proportion of pure gold or silver in jewelry or bullion expressed in parts per thousand. Thus, 925 fine gold indicates 925 parts out of 1,000, or 92.5%, is pure gold.	*Mining*
Fines	The portion of a powder composed of particles which are smaller than the specified size	*Paint and Coatings*
Fines or Coal fines	very fine coal material below 500 μm.	*Mining*
Finished leaded gasoline	Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.	*Energy*
Finished motor gasoline	Finished motor gasoline: See Motor gasoline (finished).	*Energy*
Finished-Goods Turn Rate	A measure of asset management that typically is calculated by dividing the value of total annual shipments at plant cost (for the most recent full year) by the average finished-goods inventory value. Plant cost includes material, labor, and plant overhead.	*Maintenance*
Finished-Product First-Pass Yield	The percent of finished-products that meet all quality-related specifications at a final test point. In process industries, yield is often calculated as the percentage of output that meets target-grade specifications (excluding saleable "off-grade" product).	*Maintenance*
Finish-Go-Home Basis of Pay	a method of wage payment which guarantees pay for the day upon completion of the task assigned for the period.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Finishing	final stages of inspection and preparing galvanized steel so that it complies with specification(s)	*Materials Process*
Finite capacity scheduling	Software-based systems that enable simulation of production scheduling (and determination of delivery dates) based on actual unit/hour capacity at each step in the production routing. Finite scheduling systems, running on desktop computers, often compensate for the "infinite capacity" assumptions built into capacity-planning modules in traditional MRP II systems.	*Quality*
Finite element analysis (FEA)	A mathematical method for analyzing stress. FEA is used in product-design software to conduct graphical on-screen analysis of a model's reactions under various load conditions.	*Quality*
Finite element modeling or finite element analysis or FEA	A computer-aided design technique for predicting the dynamic behavior of a possible future mechanical system.	*Reliability Engineering*
Fink	a professional strike-breaker.	*Industrial Relations*
Finned-Tube	Pipe or tube with longitudinal fins equally spaced in array along its length, usually used for thermal heat processes or Heat Exchange. See also Fins	*Industrial*
Fins	Specially shaped fins used in array along the length of a Heat Exchanger or tube, useful in the distribution of heat from the surface of the exchange device. Fins may be welded on, or extruded with the tube. See also Finned-Tube	*Industrial*
FIP	Federal Implementation Plan	*Petro-Chemical Abbreviations*
Fire bank	a waste tip that is on fire due to spontaneous combustion. (Mids.).	*Mining*
Fire basket	Fire basket, -see Fire lamp.	*Mining*
Fire beater	the man who attended the boilers on the pit top. Before the introduction of mechanical feeders when the boilers were stoked by hand the fire beater paid a high price in toil and sweat to keep up a head of steam to run the winding engine. He was only allowed the dirty, low-grade coal from the mine and spent a great deal of time keeping the fire clear of ash and clinker.	*Mining*
Fire damp	The combustible gas, methane, CH4. Also, the explosive methane-air mixtures with between 5% and 15% methane. A combustible gas formed in mines by decomposition of coal or other carbonaceous matter, and that consists chiefly of methane.	*Mining*
Fire gate	A gate or ball valve which is positioned in a pipeline at the entrance to a compressor station. This valve is closed in case of fire in the compressor station. Closing the valve prevents the gas in the pipeline from feeding the fire.	*Mechanical*
Fire Hazard	Situation in which a material of more than average combustibility or explodability exists in the presence of a potential ignition source.5	*Maintenance and Repair*
Fire hydrant	A hydrant for use in extinguishing fires. Also called "fireplug."	*Civil Engineering*
Fire lamp	a round iron cage supported on three legs, or hung by chains, in which a coal fire is maintained for the convenience of the banksmen or others. Also sometimes placed at the bottom of a shaft to produce ventilation in opening out a colliery and this was also known as a 'fire basket'. Fireman, - see Deputy.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fire Point	The temperature at which the fluid will sustain a fire if ignited by an outside ignition source. It is quite common for heat transfer systems to be operated at temperatures above the fire point of the fluid as ignition sources should always be far removed from any heat transfer system.	*Lubrication*
Fire point (Clevelend Open Cup)	The temperature to which a combustible liquid must be heated so that the released vapor will burn continuously when ignited under specified conditions.	*Oil Analysis*
Fire Resistant Fluid	A fluid difficult to ignite which shows little tendency to propagate flame.	*Lubrication*
Fire rib	a solid rib or wall of coal left unworked between the sides of work as a protection against gob fires (S. Staffs.).	*Mining*
Fire safe	A valve design that is capable of passing a fire test with specified limits on leakage to the atmosphere and downstream after being closed subsequent to fire exposure.	*General Mechanical*
Fire stink	the burning smell of spontaneous combustion, also called 'fire stythe'—see also 'Gob stink'.	*Mining*
Fire stone	another word for 'fireclay' (Som.).	*Mining*
Firebreak	Any nonflammable barrier such as mineral soil or slow-burning vegetation used to slow or stop the spread of fire.	*Forestry*
Fireclay or underclay	clay, often occurring beneath a coal and often containing rootlets. Some are suitable for brick making or for refractories.	*Mining*
Fired ceramic	Ceramic material after processing at a sufficiently high temperature to drive off any volatiles and to allow necessary strengthening mechanism, such as sintering.	*Material Process*
Firedamp	methane (CH4); or a mixture of methane gas and air.	*Mining*
Firepan	Firepan—see Furnace	*Mining*
Fire-resistant Fluid	Lubricant used especially in high-temperature or hazardous hydraulic applications. Three common types of fire-resistant fluids are: (1) water-petroleum oil emulsions, in which the water prevents burning of the petroleum constituent; (2) water-glycol fluids; and (3) non-aqueous fluids of low volatility, such as phosphate esters, silicones, and halogenated hydrocarbon-type fluids.	*Lubrication*
Firewall	A double wall between cells used to isolate a fire portion system and designed according to NFPA 214.	*Facility Engineering*
Firing	A high-temperature heat treatment that increases the density and strength of a ceramic piece.	*Engineering Physics*
Firing	The processing of a ceramic by heating raw materials to a high temperature, typically above 1000 °C (1832°F).	*Material Process*
Firing line	an early method of clearing firedamp. A prop with a metal ring nailed near the top would be set where the gas has accumulated. A cord or wire was passed through the ring and brought back to a safe distance. An oil lamp would be fastened to the cord and slowly drawn along towards the prop until it came into contact with the firedamp and exploded it	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Firm	An association, company, corporation, estate, individual, joint venture, partnership, sole proprietorship, or any other entity, however organized, including: (a) charitable or educational institutions; (b) the Federal Government, including corporations, departments, federal agencies and other instrumentalities; and (c) state and local governments.	*Energy*
Firm Energy	Power or power-producing capacity covered by a commitment to be available at all times during the period.	*Energy*
Firm power	Power or power-producing capacity, intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.	*Energy*
Firm Transmission Service	Service that is reserved for at least one year.	*Energy*
Firmware	Programs stored in PROMs.	*Electronic Process*
First International	an organization of working men of international scope which grew out of the efforts of Marx and Engels to organize workers in the 1840's.	*Industrial Relations*
First order vibration	Rotating machine vibration caused by shaft unbalance. Frequency in hertz (Hz) is calculated by shaft RPM/60. Also called 1x vibration. Additional orders, 2x, 3x .... 36x, etc. are caused by other mechanisms	*Reliability Engineering*
First purchase (of crude oil)	An equity (not custody) transaction commonly associated with the transfer of ownership of crude oil coupled with the physical removal of the crude oil from a property (lease) for the first time. A first purchase normally occurs at the time and place of ownership transfer where the crude oil volume sold is measured and recorded on a run ticket or other similar physical evidence of purchase. The reported price is the first purchase average cost paid by the purchaser, allowing for any adjustments (deductions or premiums) passed on to the producer or royalty owner.	*Energy*
First purchase price	The price for domestic crude oil reported by the company that owns the crude oil the first time it is removed from the lease boundary.	*Energy*
First purchaser	A firm that acquires ownership of domestic crude oil by a first purchase transaction. Physical custody of the crude oil is not a prerequisite. In the case of multiple owners, only one firm should report to avoid double-counting.	*Energy*
First Read Rate	The ratio of the number of successful reads to the number of attempted first reads.	*Gears*
First Round Increases	wage demands made by unions following the end of WWII designed largely to offset the wage "stabilization" during the war.	*Industrial Relations*
First weighting	the first weight which takes place after a longwall face begins working.	*Mining*
First working	the driving of headings to extract coal and form pillars; or the first extraction in a seam that is worked in more than one layer.	*Mining*
First-In First Out	A type of memory that stores data serially, where the first bit read is the first bit that was stored.	*Electrical Engineering*
First-pass yield	The percentage of finished products that meet all quality-related specifications at a final test point. When calculating yield for components, the percentage that meets all quality-related specifications at a critical test point without being scrapped, rerun or reworked. In process industries, yield often is calculated as the percentage of output that meets target-grade specifications (excluding saleable "off-grade" product).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fiscal year	The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in which it ends; e.g., fiscal year 2002 begins on October 1, 2001 and ends on September 30, 2002	*Energy*
Fish	The remnants of a broken drill string, or any object that has been unintentionally dropped down the wellbore. Fishing is the act of using specialized tools to retrieve a fish.	*Petroleum Drilling*
Fish and Boat Commission	Because of the Marcellus gas drilling impact on waterways, this state department has also emerged as an active regulator of Marcellus shale drilling in Pennsylvania.	*Petroleum Drilling*
Fish eye	Small globular mass in a transparent or translucent plastic which has not disappeared or blended completely into surrounding material, creating somewhat the appearance of a fish's eye.	*Material Process*
Fisher clip	a clip used to attach a tub to a haulage rope incorporating a wedging action in which a collar is knocked down on two tapered arms which carry the rope grip. Fissle or Fistle, the faint crackling noise heard in the early stages of creep. (N. East).	*Mining*
Fisher Matrix	A mathematical expression that is used to determine the variability of estimated parameter values based on the variability of the data used to make the parameter estimates. It is used to determine confidence bounds when using maximum likelihood estimation (MLE) techniques	*Reliability Engineering*
Fishing	Retrieving objects from the borehole, such as a broken drillstring, or tools.	*Petroleum Drilling*
Fishing	Retrieving objects from the borehole, such as a broken drillstring, or tools.	*Petroleum Drilling*
Fissile material	Material that can be caused to undergo atomic fission when bombarded by neutrons. The most important fissionable materials are uranium-235, plutonium-239, and uranium-233.	*Energy*
Fission	The process whereby an atomic nucleus of appropriate type, after capturing a neutron, splits into (generally) two nuclei of lighter elements, with the release of substantial amounts of energy and two or more neutrons.	*Energy*
Fissure	An extensive crack, break or fracture in rocks.	*Mining*
Fissure Vein	A fissure or crack in the earth's crust filled with mineral matter.	*Mining*
Fitness for service	This is an assessment carried out to ascertain the structural integrity of an in-service component/system that contains a defect, damage or degradation. Its objectives include;	*Reliability Engineering*
Fitter	a coal broker who conducts the sales of coals between the owner of a colliery and the shipper. (N. East)	*Mining*
Fitting	Any component, other than valves, used with pipe as part of the pressure system and normally referring to items covered by a national standard.	*General Mechanical*
Fitting, Bushing	A short, externally threaded connector with a smaller size internal thread. FITTING, CLOSURE - A cap or a plug.	*Mechanical, Process, and Operations*
Fitting, Compression	A fitting which seals and grips by manual adjustment deformation.	*Mechanical, Process, and Operations*
Fitting, Connector	A fitting for joining a conductor to a component port or to one or more other conductors.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fitting, Flared	A fitting which seals and grips by a performed flare at the end of the tube. FITTING, FLARELESS - A fitting which seals and grips by some means other than a flare.	*Mechanical, Process, and Operations*
Fitting, Reusable hose	A hose fitting that can be removed from a hose and reused. FILTER (OIL) - A device which removes solids from a fluid.	*Mechanical, Process, and Operations*
Five-Day Workweek	a goal of American Labor during the 1920's which was supported by some employers.	*Industrial Relations*
Fivefold symmetry	Property of a structure that is equivalent 360°/5 rotation. this characteristic of quasi crystals is not consistent with traditional crystallography.	*Material Process*
Five-S (5-S) Concept	The "5-S Concept" was developed by the Japanese over a period of time to ensure a culture of organization within the manufacturing and service environments, which leads to higher quality. The 5 S's, closely translate from Japanese to English as Sort, Simplify, Shine, Standardize, and Sustain.	*Maintenance*
Fix, to	to bribe or use other unscrupulous methods in order to prevent the normal application or operation of the law.	*Industrial Relations*
Fixed asset turnover	A ratio of revenue to fixed assets which is a measure of the productivity and efficiency of property, plant, and equipment in generating revenue. A high turnover reflects positively on the entity's ability to utilize properly its fixed assets in business operations.	*Energy*
Fixed assets	Tangible property used in the operations of an entity, but not expected to be consumed or converted into cash in the ordinary course of events. With a life in excess of one year, not intended for resale to customers, and subject to depreciation (with the exception of land), they are usually referred to as property, plant, and equipment.	*Energy*
Fixed Assets	Possessions such as buildings, machinery and land which, as opposed to current assets, are unlikely to be converted into cash during the normal business cycle.	*Mining*
Fixed carbon	The nonvolatile matter in coal minus the ash. Fixed carbon is the solid residue other than ash obtained by prescribed methods of destructive distillation of a coal. Fixed carbon is the part of the total carbon that remains when coal is heated in a closed vessel until all matter is driven off.	*Energy*
Fixed carbon	The part of the carbon that remains behind when coal is heated in a closed vessel until all of the volatile matter is driven off.	*Mining*
Fixed charge coverage	The ratio of earnings available to pay so-called fixed charges to such fixed charges. Fixed charges include interest on funded debt, including leases, plus the related amortizations of debt discount, premium, and expense. Earnings available for fixed charges may be computed before or after deducting income taxes. Occasionally credits for the "allowance for funds used during construction" are excluded from the earnings figures. The precise procedures followed in calculating fixed charges or interest coverages vary widely.	*Energy*
Fixed connection	In two dimensions, a fixed connection between two members restrains all three degrees of freedom of the connected member with respect to one another. A fixed connection is sometimes called a rigid connection or moment-resisting connection.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fixed Cost	A cost that remains constant, in total, regardless of changes in the level of activity within the relevant range. If a fixed cost is expressed on a per unit basis, it varies inversely with the level of activity.	*Procurement*
Fixed cost (expense)	An expenditure or expense that does not vary with volume level of activity.	*Energy*
Fixed Costs	The annual costs associated with the ownership of property such as depreciation, taxes, insurance, and the cost of capital.	*Energy*
Fixed Displacement Pump	A pump in which the output per cycle cannot be varied.	*Mechanical, Process, and Operations*
Fixed Displacement Pump	A pump in which the displacement per cycle cannot be varied.	*Lubrication*
Fixed Length	Description of a symbology which only allows bar codes of a set number of characters.	*Gears*
Fixed operating costs	Costs other than those associated with capital investment that do not vary with the operation, such as maintenance and payroll.	*Energy*
Fixed Price	A price, usually per kilowatt-hour, that remains the same over the term of the contract.	*Energy*
Fixed Shift	assignment of individuals or groups to the same shift on a regular basis in plants which operate more than one shift.	*Industrial Relations*
Fixed support	In two dimensions, a fixed support restrains three degrees of freedom: two translations and one rotation.	*Engineering Physics*
Fixed-effect model	[In meta-analysis:] A model that calculates a pooled effect estimate using the assumption that all observed variation between studies is caused by the play of chance. Studies are assumed to be measuring the same overall effect. An alternative model is the random-effects model.	*Quality Engineering*
Fixing	in the nitrogen cycle, it is the process of nitrogen changing into a less mobile and more usable form by combining with hydrogen to make ammonia	*Agriculture*
Fixture	A device or attachment fastened to or propelled by the conveying medium; used for supporting or securing objects being processed as they are conveyed.	*Equipment*
Flag	Any of various types of indicators used for identification of a condition or event; for example, a character that signals the termination of a transmission.	*General Engineering*
Flags	Flags signal drivers of events or conditions. Green, white, white/red, black, checkered, blue, yellow, red and red/yellow flags each have a different meaning. See each individual color for an explanation of what each flag means.	*NASCAR*
Flail	a wooden bar with a wooden handle used for removing grain or seeds from stalks	*Agriculture*
Flame Hardening	The localized surface heating of a medium carbon steel by an impinging gas flame so that the temperature is raised above 900oC. The part is quenched (or self-quenches by virtue of the remaining cool bulk of the component) and tempered to produce a hard martensitic structure at the surface.	*Paint and Coatings*
Flame Resistance	The ability of a burning material to extinguish its own flame, once its flame-initiating heat source is removed.	*Electrical*
Flame Retardance	Ability of a material to prevent the spread of combustion by a low rate of travel so the flame will not be conveyed.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flame retardant	Additive used to reduce the inherent combustibility of certain polymers.	*Material Process*
Flame retardants	Any chemical compound used to raise the ignition point of such materials as cloth or plastic, and thereby increase their resistance to combustion	*Chemical*
Flame retardants	Any chemical compound used to raise the ignition point of such materials as cloth or plastic, and thereby increase their resistance to combustion	*Chemical Engineering*
Flame Spraying	A thermal spraying process in which the particles are heated and accelerated in a flame (combustion flame, plasma flame). Old term for thermal spray process.	*Paint and Coatings*
Flameproof	Electrical apparatus is said to be flameproof when, in its normal working, it is incapable of igniting firedamp in the surrounding air.	*Mining*
Flameproofing	Modifying plastics, as by incorporation of phosphates, asbestos, and the like, so as to make them more resistant to flame.	*Material Process*
Flammability	Ease of ignition, stated as ignition temperature. Rapidity of burning.	*Material Process*
Flammable	A material which is easily ignited.	*Chemical*
Flamper, clay ironstone found in beds or seams. (Derbys.).	Flamper, clay ironstone found in beds or seams. (Derbys.).	*Mining*
Flange	Flanges are available in round, square, and rectangular, but are typically ring shaped, and form a rim at the end of a pipe. Flanges are used for variety of purposes, but the main purpose is to connect pipes and other equipment, such as a tee, valve, pump, etc. A blind flange can be a plate for covering or closing the end of a pipe. Flanges can also be placed on beams to provide additional strength. See also Flange Tables.	*Industrial*
Flange 6B	API6B A term relating to API Spec 6A flanges which have R or RX ring grooves. API originally specified these flanges in API STD 6B, R or RX appears in the prefix of the numbered ring gaskets, which fit 6B flanges.	*Petroleum Engineering*
Flange 6BX	(API6BX also called BX). API Spec 6A flanges, which have 'BX', ring grooves.	*Petroleum Engineering*
Flange Series	Out of date term, applied in the past to API flanges. The flange series because the ANSI (ASME) Rating. API6A flanges are now rated in psi working pressure.	*Petroleum Engineering*
Flange Tables	Flanges tables are a universal reference which detail the outside and inside diameter sizes and bolt hole drilling patterns for various standard plate flanges.	*Industrial*
Flange, Adaptor	A flange that will connect between two different flanges. Usually a Double Studded Adaptor (DSA), or a Single Studded Adapter (SSA). Also can be a Double Flanged Adaptor.	*Petroleum Engineering*
Flange, ANSI	A flange specified in American National Standards Institute, (ANSI) standards.	*Petroleum Engineering*
Flange, API	A flange specified, in American Petroleum Institute (API) standards.	*Petroleum Engineering*
Flange, Blind	A flange with no bore or outlet, designed to close off an outlet or end connection.	*Petroleum Engineering*
Flange, Companion	A Raised Face or Ring Joint (RTJ) Flange, with a threaded outlet. Also called a Threaded Flange.	*Petroleum Engineering*
Flange, MSS	A flange specified to Manufacturing Standardization Society, Standard Practice MSS-SP-44. Typically specified for 26″ and larger flanges.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flange, Open Face	A flange connection with drilled through bolt holes. An open face flange will mate with another open face flange or with a Studded Face Flange.	*Petroleum Engineering*
Flange, Outlet	An integral flange outlet, connected to a Body usually a side outlet (for example on a tee or a spool).	*Petroleum Engineering*
Flange, RTJ	A flange that utilizes a Ring Gasket has the designation "Ring Type Joint" (RTJ). All API Spec. 6A flanges have "Ring Type Joint" sealing surfaces. ASME (ANSI) standard flanges are also available in RTJ.	*Petroleum Engineering*
Flange, Spacer	A flange, usually made with a ring joint connection on both sides, to fit between two other flanges to space them apart.	*Petroleum Engineering*
Flange, Studded Face	A flange connection with the bolt circles drilled and tapped into its face so as to accept Tapped End Studs (i.e., the connections on a Studded Cross or Tee). A studded face flange will mate with an Open Face Flange.	*Petroleum Engineering*
Flange, SV	API Specification 17D specifies Swivel Flanges (flanges that swivel around a hub) identified as 'SV Flanges'. Specified in a limited range of sizes in 5,000 psi and 10,000 psi.	*Petroleum Engineering*
Flange, Target	See Target Flange	*Petroleum Engineering*
Flange, Test	A Blind Flange, with a tapped test port in its center or side to allow application of pressure or the attachment of a gauge.	*Petroleum Engineering*
Flange, Threaded	A screwed flange with an internal (also called Flange, Companion) or external thread opposite its Ring Groove side to mate with threaded pipe.	*Petroleum Engineering*
Flange, Weld Neck	A flange with a butt weld neck for welding to pipe or buttweld fittings. Material grade may vary from that required for Integral Flanges in order to facilitate field welding to carbon steel pipe.	*Petroleum Engineering*
Flangeless	A valve that does not have integral line flanges. This type of valve is sometimes referred to as a Wafer Style valve. The valve is installed by bolting it between the companion flanges with a set of bolts or studs, called line bolting. Care should be taken that strain-hardened bolts and nuts are used in lieu of all-thread, which can stretch when subjected to temperature cycling.	*Industrial Engineering*
Flank of Tooth	That surface which is between the pitch circle and the bottom land. The flank includes the fillet.	*Mechanical Engineering*
Flannels	Iron-stained shales containing many flattened 'mussel' shells.	*Mining*
Flapper action	A valve design in which output control pressure is regulated by a pivoted flapper in relation to one or two orifices.	*Mechanical, Process, and Operations*
Flapper Gate	A hinged or pivoted plate used for selectively directing material handled.	*Manufacturing*
Flare	A tall stack equipped with burners used as a safety device at wellheads, refining facilities, gas processing plants, and chemical plants. Flares are used for the combustion and disposal of combustible gases. The gases are piped to a remote, usually elevated, location and burned in an open flame in the open air using a specially designed burner tip, auxiliary fuel, and steam or air. Combustible gases are flared most often due to emergency relief, overpressure, process upsets, startups, shutdowns, and other operational safety reasons. Natural gas that is uneconomical for sale is also flared. Often natural gas is flared as a result of the unavailability of a method for transporting such gas to markets.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flare Gas	flares are used to burn off waste gas, typically containing H2S or hydrogen sulfide, so that it does not pose a hazard to humans or animals. Flares used on Eagle Ford Shale wells typically contain a self-igniting system to keep the flame burning. Can be used as a verb, as in "they are flaring gas now."	*Petroleum Drilling*
Flared natural gas	Flared natural gas: See flare.	*Energy*
Flaring	The burning of natural gas that cannot be conserved. It is restricted primarily to short term testing, well workovers, or exceedingly rare emergency situations.	*Petroleum Engineering*
Flash	The portion of the charge flows from or is extruded from the mold.	*Material Process*
Flash ADCs	An analog-to-digital converter that uses a series of comparators with different threshold voltages to convert an analog signal to a digital output.	*Electrical Engineering*
Flash lines	Marks formed where excess material flowed out of a mold.	*Material Process*
Flash mold	A type of mold designed to permit escape of excess molding material, relaying on back pressure to close the mold to put the piece or pieces under pressure.	*Material Process*
Flash Point	The temperature at which the vapors produced from a fluid will ignite (flash off) with the presence of an ignition source (the fluid will not burn at this point). The flash point is important from the viewpoint of safety; however it is quite common for heat transfer systems to be operated at temperatures above the flash point of the fluid.	*Lubrication*
Flash point (Cleveland Open Cup)	The temperature to which a combustible liquid must be heated to give off sufficient vapor to form momentarily a flammable mixture with air when a small flame is applied under specified conditions. (ASTM Designation D 92.)	*Oil Analysis*
Flash Vessel	In the flash vessel the steam is separated from the water, and then fed into a low pressure steam system. The condensate remaining in the flash vessel is discharged into a condensate tank.	*Industrial*
Flashboard	A board, or one of a series of boards, as on a milldam, used to increase the depth of the impounded water.	*Civil Engineering*
Flashing	The act of creating an artificial flood in a conduit or stream, as in a sewer for cleansing it.	*Civil Engineering*
Flat	a district of the mine, a work area. (N. East).	*Mining*
Flat Position	The position of welding which is performed from the upper side of the joint, while the face of the weld is approximately horizontal.	*Maintenance and Repair*
Flat and meter rate schedule	An electric rate schedule consisting of two components, the first of which is a service charge and the second a price for the energy consumed.	*Energy*
Flat Claims	Minerals found on flats.	*Mining*
Flat demand rate schedule	An electric rate schedule based on billing demand that provides no charge for energy.	*Energy*
Flat Face (FF)	A flange surface in which the gasket sealing area is the entire surface from the ID to the outside edge. Usually used for class 125 cast iron valves.	*General Mechanical*
Flat Face Pulley	A pulley on which the face is a straight cylindrical drum, i.e. uncrowned.	*Manufacturing*
Flat plate	a flat piece of steel plate on which tubs were turned	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flat plate pumped	A medium-temperature solar thermal collector that typically consists of a metal frame, glazing, absorbers (usually metal), and insulation and that uses a pumped liquid as the heat-transfer medium predominant use is in water-heating applications.	*Energy*
Flat Rate	A fixed charge for goods and services that does not vary with changes in the amount used, volume consumed, or units purchased.	*Energy*
Flat Rope	Wire rope that is made of a series of parallel, alternating right-lay and left-lay ropes, sewn together with relatively soft wires.	*Wire Rope & Cable*
Flat sheets	square or oblong sheets of cast-iron about ¾ inch thick which were nailed on planking at the top or bottom of a pit and form a metal floor for the free movement of the coal tubs. They were often also used in the workings where roads cross or converge, as at the top and bottom of small inclines, &c.	*Mining*
Flat spot	If a driver locks a tire (brakes so hard that the wheel stops turning), he'll grind a flat spot on the surface of the tire. This causes vibration that can make the car almost undrivable.	*NASCAR*
Flat	A rectangular container that holds several units of product; e.g., a flat of strawberries holds 12 pints of strawberries in pint-size containers. Flats may have single or multiple layers.	*Agriculture*
Flat-lad or Flat-man	the man or older lad who worked on the flat or landing, making up sets of tubs to be sent out of the mine. (N. East).	*Mining*
Flat-Land Bevel	A square extended root face preparation extensively used in inert-gas, root-pass welding of piping.	*Maintenance and Repair*
Flat-lying	Said of deposits and coal seams with a dip up to 5 degrees.	*Mining*
Flatman	similar to a craneman, the difference being that when tubs were used for the conveyance of coal no cranes were necessary, they did not have to be hoisted on to the rolleys as in the case of corves, they were merely linked together at the flat or level by the flatman. (N. East).	*Mining*
Flat-Rolled Steel	Steel processed on rolls with flat faces as opposed to grooved or cut faces. Flat-rolled products include sheet, strip and tin plate, among others.	*Metallurgy*
Flats	beds or sheets of trap rock or whin; or coal seams that lie at a moderately inclined angle in areas containing rearer seams (N. Staffs.); or cut slabs of wood used in roof supports.	*Mining*
Flattened Strand Rope	Wire rope that is made either of oval or triangular shaped strands in order to form a flattened rope surface.	*Wire Rope & Cable*
Flatting	drawing or leading tubs of coal underground with horses and lads. (Derbys.).	*Mining*
Flatting agent	A material added to paints, varnishes and other coating materials to reduce the gloss of the dried film.	*Material Process*
Flaw	An imperfection of unintentional discontinuity which is detectable by a nondestructive examination.7	*Maintenance and Repair*
Flaw induced fracture	The rapid failure	*Material Process*
Flax	Fiber obtained from the inner bark of the flax plant. The fabric, called linen, is used as a filler for high strength laminated plastics.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fleaing	a system of robbing as much coal as possible from the sides of a gate road which was about to be abandoned (S. Staffs.).	*Mining*
Fleck	White to tan necrotic lesions up to a few millimeters in length or diameter, usually confined to the upper surface of leaves.	*Forestry*
Fleet Angle	That angle between the rope's position at the extreme end wrap on a drum, and a line drawn perpendicular to the axis of the drum through the center of the nearest fixed sheave. See DRUM and SHEAVE.	*Wire Rope & Cable*
Fleet vehicle	Any motor vehicle a company owns or leases that is in the normal operations of a company. Vehicles which are used in the normal operation of a company, but are owned by company employees are not fleet vehicles. If a company provides services in addition to providing natural gas, only those vehicles that are used by the natural gas provider portion of a company should be counted as fleet vehicles. Vehicles that are considered "off-road" (e.g., farm or construction vehicles) or demonstration vehicles are not to be counted as fleet vehicles. Fleet vehicles include gasoline/diesel powered vehicles and alternative-fuel vehicles.	*Energy*
Flex Life	The number of bends or twists, of specified type, that a cable will withstand before failure.	*Electrical*
Flexibility	Flexibility is the inverse of stiffness. When a force is applied to a structure, there is a displacement in the direction of the force; flexibility is the ratio of the displacement divided by the force. High flexibility means that a small load produces a large displacement.	*Engineering Physics*
Flexible assembly systems	Automated assembly equipment and/or cross-trained work teams that can accommodate a variety of product configurations in small lots.	*Quality*
Flexible fuel vehicle	A vehicle that can operate on	*Energy*
Flexible fuel vehicle and variable fuel vehicle are synonymous terms.	Flexible fuel vehicle and variable fuel vehicle are synonymous terms.	*Energy*
Flexible fuel vehicles	have a single fuel system to handle alternative and petroleum-based fuels.	*Energy*
Flexible Load Shape	The ability to modify your utility's load shape on short notice. When resources are insufficient to meet load requirements, load shifting or peak clipping may be appropriate.	*Energy*
Flexible machining centers	Automated machining equipment that can be rapidly reprogrammed to accommodate small-lot production of a variety of product or component configurations.	*Quality*
Flexible manufacturing system (FMS)	Automated manufacturing equipment and/or cross-trained work teams that can accommodate small-lot production of a variety of product or part configurations. From an equipment standpoint, an FMS is typically a group of computer-based machine tools with integrated material handling that is able to produce a family of similar parts.	*Quality*
Flexible membrane molding	Process of applying pressure by the use of flexible membrane to transmit uniform pressure to all surfaces under molding.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flexible Retail PoolCo	This provides a model for the restructured electric industry that features an Independent System Operator (ISO) operating in parallel with a commercial Power Exchange, which allows end-use customers to buy from a spot market or "pool" or to contract directly with a particular supplier.	*Energy*
Flexible Schedule	a work schedule which permits the adjustment of the daily time.	*Industrial Relations*
Flexible shaft	(See Drive Shaft).	*Facility Engineering*
Flexible tube valve	A special valve using a flexible sleeve or tube which acts as the closure element. Pressure applied to the jacket space surrounding the outside of the tube, controls the opening and closing of the valve.	*Mechanical*
Flexicoking	A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.	*Energy*
Flexing Test	Any test to determine the ability of a cable to withstand repeated bending and twisting.	*Electrical*
Flexsound	Flexsound describes a set of digital audio signal processing blocks used in Maxim's products to provide or enhance audio functions such as compression, limiting, or equalization. Maxim's Flexsound processor is a fully programmable digital audio signal processing system that includes a programmable DSP core, hard-wired digital macros, and an associated memory architecture.	*Electrical Engineering*
Flexural strength	Failure stress of a material, as measured in bending. The pressure in pounds necessary to break a given sample when applied to the center of the sample which has been supported at its ends.	*Material Process*
Flexure	Bending deformation, i.e., deformation by increasing curvature.	*Engineering Physics*
Flight	The metal strap or crossbar attached to the drag chain-and-flight conveyor.	*Mining*
Flights or Flight bars	the bars that scrape material along in a chain conveyor	*Mining*
Flint mill	Flint mill, -see Steel or Steel mill.	*Mining*
Flip-Flop	A digital component or circuit with two stable states and sufficient hystereses so that it has "memory". When the state is changed with a control pulse, a continuous control signal is now necessary for it to remain in that state.	*Mechanical, Process, and Operations*
Flit	to move a coal-cutting machine from one place to another under its own power.	*Mining*
Flitch	A bundle of dry sheets of veneer arranged in sequence of cutting and held together for shipment. Adjacent sheets of a flitch have almost identical grain figuration.	*Material Process*
Flitching	removing a thin slice of coal from the sides of a coal pillar in pillar and stall working (N. Staffs.).	*Mining*
Float	Pieces of rock that have been broken off and moved from their original location by natural forces such as frost action or glaciers.	*Mining*
Float bridge	A bridge, as from a pier to a boat, floating at one end and hinged at the other to permit loading and unloading at any level of water.	*Civil Engineering*

Term	Definition	*Industry*
Float dust	Fine coal-dust particles carried in suspension by air currents and eventually deposited in return entries. Dust consisting of particles of coal that can pass through a No. 200 sieve.	*Mining*
Float valve	A valve that is actuated by a float, generally used to control makeup water supply to a cooling system.	*Chemical Engineering*
Float valve	A valve which automatically opens or closes as the level of a liquid changes. The valve is operated mechanically by a float which rests on the top of the liquid.	*Mechanical*
Float	Loose rock or isolated masses of ore, or ore detached from the original formation.	*Mining*
Floatation	A milling process by which some mineral particles are induced to become attached to bubbles and float, and others to sink. In this way the valuable minerals are concentrated and separated from the worthless gangue.	*Mining*
Floater	a worker who drifts from job to job.	*Industrial Relations*
Floating ball	A ball valve design in which the ball is not rigidly held on its rotational axis and so is free to float between the seat rings.	*General Mechanical*
Floating foundation	A foundation used in yielding soil, having for its footing a raft tending to displace a weight greater than that of the building.	*Civil Engineering*
Floating Type Flange Joint	A conventional flanged joint in which a gasket is compressed by bolts - the gasket is not rigidly located. Calculation methods such as the ASME code in the USA and the EN1591 code in Europe.	*Maintenance*
Floats, or asbestos floats or fines	The form of asbestos most generally used for filler, consisting of very fine short fibers with associated dust and nonfibrous asbestic material.	*Material Process*
Floc Point	The temperature at which wax or solids separate in an oil	*Lubrication*
Flocculant	Flocculants are products used in waste treatment to separate unwanted components from water and sludge.	*Chemical*
Flocculation	The process of agglomerating coagulated particles into settleable flocs, usually of a gelatinous nature.	*Chemical Engineering*
Flock	Very short fibers such as short cotton fibers, wood fibers, or wood fibers such as those obtained by shearing the nap of cloth, used as an inexpensive filler.	*Material Process*
Flood control	The act or technique of controlling river flow with dams, dikes, artificial channels, etc. So as to minimize the occurrence of floods.	*Civil Engineering*
Flood irrigation	A type of irrigation in which fields are flooded with water.	*Agriculture*
Flood wall Civil Engineering	A wall built along a shore or bank to prevent floods by giving a raised, uniform freeboard and by allowing unimpeded flow to water in a channel	*Civil Engineering*
Flooded	A condition in which the pump inlet is charged by placing the reservoir oil level above the pump inlet port.	*Mechanical, Process, and Operations*
Floodgate	Civil Engineering a gate designed to regulate the flow of water.	*Civil Engineering*
Floodplain	The surface or strip of relatively smooth land adjacent to a river channel, constructed by the present river, and covered with water when the river overflows its banks. It is built of alluvium carried by the river during floods and deposited in the sluggish water beyond the influence of the swiftest current.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Floodway	The channel and adjacent shore areas under water during a flood, esp. as determined for a flood of a given height.	*Civil Engineering*
Floor	That part of any underground working upon which a person walks or upon which haulage equipment travels; simply the bottom or underlying surface of an underground excavation.	*Mining*
Floor (coal)	The upper surface of the stratum underlying a coal seam. In coals that were formed in persistent swamp environments, the floor is typically a bed of clay, known as "underclay," representing the soil in which the trees or other coal-forming swamp vegetation was rooted.	*Energy*
Floor coal	Floor coal, -see Bottom coal.	*Mining*
Floor Conveyor	Any of several types of conveyors using chain, cable, or other linkage mounted near or flush with the floor for the purpose of assembling, or finishing built-up products and subassemblies.	*Equipment*
Floor Finish	The top layer of protective floor coatings.	*Chemistry*
Floor price	A price specified in a market-price contract as the lowest purchase price of the uranium, even if the market price falls below the specified price. The floor price may be related to the seller's production costs.	*Energy*
Floor space	The area enclosed by exterior walls of a building, including parking areas, basements, or other floors belowground level. It is measured in square feet.	*Energy*
Floor Supports	Supporting members with vertical adjustments for leveling the conveyor.	*Manufacturing*
Floor Under Wages	generally has reference to the minimum wage provisions of the Fair Labor Standards Act, since it sets an hourly wage floor below which an employer is not allowed to go.	*Industrial Relations*
Floor, wall, or pipeless furnace	Space-heating equipment consisting of a ductless combustor or resistance unit, having an enclosed chamber where fuel is burned or where electrical-resistance heat is generated to warm the rooms of a building. A floor furnace is located below the floor and delivers heated air to the room immediately above or (if under a partition) to the room on each side. A wall furnace is installed in a partition or in an outside wall and delivers heated air to the rooms on one or both sides of the wall. A pipeless furnace is installed in a basement and delivers heated air through a large register in the floor of the room or hallway immediately above.	*Energy*
Floorhand	Laborer responsible for the overall maintenance of the rig.	*Petroleum Drilling*
Floor-weight or Floor-lift	the upheaval of the floor of a mine due to strata pressures. - see also Creep and Heave.	*Mining*
Floppy Disk	A small, flexible disk carrying a magnetic medium in which digital data is stored for later retrieval and use.	*Electrical*
Flotation	A milling process in which valuable mineral particles are induced to become attached to bubbles and float as others sink.	*Mining*
Flour Gold/Gold Dust	Gold that is so fine that it looks and feels like flour or dust.	*Mining*
Flow	The direction of travel of the product on the conveyor.	*Equipment*
Flow	A fluid in motion in a conducting line.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flow Characteristic	The relationship between valve capacity and valve travel. It is usually expressed graphically in the form of a curve. control valves have two types of characteristics inherent and installed. The inherent characteristic is derived from testing the valve with water as the fluid and a constant pressure drop across the valve. When valves are installed into a system with pumps, pipes and fittings, the pressure dropped across the valve will vary with the travel. When the actual flow in a system is plotted against valve opening, the curve is known as the installed flow characteristic. Valves can be characterized by shaping the plugs, orifices or cages to produce a particular curve. Valves are characterized to try to alter the valve gain. Valve gain is the flow change divided by the control signal change. This is done in an effort to compensate for nonlinearities in the control loop.	*Industrial Engineering*
Flow Chart	A flow chart is a diagram that uses graphic symbols to depict the nature and flow of the steps in a process. Another name for this tool is "flow diagram." A flow chart is a graphical representation of a process, depicting inputs, outputs and units of activity. It can represent the entire process at a high or detailed (depending on your use) level of observation, allowing analysis and optimization of workflow.	*Maintenance*
Flow Coefficient	See the definition for Cv.	*Industrial Engineering*
Flow control	The laws, regulations, and economic incentives or disincentives used by waste managers to direct waste generated in a specific geographic area to a designated landfill, recycling, or waste-to-energy facility.	*Energy*
Flow control valve	A manually controlled valve generally located in the hot water supply line used to increase or decrease the flow of a liquid in a system.	*Chemical Engineering*
Flow Control Valve	A valve whose primary function is to control flow rate.	*Lubrication*
Flow Divider Valve	A valve which divides the flow from one source into two or more branches. (Includes "priority" and "proportional" types.)	*Mechanical, Process, and Operations*
Flow Fatigue Rating	The ability of a filter element to resist a structural failure of the filter medium due to flexing caused by cyclic differential pressure.	*Oil Analysis*
Flow laminar	The flow of a viscous fluid in which the fluid moves in parallel layers with a fixed velocity gradient from the centerline to the containing walls of the conduit. Sometimes referred to as "streamline" flow.	*Mechanical*
Flow line	Any pipeline, that contains, transports and controls the fluid.	*Petroleum Engineering*
Flow lines	Lines appearing on the surface of a piece, generally caused by failure of the material to flow and knit together properly. Term not recommended.	*Material Process*
Flow marks	Wavy appearance of a plastic caused by flowing of the material.	*Material Process*
Flow meter	An instrument used to measure flow rate or total flow or both.	*Mechanical*
Flow Rate	Actual speed or velocity of fluid movement.	*General Engineering*
Flow rate	The volume or weight of a fluid passing thru a pipeline or conductor per unit of time, i.e., 3000 barrels of oil per day; 4 MMCF of gas per hour.	*Mechanical*
Flow tube	a calibrated flow measuring device made for a specific range of flow velocities and fluids.	*Chemical*
Flow, laminar	A flow situation in which fluid moves in parallel lamina or layers.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flow, Laminar (streamlined)	A flow situation in which the fluid particles move in parallel lamina or layers. (See Reynold's Number.)	*Mechanical, Process, and Operations*
Flow, Turbulent	The random flow of a fluid in which the velocity at a certain point in the fluid varies irregularly.	*Mechanical*
Flowback water	After the hydraulic fracturing procedure is completed and pressure is released, the direction of fluid flow reverses, and water and excess proppant flow up through the wellbore to the surface. Both the process and the returned water are commonly referred to as "flowback."	*Petroleum Drilling*
Flowback	The process where frac fluids, (including water, oil and natural gas,) return to the surface following a hydraulic fracturing operation. Flowback technicians may stay on the wellsite for several days as this process is completed, checking the amount of oil and gas production and adjusting chokes (restrictive valves) in the well that regulate how much gas and fluid flows back. The flowback process is very critical, since damage can be done to the oil and gas producing formation and the well if it is not done correctly.	*Petroleum Drilling*
Flowing Artesian Well	One that has penetrated into an artesian aquifer. Artesian aquifers have pressure built-up within themselves. This pressure results from a portion of the aquifer being at a higher elevation. The pressure is released when a well is bored into it. This causes the well to flow spontaneously.	*Petroleum Engineering*
Flowmeter	A device used for measuring the flow or quantity of a moving fluid.	*Electronic Process*
Flowsheet	The sequence of operations, step by step, by which ore is treated in a milling, concentration, or smelting process.	*Mining*
Flowsheet	An illustration showing the sequence of operations, step by step, by which ore is treated in a milling, concentration or smelting process.	*Mining*
Flow-through shares	Shares in an exploration company that allow the tax deduction or credits for mineral exploration to be passed to the investor.	*Mining*
Flue	An enclosed passage way for directing products of combustion to the atmosphere.	*Energy*
Flue gas desulfurization	Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Also referred to as scrubbers. Chemicals such as lime are used as scrubbing media.	*Energy*
Flue gas loss	The flue gas loss is that portion of the thermal energy that escapes unused together with the flue gases.	*Thermal Management*
Flue-gas desulfurization unit (scrubber)	Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Chemicals such as lime are used as the scrubbing media.	*Energy*
Flue-gas particulate collector	Equipment used to remove fly ash from the combustion gases of a boiler plant before discharge to the atmosphere. Particulate collectors include electrostatic precipitators, mechanical collectors (cyclones), fabric filters (baghouses), and wet scrubbers.	*Energy*
Fluid	Fluid	*Mechanical, Process, and Operations*
Fluid	Any non-solid substance that can be made to flow. Both liquids and gases are fluids.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fluid Coking	A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.	*Energy*
Fluid compatibility	The suitability of filtration medium and seal materials for service with the fluid involved.	*Oil Analysis*
Fluid Friction	Occurs between the molecules of a gas or liquid in motion, and is expressed as shear stress. Unlike solid friction, fluid friction varies with speed and area.	*Lubrication*
Fluid friction	Friction due to the viscosity of fluid.	*Mechanical, Process, and Operations*
Fluid leakoff	The process by which injected fracturing fluid migrates from the created fractures to other areas within the hydrocarbon-containing formation.	*Petroleum Drilling*
Fluid Opacity	Related to the ability of a fluid to pass light.	*Oil Analysis*
Fluid Power	Energy transmitted and controlled through use of a pressurized fluid.	*Oil Analysis*
Fluid power system	A system that transmits and controls power through use of a pressurized fluid within an enclosed circuit.	*Mechanical, Process, and Operations*
Fluid pressure molding	Process of applying pressure by the use of a fluid to transmit uniform pressure to all surfaces under molding.	*Material Process*
Fluid Velocity	The measured speed at which a fluid moves through the inside of a tube.	*Lubrication*
Fluid, Fatty oil	A fluid composed of fats derived from animal, marine, or vegetable origin. It may contain additives.	*Mechanical, Process, and Operations*
Fluid, Fire resistant (Non-Flammable)	A fluid difficult to ignite and which shows little tendency to propagate flame.	*Mechanical, Process, and Operations*
Fluid, Hydraulic	A fluid suitable for use in a hydraulic system.	*Mechanical, Process, and Operations*
Fluid, Pneumatic	A fluid suitable for use in a pneumatic system.	*Mechanical, Process, and Operations*
Fluidic	Of or pertaining to devices, systems, assemblies, etc., utilizing fluidic components. FLUIDICS - Engineering science pertaining to the use of fluid dynamic phenomenon to sense, control,	*Mechanical, Process, and Operations*
Fluidity	Rate of flow, reciprocal of viscosity.	*Material Process*
Fluidized Bed Combustion	A process with a high degree of ability to remove sulfur from coal during combustion. Crushed coal and limestone are suspended in the bottom of a boiler by an upward stream of hot air. The coal is burned in this bubbling, liquid-like (or "fluidized") mixture. Rather than released as emissions, sulfur from combustion gases combines with the limestone to form a solid compound recovered with the ash.	*Mining*
Fluidized-bed combustion	A method of burning particulate fuel, such as coal, in which the amount of air required for combustion far exceeds that found in conventional burners. The fuel particles are continually fed into a bed of mineral ash in the proportions of 1 part fuel to 200 parts ash, while a flow of air passes up through the bed, causing it to act like a turbulent fluid.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flume	An artificial channel or trough for conducting water, as one used to transport logs or provide water power. To transport in a flume. To divert (a stream) by a flume.	*Civil Engineering*
Fluorescent lamp	A glass enclosure in which light is produced when electricity is passed through mercury vapor inside the enclosure. The electricity creates a radiation discharge that strikes a coating on the inside surface of the enclosure, causing the coating to glow. Note: Traditional fluorescent lamps are usually straight or circular white glass tubes used in fixtures specially designed for them. A newer type of fluorescent lamp, the compact fluorescent lamp, takes up much less room, comes in many differently-shaped configurations, and is designed to be used in some fixtures originally intended to house in candescent lamps.	*Energy*
Fluorescent light bulbs	These are usually long, narrow, white tubes made of glass coated on the inside with fluorescent material, which is connected to a fixture at both ends of the light bulb; some are circular tubes. The light bulb produces light by passing electricity through mercury vapor, which causes the fluorescent coating to glow or fluoresce.	*Energy*
Fluorescent lighting other than compact fluorescent bulbs	In fluorescent lamps, energy is converted to light by using an electric charge to "excite" gaseous atoms within a fluorescent tube. Common types are "cool white," "warm white," etc. Special energy efficient fluorescent lights have been developed that produce the same amount of light while consuming less energy. Note: for definition of compact fluorescent bulbs, go to compact fluorescent bulbs.	*Energy*
Fluorite	Compound crystal structure.	*Material Process*
Fluoro-Carbon Thread Coating	A low friction coating applied to threads. This type of coating is frequently used to prevent thread fouling when an assembly containing threaded fasteners is painted. Unless masked in some way before painting, electro deposited primers can cover the threads. If this occurs assembly difficulties can result unless the expensive chore of cleaning the threads is completed. A fluoro-carbon thread coating eliminates the need for masking or cleaning since paint will not adhere to the coating. This type of coating can also prevent problems caused by weld splatter obstructing the threads of weld nuts during their placement. Such coatings also have the property of reducing the torque-tension scatter during tightening.	*Maintenance*
Fluoropolymer	Fluoropolymers are inert to most chemicals and resistant to high temperatures. They also have low coefficients of friction and have superb dielectric properties. Therefore, fluoropolymers are used in electronics, as well as in pipe and in chemical processing equipment. It is also found in the non-stick coatings used for cookware.	*Material Engineering*
Fluoropolymer Coating	A specialized coating typically used on stud bolts, nuts, and other surfaces that need characteristics of low friction, wear resistance, and protection from corrosion; (commonly used for offshore service) also marketed as 'Xylan' or Teflon coating.	*Petroleum Engineering*
Fluoroscence	Luminescence in which photon emission occurs rapidly, in less than about ten nanoseconds.	*Material Process*
Flush	adjacent surfaces even, or in same plane (flat against).	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Flushing	the filling of the waste by waterborne material from a pipeline. Also called 'Pneumatic stowing'; or the crumbling of the roof or sides around the supports in an excavation.	*Mining*
Flux	The rate of water flow per unit of membrane filtration area.	*Filtration*
Flux	the rate of movement of mass through a unit cross-sectional area per unit time in response to a concentration gradient or some advective force.	*Chemical*
Flux density	Magnitude of the magnetic induction.	*Material Process*
Flux inclusions	Flux carried out onto the work from the top flux blanket incorporated in the 'wet' process; occurs only in the 'wet' galvanizing process	*Materials Process*
Flux material	A substance used to promote fusion, e.g., of metals or minerals.	*Energy*
Flux	A chemical substance that reacts with gangue minerals to form slags, which are liquid at furnace temperature and low enough in density to float on the molten bath of metal or matte.	*Mining*
Flux-Cored Arc Welding (FCAW)	An arc welding process that employs a continuous tubular filler metal (consumable) electrode having a core of flux for shielding. Adding shielding may or may not be obtained from an externally supplied gas or gas mixture.	*Maintenance and Repair*
Fluxgate magnetometer	An instrument used in geophysics to measure total magnetic field.	*Mining*
Fluxing	the process by which steel is dipped in aqueous zinc ammonium chloride to remove undesirable substances and to protect it from further oxide formation prior to entering the galvanizing bath	*Materials Process*
Fly ash	Particulate matter mainly from coal ash in which the particle diameter is less than 1 x 104 meter. This ash is removed from the flue gas using flue gas particulate collectors such as fabric filters and electrostatic precipitators.	*Energy*
Fly ash	The finely divided particles of ash suspended in gases resulting from the combustion of fuel. Electrostatic precipitators are used to remove fly ash from the gases prior to the release from a power plant's smokestack.	*Mining*
Flying cradle	a frame about 4ft x 1½ft on which one or more men sit astride to do any temporary work in the shaft	*Mining*
Flying Squadron	a group of specially trained employees who are familiar with all or most of th key jobs in a plant or other production unit.	*Industrial Relations*
Flywheel	A metal disc bolted to the end of the crankshaft. The inertia of the spinning flywheel while the engine is running smoothes the engine's operation.	*Mechanical Engineering*
FM	Factory Mutual Research Corporation. An organization which sets industrial safety standards.	*General Engineering*
FM Approved	An instrument that meets a specific set of specifications established by Factory Mutual Research Corporation.	*General Engineering*
FME	Free Market Economies. Countries that are members of the Council for Mutual Economic Assistance (CMEA) are not included.	*Energy*
FMEA	Failure Mode Effect Analysis.	*Maintenance*
FMECA	See Failure Mode, Effects (& Criticality) Analysis (FME(C)A).	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
FNS	Food and Nutrition Service, an agency of the USDA.	*Agriculture*
Foal	a young putter, also called 'Halfmarrows'. (N. East).	*Mining*
Foam	A mass of bubbles formed on liquids by agitation.	*Chemistry*
Foam Inhibitor	A substance introduced in a very small proportion to a lubricant or a coolant to prevent the formation of foam due to aeration of the liquid, and to accelerate the dissipation of any foam that may form	*Lubrication*
Foaming	A frothy mixture of air and a petroleum product (e.g., lubricant, fuel oil) that can reduce the effectiveness of the product, and cause sluggish hydraulic operation, air binding of oil pumps, and overflow of tanks or sumps. Foaming can result from excessive agitation, improper fluid levels, air leaks, cavitation, or contamination with water or other foreign materials. Foaming can be inhibited with an antifoam agent. The foaming characteristics of a lubricating oil can be determined by blowing air through a sample at a specified temperature and measuring the volume of foam, as described in test method ASTM D 892.	*Lubrication*
Foaming Agent or Surfactant	A substance capable of reducing the surface tension of a liquid in which it is dissolved. Used in air-based drilling fluids to produce foam, and during well development to disaggregate clays.	*Petroleum Engineering*
FOB	Free on board.	*Lubrication*
Focused-factory production	A plant configuration and organization structure in which equipment and manpower are grouped to create essentially self-contained "mini-businesses," each with a specific product line or customer focus. A single plant may be divided into several focused-factory units, designed around process flows, each of which has control over such support activities as maintenance, manufacturing engineering, purchasing, scheduling, and customer service.	*Quality*
Fog	Cloudy or dull surface caused by a deposit on mold or pressing plate.	*Material Process*
Fogging	A fog condition created when the exhaust air or plume from a cooling tower becomes supersaturated so that part of the water vapor condenses into visible liquid droplets.	*Facility Engineering*
Fold	Any bending or wrinkling of rock strata.	*Mining*
Foldback Current Limit	A circuit which reduces the current limit once the device enters current-limited operation. Commonly seen on RS-422/RS-485 drivers and some power circuits.	*Electrical Engineering*
Folding boards	Before keps came into use the boards were used to rest the cage on while it was being unloaded. Also known as shuts. (Scot.)	*Mining*
Follow valve	A control valve which ports oil to an actuator so the resulting output motion is proportional to the input motion to the valve.	*Mechanical, Process, and Operations*
Follower Joint	A non-load-carrying ball joint that maintains the position of the steering knuckle and provides the correct steering axis inclination angle; sometimes called pilot joint or friction joint.	*Mechanical Engineering*
Follow-up	Observation over a period of time of an individual, group, or initially defined population whose relevant characteristics have been assessed in order to observe changes in health status or health-related variables.	*Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Food Grade Lubricants	Lubricants acceptable for use in meat, poultry and other food processing equipment, applications and plants. The lubricant types in food-grade applications are broken into categories based on the likelihood they will contact food. The USDA created the original food-grade designations H1, H2 and H3, which is the current terminology used. The approval and registration of a new lubricant into one of these categories depends on the ingredients used in the formulation.	*Lubrication*
Food Miles	the distance food travels from where it was grown to where it is consumed.	*Agriculture*
Food Safety and Inspection Service, (FSIS)	A consumer protection agency within the USDA. Its mission is to protect consumers by ensuring that meat, poultry, and egg products are safe, wholesome, and accurately labeled.	*Agriculture*
Foot blocks	square blocks of thick wood used to spread the load at the base of an arch support girder	*Mining*
Foot checking	wooden guides set alongside the rails on curves to stop the tubs from derailing (N. Staffs.).	*Mining*
Footage drilled	Total footage for wells in various categories, as reported for any specified period, includes (1)the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional side-track wells does not include footage in the common bore that is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.	*Energy*
Footbridge	A bridge intended for pedestrians only.	*Civil Engineering*
Footprint	The mark left by a loaded tire's tread as it meets the road surface.	*Mechanical Engineering*
Footprint Area	The amount or area of contact in square inches the tire has with the road. This is dependent upon both load and inflation pressure as well as tire dimensions.	*Mechanical Engineering*
Footrail, Footrill or Futteril	the entrance to, or a drift mine.	*Mining*
Footwall	The wall or rock on the underside of a vein or ore structure.	*Mining*
Footwall	The layer of rock immediately under the vein.	*Mining*
Forage	Vegetation such as leaves, stems, buds, and some types of bark, that can be eaten for food and energy.	*Forestry*
Forage	Plants, other than grain, grown for animal feed.	*Agriculture*
Force	A directed interaction between two objects that tends to change the momentum of both. Since a force has both direction and magnitude, it can be expressed as a vector	*Engineering Physics*
Force	A push or pull acting upon a body. In a hydraulic cylinder, it is the product of the pressure on the fluid; multiplied by the effective area of the cylinder piston. It is measured in pounds or tons.	*Mechanical, Process, and Operations*
Force day	A low temperature, below 180-200 °F (82.22 - 93.33 °C) cure as differentiated from a true bake, which involves contact with a temperature above 180-200 °F (82.22-93.33 °C).	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Force Differential	The difference between the operating force and the release force.	*Electrical Engineering*
Force Feed Lubrication	A system of lubrication in which the lubricant is supplied to the bearing surface under pressure.	*Lubrication*
Force motor	A type of electromechanical transducer having linear motion used in the input stages of servovalves.	*Mechanical, Process, and Operations*
Force plate	Plate carrying plunger or force plug of a mold, sometimes called the steam plate.	*Material Process*
Force System	See system of forces.	*Engineering Physics*
Force, Contact	The force holding closed contacts together.	*Electrical Engineering*
Forced draft water cooling tower	Type of mechanical draft tower in which one or more fans are located at the air inlet to force air into the tower.	*Facility Engineering*
Forced Labor	labor which is required or compelled by government.	*Industrial Relations*
Forced Outage	An outage that results from emergency conditions and requires a component to be taken out of service automatically or as soon as switching operations can be performed. The forced outage can be caused by improper operation of equipment or by human error. If it is possible to defer the outage, the outage becomes a scheduled outage.	*Energy*
Forced Vibration	Vibration of a system caused by an imposed force. Steady-state vibration is an unchanging condition of periodic or random motion.	*General Engineering*
Forced vibration.	The vibratory motion of a system caused by some mechanical excitation. If the excitation is periodic and continuous, the response motion eventually becomes steady-state.	*Reliability Engineering*
Force-Sense	Measurement technique in which a voltage (or current) is forced at a remote point in a circuit; then the resulting current (or voltage) is measured (sensed).	*Electrical Engineering*
Forcing frequency	In sinusoidal vibration testing or resonance searching, the frequency at which a shaker vibrates.	*Reliability Engineering*
Forcing function	A climatic or mechanical environmental input to an item of equipment that affects its design, service life or ability to function. (Also referred to as an environmental condition or an environmental stress.	*Reliability Engineering*
Fore and Aft Weight Transfer	A load factor where weight is transferred from the front tires to the rear tires during acceleration and from the rear to the front tires during braking.	*Mechanical Engineering*
Fore winning	winning out in front of other workings.	*Mining*
Forecast/Demand Management Software	Software that provides front-end input to master production scheduling systems and helps to optimize inventory planning. Such software not only takes into account historical demand trends, but also may calculate the impact of planned sales promotions, price reductions, and other factors that cause spikes in demand levels.	*Maintenance*
Foreign access	Refers to proved reserves of crude, condensate, and natural gas liquids applicable to long-term supply agreements with foreign governments or authorities in which the company or one of its affiliates acts as producer.	*Energy*
Foreign Agricultural Service, (FAS)	A USDA agency that represents interests of U.S. farmers and the food and agricultural sector abroad.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Foreign currency transaction gains and losses	Gains or losses resulting from the effect of exchange rate changes on transactions denominated in currencies other than the functional currency (for example, a U.S. enterprise may borrow Swiss francs or a French subsidiary may have a receivable denominated in kroner from a Danish customer). Gains and losses on those foreign currency transactions are generally included in determining net income for the period in which exchange rates change unless the transaction hedges a foreign currency commitment or a net investment in a foreign entity. Intercompany transactions of a long-term investment nature are considered part of a parent's net investment and hence do not give rise to gains or losses.	*Energy*
Foreign currency translation effects	Gains or losses resulting from the process of expressing amounts denominated or measured in one currency in terms of another currency by use of the exchange rate between the two currencies. This process is generally required to consolidate the financial statements of foreign affiliates into the total company financial statements and to recognize the conversion of foreign currency or the settlement of a receivable or payable denominated in foreign currency at a rate different from that at which the item is recorded. Translation adjustments are not included in determining net income, but are disclosed as separate components of consolidated equity.	*Energy*
Foreign matter	Particles of substance included in a plastic which seem foreign to its composition.	*Material Process*
Foreign operations	These are operations that are located outside the United States. Determination of whether an enterprise's mobile assets, such as offshore drilling rigs or ocean-going vessels, constitute foreign operations should depend on whether such assets are normally identified with operations located outside the United States.	*Energy*
Foreign-controlled firms (coal)	Foreign-controlled firms are U.S. coal producers with more than 50 percent of their stock or assets owned by a foreign firm.	*Energy*
Foreman	generally the first line of management in the operation of the plant or facility.	*Industrial Relations*
Foreman Training	programs designed by management for supervisory employees which have for their purpose the more effective functioning of the foreman on the job.	*Industrial Relations*
Fore-pole	a kind of horsehead or forward support used in drivages or tunnels—see Spile and Spill.	*Mining*
Forest management	Proper care and control of wooded land to maintain health, vigor, product flow, and other values such as soil condition, water quality, wildlife preservation and beauty, and to accomplish specific objectives.	*Forestry*
Forest management plan	Written guidelines for current and future management practices needed to meet an owner's objectives.	*Forestry*
Forest plot	A graphical representation of the individual results of each study included in a meta-analysis together with the combined meta-analysis result. The plot also allows readers to see the heterogeneity among the results of the studies. The results of individual studies are shown as squares centered on each study's point estimate. A horizontal line runs through each square to show each study's confidence interval—usually, but not always, a 95% confidence interval. The overall estimate from the meta-analysis and its confidence interval are shown at the bottom, represented as a diamond. The centre of the diamond represents the pooled point estimate, and its horizontal tips represent the confidence interval.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Forest stewardship plan	A written document emphasizing long-term, forest sustainability and activities that enhance or improve wildlife, timber, soil, water, recreation, and aesthetics.	*Forestry*
Forest stewardship program	A cooperative, technical -assistance program designed to encourage multiple resource management.	*Forestry*
Forest type	growing in the same stand because their environmental requirements are similar.	*Forestry*
Forestry	The science, art, and practice of managing and using trees, forests, and their associated resources.	*Forestry*
Forewings	Front pair of wings.	*Forestry*
Forfeiture	A failure to comply with the laws prescribing the quantity of work.	*Mining*
Forge Weld	A method of manufacture similar to hammer welding. The term forge welded is applied more particularly to headers and large drums, while hammer welded usually refers to pipe.	*Maintenance and Repair*
Forged and Bored Pipe	Pipe produced by boring or trepanning of a forged billet.	*Maintenance and Repair*
Forged Steel	Steel, pressed and shaped, under heat, using compressive force to breakup and close any internal Discontinuities.	*Petroleum Engineering*
Forged steels	steels formed by plastically deforming metal, usually hot, into desired shapes with compressive force, with or without dies	*Materials Process*
Forging	Mechanical forming of a metal or alloy by heating and hammering.	*Engineering Physics*
Fork or Hambone	a clip used to attach tubs to the endless rope. (N. East).	*Mining*
Form	To apply force to plastic materials with the intention of making them flow, bend or otherwise conform to a given shape.	*Material Process*
Formal Notification	procedures which are occasionally required in a collective bargaining agreement which specify the form a particular type of notice is to take in order to assure the parties that the information will be properly and efficiently delivered.	*Industrial Relations*
Formaldehyde (HCHO) Colorless gas	An aldehyde most widely used in plastics. It condenses with phenol, urea, aniline, melamine, etc., to form a synthetic resins, and is used as a hardener for casein and other protein plastics.	*Material Process*
Formalin	A 40% aqueous solution of formaldehyde.	*Material Process*
Formamide (HCONH2)	Used as a curing or hardening agent for zein and other protein plastics.	*Material Process*
Formation	Any assemblage of rocks which have some character in common, whether of origin, age, or composition. Often, the word is loosely used to indicate anything that has been formed or brought into its present shape.	*Mining*
Formation Pressure	The pressure at the bottom of a well when shut in at the wellhead.	*Petroleum Drilling*
Formation pressure	The pressure at the bottom of a well when it is shut in at the wellhead.	*Petroleum Drilling*
Formation Stabilizer	Sand or gravel placed in the annulus of the well between the borehole wall and the well screen to provide temporary to long-term support for the borehole.	*Petroleum Engineering*
Formation Water	Salt water underlying gas and oil in the formation.	*Petroleum Drilling*
Formation water	Salt water underlying gas and oil in the formation.	*Petroleum Drilling*

Term	Definition	*Industry*
Formica	Trade name for phenolic laminated material.	*Material Process*
Formula car	Formula cars must fit within a specific set of design rules or "formula." The formulas are usually quite complex, but basic issues include minimum weight, engine displacement, vehicle dimensions, wing sizes and placement, ground-effects tunnel size and configuration, tire and wheel size, and safety considerations.	*NASCAR*
Fortran	Formula Translation language. A widely used high-level programming language well suited to problems that can be expressed in terms of algebraic formulas. It is generally used in scientific applications.	*General Engineering*
Forward bias	Orientation of electrical potential to provide a significant flow of charge carriers in a rectifier.	*Material Process*
Forward contract	The sale or purchase of a commodity for delivery at a specified future date.	*Mining*
Forward Converter	A power-supply switching circuit that transfers energy to the transformer secondary when the switching transistor is on.	*Electrical Engineering*
Forward cost (1)	Forward costs are those operating and capital costs yet to be incurred at the time an estimate of reserves is made. Profits and "sunk" costs, such as past expenditures for property acquisition, exploration, and mine development, are not included. Therefore, the various forward-cost categories are independent of the market price at which uranium produced from the reserves would be sold.	*Energy*
Forward cost (2)	The operating and capital costs still to be incurred in the production of uranium from in-place reserves. By using forward costing, estimates for reserves for ore deposits in differing geological settings and status of development can be aggregated and reported for selected cost categories. Included are costs for labor, materials, power and fuel, royalties, payroll taxes, insurance, and applicable general and administrative costs. Excluded from forward cost estimates are prior expenditures, if any, incurred for property acquisition, exploration, mine development, and mill construction, as well as income taxes, profit, and the cost of money. Forward costs are neither the full costs of production nor the market price at which the uranium, when produced, might be sold.	*Energy*
Forward costs (uranium)	The operating and capital costs that will be incurred in any future production of uranium from in-place reserves. Included are costs for labor, materials, power and fuel, royalties, payroll taxes, insurance, and general and administrative costs that are dependent upon the quantity of production and, thus, applicable as variable costs of production. Excluded from forward costs are prior expenditures, if any, incurred for property acquisition, exploration, mine development, and mill construction, as well as income taxes, profit, and the cost of money. Note: By use of forward costing, estimates of reserves for ore deposits in differing geological settings can be aggregated and reported as the maximum amount that can theoretically be extracted to recover the specified costs of uranium oxide production under the listed forward cost categories.	*Energy*
Forward coverage	Amount of uranium required to assure uninterrupted operation of nuclear power plants.	*Energy*
Forward Error Correction	A technique for detecting and correcting errors from imperfect transmission by adding a small number of extra bits. FEC allows optical transmission over longer distances by correcting errors that can happen as the signal-to-noise ratio decreases with distance.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Forward Workload	All Known Backlog Work And Work Which Is Due Or Predicted To Become Backlog Work Within A Pre-Specified Future Time Period.	*Plant Engineering*
Fossil fuel	An energy source formed in the Earth's crust from decayed organic material. The common fossil fuels are petroleum, coal, and natural gas.	*Energy*
Fossil fuel electric generation	Electric generation in which the prime mover is an internal combustion engine or a turbine rotated by high-pressure steam produced in a boiler or by a hot exhaust gas produced from the burning of fossil fuels.	*Energy*
Fossil fuel plant	A plant using coal, petroleum, or gas as its source of energy.	*Energy*
Fossil fuel steam-electric power plant	An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boilerby heat from burning fossil fuels.	*Energy*
Fossil fuel	Any naturally occurring fuel of an organic nature, such as coal, crude oil and natural gas.	*Mining*
FOT	Free on truck.	*Lubrication*
Fother	a measure of coal, being 1/3 of a chaldron, or 17 2/3 cwt.; a good single horse cart load	*Mining*
Foul	a term used when describing air contaminated with firedamp to an extent that it is potentially explosive.	*Mining*
Foulant	Material that obstructs, such as sediment or biological material that blinds a filter or intake.	*Filtration*
Foul-coal	impure coal, admixed with shale etc. (N. East).	*Mining*
Fouling	Fouling is when a fluid goes through the Heat Exchanger, and the impurities in the fluid precipitate onto the surface of the tubes, which can cause scale. This precipitation reduces the surface area for heat to be transferred and causes an increase in the resistance to heat transfer across the heat exchanger. Fouling can be prevented with proper water purification. See also Maintenance	*Industrial*
Fouling	Contamination (plugging) of the membrane, either decreasing flux, or increasing differential pressure or TMP. Membrane fouling may necessitate a flux maintenance procedure or a membrane cleaning.	*Contamination Control*
Foulness	inflammable air. (N. East).	*Mining*
Foundation	Support material beneath the tower.	*Facility Engineering*
Foundry	An operation where metal castings are produced, using coke as a fuel.	*Energy*
Foundry coke	This is a special coke that is used in furnaces to produce cast and ductile iron products. It is a source of heat and also helps maintain the required carbon content of the metal product. Foundry coke production requires lower temperatures and longer times than blast furnace coke.	*Energy*
Four Ball Tester	This name is frequently used to describe either of two similar laboratory machines, the Four-Ball Wear Tester and the Four-Ball EP Tester. These machines are used to evaluate a lubricant's anti-wear qualities, frictional characteristics or load carrying capabilities. It derives its name from the four 1/2 inch steel balls used as test specimens. Three of the balls are held together in a cup filled with lubricant while the fourth ball is rotated against them.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Four Wheel Drive (4WD)	In a Four Wheel Drive system, a secondary transmission assembly, called a transfer case, is driven from the main transmission. The transfer case distributes power to both axles to drive all four wheels. It is the heart of the Four-Wheel Drive system. Four-Wheel Drive can be full-time, in which power is delivered to both axles at all times or part-time, where the driver selects two or four wheel drive. Four wheel drive is often combined with independent suspension systems and off-road type tires to enhance drive ability on rough, off-road terrain, or on-road drive ability in unfavorable driving conditions.	*Mechanical Engineering*
Four Wheel Independent Suspension	A type of suspension in which all wheels are mounted to separate suspension members with no rigid axle connecting them. Therefore a disturbance affecting one wheel has no effect on the opposite wheel. Four wheel independent suspension reduces the un-sprung weight, improves ride and handling over rough surfaces and permits room for a larger trunk.	*Mechanical Engineering*
Fourier	See Fast Fourier Transform or FFT. Term honors mathematician Baron Jean Baptiste Joseph Fourier 1768-1830.	*Reliability Engineering*
Fourier's low	Relationship between rate of heat transfer and temperature gradient.	*Material Process*
Fourth Quantum Number (Ms)	Number that represents the spin of the electron	*Physics*
Fourth quantum numbers	allow every electron in an atom to be characterized uniquely	*Physics*
Fourth Round Increase	Wage requests made by unions in the major industries in 1949.	*Industrial Relations*
Four-Way valve	A directional valve having four flow paths.	*Mechanical, Process, and Operations*
Four-Wheel Anti-Lock Brakes	All four wheels are equipped with speed sensors. When these sensors determine that the wheels are decelerating so rapidly that lockup may occur, the Electro-Hydraulic Control Unit (EHCU) is activated. The EHCU then modulates the brake pressure in the appropriate brake lines by means of the solenoid-operated valves. This is intended to prevent wheel lockup and help the vehicle maintain directional stability during potentially hazardous braking situations.	*Mechanical Engineering*
FPC	Federal Power Commission	*Energy*
FPM	Flow velocity in feet per minute.	*General Engineering*
FPS	Flow velocity in feet per second.	*General Engineering*
FQP	Fuel Quality Position (EMA)	*Petro-Chemical Abbreviations*
Frac	Refers to the process of hydraulically fracturing a well using water, sand and some chemicals. (Propane is also used to frac wells as part of a new technology invented by GasFrac, a Canadian company.) Frac can be used as a noun (they did a frac or frac job on the well,) and as a verb, (they are going to frac the well next week.)	*Petroleum Drilling*
Frac Fluid	A fluid used in the fracturing process, Under extreme high hydraulic pressure, frac fluids (which can include distillate, diesel fuel, crude oil, dilute hydrochloric acid, water or kerosene) are pumped downward through production tubing or the drill pipe.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Frac job	Slang term for hydraulic fracturing, a process whereby an oil or gas well is stimulated by pumping special fluids into the reservoir, fracturing the formation.[2]	*Petroleum Drilling*
Fracing, or "Fracking"	Fracing, or "Fracking" – See Hydraulic Fracturing.	*Petroleum Drilling*
Frack fluid	This is the water-based compound drillers use to fracture the shale. It's composed of very large amounts of water – up to several million gallons -- mixed with any number of chemicals, plus sand. It is pumped into wells under very high pressure to break up underground rock formations, which releases natural gas. The environmental impact(pdf link) of frack fluid has been a running controversy in Pennsylvania, almost since Marcellus drilling began in the state.	*Petroleum Drilling*
Frack water recycling	The reuse of water or brine that comes up out of the well after the shale has been fractured. Companies treat the used fluid and dilute it with new fresh water. After Pennsylvania passed stricter limits on total dissolved solids (TDS) discharge, companies have been recycling more frack fluid.	*Petroleum Drilling*
Fraction	One of the portions of fractional distillation having a restricted boiling range.	*Petroleum Engineering*
Fractionating column	Process unit that separates various fractions of petroleum by simple distillation, with the column tapped at various levels to separate and remove fractions according to their boiling ranges.	*Petroleum Engineering*
Fractionation	The process by which saturated hydrocarbons are removed from natural gas and separated into distinct products, or "fractions," such as propane, butane, and ethane.	*Energy*
Fractire mechanics	Analysis of failure of structural materials with preexisting flaws.	*Material Process*
Fracture	?	*Engineering Physics*
Fracture (fatigue)	Fatigue fracture results from frequently exceeding a fatigue strength limit, often under bending condition or excessive compressive loads. Cracks are initiated at little defects and propagate stepwise through the component.	*Reliability Engineering*
Fracture (forced)	Forced fracture is caused by high stress concentration in excess of material tensile strength by local overloading (e.g. by impact).	*Reliability Engineering*
Fracture toughness	Critical value of the stress intensity factor for which crack extensions occurs.	*Engineering Physics*
Fracture	A break in the rock, the opening of which allows mineral-bearing solutions to enter. A "cross-fracture" is a minor break extending at more-or-less right angles to the direction of the principal fractures.	*Mining*
Fracturing	A method of breaking down a formation by pumping fluid at very high pressures. The objective is to increase production rates from a reservoir.	*Petroleum Drilling*
Fragility	The maximum load an equipment can stand before failure (malfunction, irreversible loss of performance or structural damage) occurs.	*Reliability Engineering*
Fragility test	Expensive but highly useful dynamic tests of several samples (to account for variations in tolerances, material properties and manufacturing processes) at potentially destructive frequencies, to determine fragility.	*Reliability Engineering*
Frame	The structure which supports the machinery components of a conveyor.	*Equipment*
Frame Relay	A high-speed, packet-switched data communications service similar to X.25. Frame relay is a leading contender for LAN-to-LAN interconnect services, and is well suited to the burst-intensive demands of LAN environments.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Frame Spacer	Cross members to maintain frame rail spacing. Also referred to as Bed Spacer.	*Manufacturing*
Framer	A device used to align/synchronize to an embedded framing pattern in a serial bit stream. Once synchronized and data fields are properly aligned, overhead bits for alarms, performance monitoring, embedded signaling, etc. may be extracted and processed.	*Electrical Engineering*
Framework Convention on Climate Change (FCCC)	An agreement opened for signature at the "Earth Summit" in Rio de Janeiro, Brazil, on June 4, 1992, which has the goal of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent significant anthropogenically forced climate change.	*Energy*
Framework members	The structural members designed to support all live and dead loads. They consist of columns, horizontal ties, diagonals and joists and beams. Can also include shear walls if designed accordingly as in a concrete tower.	*Facility Engineering*
Franchise Area	This is the territory in which a utility system supplies service to customers.	*Energy*
Franchise Monopoly	Under this system, a utility has the right to be the sole or principal supplier of electric power at a retail level in a specific region or area known as the franchise service territory. In return for its sole supplier privilege, the utility has an obligation to serve anyone who requests service, and agrees to be accountable to state and/or federal regulatory bodies that regulate the utility's performance, accounting procedures, pricing structures, and plant planning and siting.	*Energy*
Frass	Solid larval insect excrement; mixed with wood fragments in woodboring or bark-boring insects.	*Forestry*
Free air	Any compressible air trapped within a hydraulic system that does not dissolve to form a part of the system fluid.	*Mechanical, Process, and Operations*
Free Air	Air at ambient temperature, pressure, relative humidity, and density.	*Lubrication*
Free Along Side (FAS)	Shipping term meaning that the price quoted for goods includes carriage to the ship, but does not include loading or subsequent carriage costs.	*Maintenance*
Free alongside ship (f.a.s.)	The value of a commodity at the port of exportation, generally including the purchase price plus all charges incurred in placing the commodity alongside the carrier at the port of exportation.	*Energy*
Free coal	Free coal,	*Mining*
Free electron	Conducting electron in a metal.	*Material Process*
Free energy	A thermodynamic quantity that is a function of both the internal energy and entropy of a system.	*Engineering Physics*
Free Gold	Gold easily separated from the quartz or dirt.	*Mining*
Free Labor Market	theoretically a place where an employer is free to hire workers and where there is competitive bidding by employees for available jobs.	*Industrial Relations*
Free level	another term for an adit.	*Mining*
Free milling	Ores of gold or silver from which the precious metals can be recovered by concentrating methods without resorting to pressure leaching or other chemical treatment.	*Mining*
Free milling	Ores of gold or silver from which the precious metals can be recovered by concentrating methods without resort to roasting or chemical treatment.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
free on board	Goods delivered without delivery charge and placed on board a carrier at a specific point. Carrier may be a truck, barge, ship or airplane.	*Agriculture*
Free On Board (City, Shipping point, or Delivered)	Free On Board (seller will load truck or rail car). "FOB delivered" keeps the vendor responsible for the shipment until it reaches your door. "FOB shipping point" or "FOB originating city" makes you responsible for the shipment. If there is a problem with a FOB originating city shipment, you still have to pay the vendor and file a claim with the carrier.	*Maintenance*
Free on board (f.o.b.)	In the international petroleum industry, this term typically refers to the price of oil or natural gas actually charged at the producing country's port of loading. The reported f.o.b. price includes deductions for any rebates and discounts or additions of premiums where applicable and should be the actual price paid to the seller with no adjustment for the cost of ocean freight, insurance, or credit. For coal and breeze, f.o.b. has the dual meaning of the price of coal at the coal mine, or the price of coal at the producer country's port of loading, both before the cost of insurance, freight, and credit.	*Energy*
Free Position of the Plunger	The position of the plunger when there is no external force other than gravity applied to it.	*Electrical Engineering*
Free product	a petroleum hydrocarbon in the liquid ("free" or non-aqueous) phase (see also non-aqueous phase liquid, NAPL).	*Chemical*
Free radical	Reactive atom or group of atoms containing an unpaired electron.	*Material Process*
Free-Range	livestock or poultry that is permitted to forage in large area of open land rather than confined to a feedlot. According to the USDA "free range" must have access to the outdoors, but the amount or quality is not regulated.	*Agriculture*
Free Riders	employees who do not belong to a contract holding union.	*Industrial Relations*
Free vibration	Free vibration occurs without forcing, as after a reed is plucked.	*Reliability Engineering*
Free water	Water droplets or globules in the system fluid that tend to accumulate at the bottom or top of the system fluid depending on the fluid's specific gravity.	*Mechanical, Process, and Operations*
Free well	A well drilled and equipped by an assignee as consideration for the assignment of a fractional share of the working interest, commonly under a farm-out agreement.	*Energy*
Freeboard	Civil Engineering the height of the watertight portion of a building or other construction above a given level of water in a river, lake, etc.	*Civil Engineering*
Freedom of Association	the right of people to assemble in public or private for the purpose of joining for the common cause.	*Industrial Relations*
Freedom of Contract	a doctrine developed by the courts in many labor cases holding that certain types of legislation infringed upon the rights of employees "to contract".	*Industrial Relations*
Freedom of Organization	the right protected by federal law to organize for the purpose of collective bargaining.	*Industrial Relations*
Freehold oil and gas rights	Mineral rights not owned by the Province. The Federal Government, First Nations, corporations, or individuals may own these mineral rights.	*Petroleum Engineering*
Freeze	the fixing or stabalizing of wages, prices, or manpower at a point desired by government during a period of emergency or war.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Freezing Point	The temperature at which the substance goes from the liquid phase to the solid phase.	*General Engineering*
Freight Bill	The carrier's invoice for transportation charges applicable to a shipment.	*Procurement*
Freight Claims	A claim against a carrier due to loss of, or damage to, goods transported by that carrier; also for erroneous rates and weights in assessment of freight charges.	*Procurement*
Frenkel Defect	In an ionic solid, a cation-vacancy and cation-interstitial pair.	*Engineering Physics*
Frenkel defect	Vacancy interstitial defect combination.	*Material Process*
Frenzied coal	coal crushed by weight, usually in pillars, and rendered beyond economic use.	*Mining*
Frequency	The number of cycles over a specified time period over which an event occurs. The reciprocal is called the period.	*General Engineering*
Frequency	Oscillations	*Electrical Engineering*
Frequency Bin	The frequency range and resolution on the frequency axis of a spectrum graph depends on the sampling rate and the size of the data record (the number of acquisition points). The number of frequency points or lines or bands in the power spectrum is NRECORD/2, where NRECORD is the number of signal points captured in the time domain.	*Electrical Engineering*
Frequency converter (frequency changer)	A device used to adjust the frequency of alternating current. Frequency converters are a central component in variable-speed drives to control the speed, torque or power on the shaft of an electric motor by adjusting the frequency and voltage of the electricity powering the machine. Frequency converters are used to control the rotational speed of wind turbines to stabilize the frequency of the electricity they produce.	*Electrical*
Frequency converters	also used to connect electrical systems operating at different frequencies. For example in shore-to-ship power connections, these devices are used to enable ships, most of which have onboard electrical systems running at 60 Hz, to onshore power supplies that most commonly run at 50 Hz.	*Electrical*
Frequency Diversity	In radio systems, Frequency Diversity spreads a signal across multiple channels by transmitting multiple versions of the signal on different frequencies.	*Electrical Engineering*
Frequency Hopping Spread Spectrum	A transmission technology in which the data signal is modulated by a narrow-band carrier signal which changes frequency ("hops") over a wide band of frequencies. The hopping seems random but is prescribed by an algorithm known to the receiving system.	*Electrical Engineering*
Frequency Modulated Output	A transducer output which is obtained in the form of a deviation from a center frequency, where the deviation is proportional to the applied stimulus.	*Electrical*
Frequency Modulation	A modulation method in which the carrier frequency changes with the input signal amplitude.	*Electrical Engineering*
Frequency of errors, frequency of occurrence of analytical errors,	A performance characteristic of a measurement procedure that describes how frequently analytical errors are expected to occur. Related to the stability of the measurement procedure.	*Quality*
Frequency of Inspection	The regularity with which inspections are undertaken. Typically these are: Annually (once per year)	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Frequency of Vibration	The number of cycles occurring in a given unit of time. RPM - revolutions per minute. CPM- cycles per minute.	*General Engineering*
Frequency Output	An output in the form of frequency which varies as a function of the applied input.	*General Engineering*
Frequency range	**Frequency range** - see bandwidth.	*Reliability Engineering*
Frequency response	The portion of the frequency spectrum over which a device can be used, within specified limits of amplitude error.	*Reliability Engineering*
Frequency Response Characteristic	The frequency dependent relation, in both amplitude and phase, between steady-state sinusoidal inputs and the resulting fundamental sinusoidal outputs.	*Process Control*
Frequency Shift Keying	A method of transmitting digital data by shifting the frequency of a carrier signal to represent binary 1s and 0s.	*Electrical Engineering*
Frequency spectrum	A description of the resolution of any electrical signal into its frequency components, giving the amplitude (sometimes also phase) of each component.	*Reliability Engineering*
Frequency Synthesizer	A frequency synthesizer is an electronic circuit that uses an oscillator to generate a preprogrammed set of stable frequencies with minimal phase noise. Primary applications include wireless/RF devices such as radios, set top boxes, and GPS.	*Electrical Engineering*
Frequency, Natural	The frequency of free (not forced) oscillations of the sensing element of a fully assembled transducer.	*Electrical*
Frequency, Natural	The frequency of free (not forced) oscillations of the sensing element of a fully assembled sensor.	*Electrical Engineering*
Fresh air base	an underground station in the intake airway which is used by the rescue teams during underground fires and rescue operations. The base has to be as close to the fire as safety will permit, adequately ventilated, and in constant touch with the surface by telephone.	*Mining*
Fresh feed input	Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.	*Energy*
Fresh feeds	Crude oil or petroleum distillates that are being fed to processing units for the first time.	*Energy*
Fresh water	sodium-chloride-free water, especially when considered as a natural resource	*Materials Process*
Fretting	Wear resulting from small amplitude motion between two surfaces; may produce red or black oxide.	*Lubrication*
Fretting	A type of wear resulting from minute reciprocal sliding motion which produces fine particulate contamination without chemical change.	*Mechanical, Process, and Operations*
Fretting Corrosion	A form of fretting wear in which corrosion plays a significant role.	*Paint and Coatings*
Fretting Corrosion	Can take place when two metals are held in contact and subjected to repeated small sliding, relative motions. Other names for this type of corrosion include wear oxidation, friction oxidation, chafing, and brinelling.	*Lubrication*
Fretting Wear	Wear arising as a result of fretting (see fretting).	*Paint and Coatings*
Friable	easily crumbled, not cohesive or sticky.	*Chemical*

Term	Definition	*Industry*
Friable	Easy to break, or crumbling naturally. Descriptive of certain rocks and minerals.	*Mining*
Friction	Resistance to motion of one object over another. Friction depends on the smoothness of the contacting surfaces, as well as the force with which they are pressed together.	*Lubrication*
Friction	The resisting force encountered at the common boundary between two bodies when, under the action of an external force, one body, moves or tends to move relative to the surface of the other.	*Lubrication*
Friction Clutch	Any clutch in which driving effort is developed by contact between pressure elements through friction alone. General use is for the purpose of engaging and disengaging revolving parts. Also used as a safety device to permit slip when over	*Equipment*
Friction Stabilizers	Coating materials used on fasteners with the intention of reducing the scatter in the thread and bearing surface friction coefficients.	*Maintenance*
Frictional Unemployment	a catch-all category of those unemployed because of temporary conditions in the labor market, personal desires of workers with respect to available jobs, lack or mobility in the labor market because of the conditions set by employers or unions.	*Industrial Relations*
Fringe Benefits	non-wage benefits or payments received by workers.	*Industrial Relations*
Front connected	A condition wherein piping connections are on normally exposed surfaces of hydraulic components.	*Mechanical, Process, and Operations*
Front Wheel Drive (FWD)	A drive system where the engine and trans axle components apply the driving force to the front wheels rather than the rear wheels. Benefits of Front-Wheel drive include: Maximized passenger space. Enhanced cargo area. excellent drive traction; particularly on wet or Slippery surfaces, since the drive is through the front wheels, which carry a heavier load.	*Mechanical Engineering*
Front-end loader	a tractor with a digging bucket mounted and operated on the front. It is often used to remove overburden in contour mining and to load coal.	*Energy*
Frost	Field of micropits; form of microadhesive wear.	*Lubrication*
Frosting	An apparently crystalline pattern on the surface of a plastic.	*Material Process*
Frozen Seniority	the protection of a worker's length of service as of a specific time.	*Industrial Relations*
FRS	Financial Reporting System Survey (EIA survey).	*Energy*
Fructose	A 6-carbon sugar.	*Agriculture*
Fruiting body	A specialized structure, often macroscopic, on or in which spores are produced.	*Forestry*
Frush,	brittle, soft and easily broken up. As in the floor of a roadway when pavement brushing. (Scot.).	*Mining*
Frying pan	see Pit pan.	*Mining*
FS	Forest Service, an agency of the USDA.	*Agriculture*
FSIS	Food Safety and Inspection Service, a consumer protection agency within the USDA. Its mission is to protect consumers by ensuring that meat, poultry, and egg products are safe, wholesome, and accurately labeled.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
FSV	short for Free Steered Vehicle, a rubber-tyred, self-propelled, diesel powered general purpose underground vehicle.	*Mining*
FT	Fischer–Tropsch	*Petro-Chemical Abbreviations*
FTA	Fault Tree Analysis	*Plant Engineering*
FTC	Federal Trade Commission (US)	*Petro-Chemical Abbreviations*
F-test	A statistical test of significance in which the difference between two variances is tested. A variance is the square of a standard deviation. The F-test is often used to compare the imprecision of two analytical methods. The hypothesis being tested (called a null hypothesis) is that there is no difference between the two variances. If the calculated F-value is greater than the critical value which is obtained from a statistics table, then the null hypothesis is rejected. This means that a difference exists and that the difference is statistically significant, or real. If the calculated F-value is less than the critical value, the null hypothesis cannot be rejected, therefore, there is no difference between the two variances being tested, and the difference is not statistically significant.	*Quality*
FTIR	Fourier Transform Infrared Spectroscopy. A test where infrared light absorption is used for assessing levels of soot, sulfates, oxidation, nitro-oxidation, glycol, fuel, and water contaminants.	*Lubrication*
FTIR = Fourier Transform Infrared Spectroscopy	A test where infrared light absorption is used for assessing levels of soot, sulfates, oxidation, nitro-oxidation, glycol, fuel, and water contaminants.	*Oil Analysis*
ft-lbs	foot-pounds (of torque or turning effort) gpm - gallons per minute	*Mechanical, Process, and Operations*
FTP	File Transfer Protocol	*Energy*
FTP (File Transfer Protocol) Server	Enables users to open a connection to a host computer and transfer files between the host computer and a remote computer.	*Quality Engineering*
FTTN	FTTN is "Fiber-to-the-node."	*Electrical Engineering*
Fuel	Any material substance that can be consumed to supply heat or power. Included are petroleum, coal, and natural gas (the fossil fuels), and other consumable materials, such as uranium, biomass, and hydrogen.	*Energy*
Fuel Adjustment	A clause in the rate schedule that provides for adjustment of the amount of a bill as the cost of fuel varies from a specified base amount per unit. The specified base amount is determined when rates are approved. This item is shown on all customer bills and indicates the current rate for any adjustment in the cost of fuel used by the company. It can be a credit or a debit. The fuel adjustment lags two months behind the actual price of the fuel. For example, the cost of oil in January will be reflected in March's fuel adjustment.	*Energy*
Fuel cell	A device in which chemical energy released by the oxidation of a liquid (such as methanol) or gaseous fuel is converted directly into electrical energy.	*Electrical*
Fuel Cell	An advanced energy conversion device that converts fuels to power very efficiently and with minimal environmental impact.	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
Fuel Chain	The chain of activities involved in transforming energy into forms more convenient for society. This chain may include some or all of the following: fuel exploration, extraction, preparation, transportation, conversion to electricity, distribution and waste disposal.	*Energy*
Fuel Charge	The rate charged per kilowatt-hour (or cubic feet) to cover the costs of the fuel used to produce power (or gas)	*Energy*
Fuel cycle	The entire set of sequential processes or stages involved in the utilization of fuel, including extraction, transformation, transportation, and combustion. Emissions generally occur at each stage of the fuel cycle.	*Energy*
Fuel Dilution	The amount of raw, unburned fuel that ends up in the crankcase of an engine. It lowers an oil's viscosity and flash point, creating friction-related wear almost immediately by reducing film strength.	*Lubrication*
Fuel Diversity	A utility or power supplier that has power stations using several different types of fuel. Avoiding over-reliance on one fuel helps avoid the risk of supply interruption and price spikes.	*Energy*
Fuel Economy	The amount of fuel required to move a machine over a given distance.	*Lubrication*
Fuel efficiency	See Miles per gallon.	*Energy*
Fuel emergencies	An emergency that exists when supplies of fuels or hydroelectric storage for generation are at a level or estimated to be at a level that would threaten the reliability or adequacy of bulk electric power supply. The following factors should be taken into account to determine that a fuel emergency exists 1. Fuel stock or hydroelectric project water storage levels are 50 percent or less of normal for that particular time of the year and a continued downward trend in fuel stock or hydroelectric project water storage level is estimated; or 2. Unscheduled dispatch or emergency generation is causing an abnormal use of a particular fuel type, such that the future supply of stocks of that fuel could reach a level that threatens the reliability or adequacy of bulk electric power supply.	*Energy*
Fuel Escalation	The annual rate of increase of the cost of fuel, including inflation and real escalation, resulting from resource depletion, increased demand, etc.	*Energy*
Fuel ethanol	Ethanol intended for fuel use. Fuel ethanol in the United States must be anhydrous (less than 1 percent water). Fuel ethanol is denatured (made unfit for human consumption), usually prior to transport from the ethanol production facility, by adding 2 to 5 volume percent petroleum, typically pentanes plus or conventional motor gasoline. Fuel ethanol is used principally for blending in low concentrations with motor gasoline as an oxygenate or octane enhancer. In high concentrations, it is used to fuel alternative-fuel vehicles specially designed for its use. See Alternative-Fuel Vehicle, Denaturant, E85, Ethanol, Fuel Ethanol Minus Denaturant, and Oxygenates.	*Energy*
Fuel Ethanol Minus Denaturant	An unobserved quantity of anhydrous, biomass-derived, undenatured ethanol for fuel use. The quantity is obtained by subtracting the estimated denaturant volume from fuel ethanol volume. Fuel ethanol minus denaturant is counted as renewable energy, while denaturant is counted as nonrenewable fuel. See Denaturant, Ethanol, Fuel Ethanol, Nonrenewable Fuels, and Oxygenates	*Energy*
Fuel Expenses	Costs associated with the generation of electricity.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fuel gas	Refinery gas used for heating.	*Petroleum Engineering*
Fuel injection	A fuel delivery system whereby gasoline is pumped to one or more fuel injectors under high pressure. The fuel injectors are valves that, at the appropriate times, open to allow fuel to be sprayed or atomized into a throttle bore or into the intake manifold ports. The fuel injectors are usually solenoid operated valves under the control of the vehicle's on-board computer (thus the term "electronic fuel injection"). The fuel efficiency of fuel injection systems is less temperature-dependent than carburetor systems. Diesel engines always use injectors.	*Energy*
Fuel Injection, Electronic	A computer-controlled method of delivering fuel under pressure. The computer monitors signals from coolant temperatures, manifold vacuum, exhaust oxygen sensor, and engine cranking sensor. It "tells" the injectors to release and adjust the fuel to yield an air/fuel mixture assuring engine operation well matched with emission requirements, optimum fuel economy and overall vehicle performance.	*Mechanical Engineering*
Fuel loading	A buildup of easily ignited, fast-burning fuels such as pinestraw, small branches, and other highly flammable, woody material.	*Forestry*
Fuel mixtures	containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels	*Energy*
Fuel oil	A liquid petroleum product less volatile than gasoline, used as an energy source. Fuel oil includes distillate fuel oil (No. 1, No. 2, and No. 4), and residual fuel oil (No. 5 and No.6).	*Energy*
Fuel oil supplier	See Energy supplier.	*Energy*
Fuel Pump	A mechanical or electrical device that draws fuel from the fuel tank and delivers it to the carburetor, injectors, or injector pump.	*Mechanical Engineering*
Fuel purchase agreement	An agreement between a company and a fuel provider which stipulates that the company agrees to purchase its fuel from the fuel provider. If the company has a credit card for use at a fuel provider's locations, but is not bound by an additional agreement to purchase fuel from that provider, the credit card agreement alone is not considered a fuel purchase agreement.	*Energy*
Fuel ratio	The ratio of fixed carbon to volatile matter in coal.	*Energy*
Fuel switching capability	The short-term capability of a manufacturing establishment to have used substitute energy sources in place of those actually consumed. Capability to use substitute energy sources means that the establishment's combustors (for example, boilers, furnaces, ovens, and blast furnaces) had the machinery or equipment either in place or available for installation so that substitutions could actually have been introduced within 30 days without extensive modifications. Fuel-switching capability does not depend on the relative prices of energy sources; it depends only on the characteristics of the equipment and certain legal constraints.	*Energy*
Fuel wood	Wood and wood products, possibly including scrubs and branches, etc, bought or gathered, and used by direct combustion.	*Energy*
Fuel	A substance that can be burned to product heat.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fuel/fabricator assembly identifier	Individual assembly identifier based on a numbering scheme developed by individual fuel fabricators. Most fuel fabricator assembly identifiers schemes closely match the scheme developed by the American National Standards Institute (ANSI) and are therefore unique.	*Energy*
fuels (other than alcohol)	derived from biological materials (biofuels such as soy diesel fuel)	*Energy*
Fuels solvent deasphalting	A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.	*Energy*
Fuel-switching DSM program assistance	DSM program assistance where the sponsor encourages consumers to change from one fuel to another for a particular end-use service. For example, utilities might encourage consumers to replace electric water heaters with gas units or encourage industrial consumers to use electric microwave heaters instead of natural gas-heaters.	*Energy*
Fuel-Use Attributes	Fuel-use attributes are important to utilities concerned about reliance on a single fuel or reduction in usage of a particular fuel. These attributes include annual fuel consumption by type and percent energy generation by fuel.	*Energy*
Fugitive emissions	Unintended leaks of gas from the processing, transmission, and/or transportation of fossil fuels.	*Energy*
Full ben	the target achieved, 'a full day's work'. (Scot.).	*Mining*
Full bore (full opening)	Describes a valve in which the bore (port) is nominally equal to the bore of the connecting pipe.	*General Mechanical*
Full bore (full port)	Describes a valve in which the bore (port) is nominally equal to the bore of the connecting pipe.	*Mechanical*
Full Bridge	A Wheatstone bridge configuration utilizing four active elements or strain gages.	*General Engineering*
Full Bridge	A Wheatstone bridge configuration utilizing four active elements or strain gages.	*Electronic Process*
Full Crew Rule	provisions generally in law seeking to satisfy safety requirements by specifying a full complement of men to handle an operation.	*Industrial Relations*
Full Diameter Shank	Equal to major diameter of thread. Produced by cut thread or by roll thread on extruded blank. Characteristic of machine bolts and cap screws.	*Fastening*
Full Dinner Pail	a demand of wage earners directed to provide adequate income for the necessities of life.	*Industrial Relations*
Full Duplex	A channel providing simultaneous transmission in both directions.	*Electrical Engineering*
Full Employment	a desired goal in a free enterprise system which provides employment opportunities for all who desire employment and are able and willing to work.	*Industrial Relations*
Full flow	In a filter, the condition where all the fluid must pass through the filter element or medium.	*Mechanical, Process, and Operations*
Full flow filter	A filter that, under specified conditions, filters all influent flow.	*Oil Analysis*
Full flow Pressure	The pressure at which a valve is wide open and passes its full flow.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Full Fluid Film Lubrication	Presence of a continuous lubricating film sufficient to completely separate two surfaces, as distinct from boundary lubrication. Full-fluid-film lubrication is normally hydrodynamic lubrication, whereby the oil adheres to the moving part and is drawn into the area between the sliding surfaces, where it forms a pressure	*Lubrication*
Full forced outage	The net capability of main generating units that are unavailable for load for emergency reasons.	*Energy*
Full opening	Describes a valve whose bore (port) is nominally equal to the bore of the connecting pipe.	*Mechanical*
Full Overtravel Force	The force required to depress the plunger of a switch to the full overtravel point.	*Electrical Engineering*
Full Overtravel Point	The position of the plunger beyond which further overtravel would cause damage to the switch or actuator.	*Electrical Engineering*
Full penetration weld	Describes the type of weld wherein the weld metal extends through the complete thickness of the parts being joined.	*Mechanical*
Full power day	The equivalent of 24 hours of full power operation by a reactor. The number of full power days in a specific cycle is the product of the reactor's capacity factor and the length of the cycle.	*Energy*
Full power operation	Operation of a unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.	*Energy*
Full requirements consumer	A wholesale consumer without other generating resources whose electric energy seller is the sole source of long-term firm power for the consumer's service area. The terms and conditions of sale are equivalent to the seller's obligations to its own retail service, if any.	*Energy*
Full Scale Output	The algebraic difference between the minimum output and maximum output.	*General Engineering*
Full Scale Output (Span)	The algebraic difference between output curve end points (outputs at specified upper and lower output limits).	*Electrical Engineering*
fullerenes	allotropic forms of carbon made up of a network of 60 carbon atoms bonded together in the shape of a soccer ball also known as buckyballs	*Physics*
Full-Fillet Weld	A fillet weld whose size is equal to the thickness of the thinner member joined.8	*Maintenance and Repair*
Full-flow filtration	A system of filtration in which the total flow of a circulating fluid system passes through a filter.	*Oil Analysis*
Full-fluid-film lubrication	Presence of a continuous lubricating film sufficient to completely separate two surfaces, as distinct from boundary lubrication. Full-fluid-film lubrication is normally hydrodynamic lubrication, whereby the oil adheres to the moving part and is drawn into the area between the sliding surfaces, where it forms a pressure -- or hydrodynamic -- wedge.	*Oil Analysis*
Full-Forced Outage	The net capability of main generating units that is unavailable for load for emergency reasons.	*Energy*
Full-Forced Outage	Net capability of generating units unavailable for load for emergencies.	*Energy*
Full-Time Earnings	the amount earned by a worker who has worked a full schedule of hours for a designated period of time.	*Industrial Relations*
Full-Time Job	a job which requires the complete attention of the employee for a set work schedule.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Full-Time Worker Rate	the wage rate paid to a regular employee who works on a full-time basis.	*Industrial Relations*
Fully developed laminar flow	Laminar flow along a channel or pipe that only has velocity components in the main direction of the flow. The velocity profile perpendicular to the flow does not change downstream in the flow.	*Chemical*
Fumarole	A vent from which gas or steam issue; a geyser or spring that emits gases.	*Energy*
Fumigation	The natural or controlled exposure of plants to toxic gases or volatile substances.	*Forestry*
Function	A definition of the objective that an equipment item intents to achieve, with respect to its role in the process. The statement should specify the operating context and contain a verb, a noun (object), and a performance standard. For example: "To supply crude oil to the separator V1022 at a flow rate of 60 m3 per hour and a pressure of between 5.5 Bar and 6 Bar."	*Maintenance*
Function Block	Smart devices on a fieldbus are capable of operating independently. The microprocessors which store control software are the function blocks. They are particular to an application.	*Control Engineering*
Function Check-out	Action taken after maintenance activities to verify that the asset is able to perform the required function.	*Maintenance*
Functional	Used In Reliability Centered Maintenance Terminology. The Inability Of An Item Of Equipment To Fulfill One Or More Of Its Functions. Interchangeably Used With Failure.	*Plant Engineering*
Functional biomaterials	materials that interact or replace biological systems with a primary function other than providing support, such as artificial blood, or skin	*Physics*
Functional Failure	A specific failure that refers to the termination of, or degradation in the ability of an item to perform any one of the stated required functions.	*Maintenance*
Functional sensitivity, FS	This term is commonly used to refer to an estimate of detection limit that is calculated from replicate measurements of low concentration patient samples. By definition, FS is the lowest concentration at which the method provides a 20% coefficient of variation (CV).	*Quality*
Functional Test	See Failure Finding Task	*Plant Engineering*
Functional Unbundling	The functional separation of generation, transmission, and distribution transactions within a vertically integrated utility without selling of "spinning off" these functions into separate companies.	*Energy*
Functionalization	a technical term used to describe the organization of management functions and work performance in a manner designed most effectively to achieve the basic objectives on an enterprise.	*Industrial Relations*
Functions	Three mode PID controller. A time proportioning controller with integral and derivative functions. The integral function automatically adjusts the system temperature to the set point temperature to eliminate droop due to the time proportioning function.	*General Engineering*
Fundamental Deviation	An intentional clearance between internal or external thread and the design form of the thread when the thread form is on its maximum metal condition. For metric threads the fundamental deviation are designated by letters, capitals for internal threads and small letters for external threads. Some tolerance classes have a fundamental deviation of zero. For imperial threads the fundamental deviation is called the allowance.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Fundamental frequency	The number of hertz or cycles per second of the lowest-frequency component of a complex, cyclic motion. (See also **Harmonic** and **Subharmonic**.)	*Reliability Engineering*
Fundamental mode of vibration	The mode having the lowest natural frequency. • To ensure personnel and public safety	*Reliability Engineering*
Fundamental Triangle Height	The fundamental triangle height is normally designated with the letter H. This is the height of the thread when the profile is extended to a sharp vee form. For 60 degree thread forms such as metric and Unified thread series, H equals 0.866025 times the thread pitch.	*Maintenance*
Funded Pension Pay	a plan in which pension benefits are built up over a period by setting aside funds in reserve.	*Industrial Relations*
Funders' Forum	A group of people with an interest in establishing infrastructure funding for the work of The Cochrane Collaboration. This initiative is led by the Department of Health in England; the group usually meets during Cochrane Colloquia.	*Quality Engineering*
Funding Arbiter	In forming a commercial sponsorship policy for The Cochrane Collaboration, the CCSG established the position of Funding Arbiter in March 2004, analogous to the Publication Arbiter. The Funding Arbiter is a CCSG member and convenes a standing panel of three to give guidance on difficult cases of potential sponsorship. Also called: Arbiter, Funding	*Quality Engineering*
Fungi	Simple, plant-like life forms that lack true roots, stems, leaves, and chlorophyll. They are filamentous in structure (e.g., mushrooms, mildews, molds, and yeasts).	*Chemical Engineering*
Fungi	aerobic, multicellular, nonphotosynthetic, heterotrophic microorganisms. The fungi include mushrooms, yeast, molds, and smuts. Most fungi are saprophytes, obtaining their nourishment from dead organic matter. Along with bacteria, fungi are the principal organisms responsible for the decomposition of carbon in the biosphere. Fungi have two ecological advantages over bacteria - (1) they can grow in low moisture areas, and (2) they can grow in low pH environments.	*Chemical*
Fungicide	A chemical agent that destroys fungi.	*Chemistry*
Funicular	A funicular shape is one similar to that taken by a suspended chain or string subjected to a particular loading.	*Engineering Physics*
Funnel plot	A graphical display of some measure of study precision plotted against effect size that can be used to investigate whether there is a link between study size and treatment effect. One possible cause of an observed association is reporting bias.	*Quality Engineering*
Furfural or furfuralaldehyde(C4H3 OCHO) Colorless liquid	An aldehyde obtained from pentosons (found in farm products such as oat hulls, woody fibers, etc.) which can be condensed with phenol and other substances to form synthetic resins and which itself polymerizes.	*Material Process*
Furfuryl alcohol	A solvent-furan.	*Material Process*
Furlough	a leave of absence from work or other duties usually initiated by an employee to meet some special problem.	*Industrial Relations*
Furnace	The part of a boiler or warm-air space-heating plant in which combustion takes place.	*Energy*
Furnace Charging	An overhead crane moves the scrap in the charge bucket to the furnace for melting. It takes three or four charge buckets to produce one heat.	*Steel*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Furnace coke plant	A coke plant whose coke production is used primarily by the producing company.	*Energy*
Furnace or Firepan,	a coal fire at the bottom of the upcast shaft that causes air to rise in the shaft and create a ventilation circuit.	*Mining*
Furnaces that heat directly, without using steam or hot water (similar to a residential furnace)	Furnaces burn natural gas, fuel oil, propane/ butane (bottled gas), or electricity to warm the air. The warmed air is then distributed throughout the building through ducts. Many people use the words "boilers" and "furnaces" interchangeably. They are not the same. We mean that warm air is produced directly by burning some fuel. Warm-air furnaces typically rely on air ducts to carry the warm air throughout the building. Warm-air furnaces are often built in combination with central air-conditioning systems, so that they can use the same air ducts for either heating or air-conditioning (depending on the season). Other terms for describing this type of equipment include "central system," "split system," and "forced air/forces air furnace."	*Energy*
Furniture Cleaner/Polish	A liquid, paste or aerosol spray designed to remove dust and stains from wood surfaces, confer shine and protection against water spots, and is formulated to reduce wax buildup with continued use.	*Chemistry*
Furring	in building, thin boards providing a basis for laths, plaster, etc.	*Petroleum Drilling*
furrow	A narrow grove made in the ground by a plow. Furrows serve different purposes, one of which is to contain a rill of water for surface irrigation.	*Agriculture*
Fuse	A cord-like substance used in the ignition of explosives. Black powder is entrained in the cord and, when lit, burns along the cord at a set rate. A fuse can be safely used to ignite a cap, which is the primer for an explosive.	*Mining*
Fused Coatings	A process in which the coating material is deposited by thermal spraying and then fused by post heat treatment. This can be done by flame, induction heating, furnace or by laser.	*Paint and Coatings*
Fused Crushed Powder	Powder formed from a fused solid mass which is then crushed to the appropriate size for spraying.	*Paint and Coatings*
Fusibility	The ease with which a material is melted.	*Material Process*
Fusion	The melting together of filler and base metal, or of base metal only, which results in coalescence.8	*Maintenance and Repair*
Fusion casting	Ceramic processing technique similar to metal casting.	*Material Process*
Fusion Zone	The area of base metal melted as determined on the cross section of a weld.	*Maintenance and Repair*
Future Benefit PM	Preventive maintenance (PM) tasks that are initiated by a breakdown rather than a schedule. The PM is done on a whole machine, assembly line, or process after a section or subsection breaks down. This is a popular method with manufacturing cells where the individual machines are closely coupled. When one machine breaks, the whole cell undergoes a preventive maintenance activity. Future benefit PM is considered "packaging of opportunistic work" given that an opportunity has arisen to do that work (often due to the failure of an associated piece of equipment).	*Maintenance*
Future Farmers of America (FFA)	an educational organization for young adults who plan to have a career in agriculture	*Agriculture*
Future Service Benefits	the retirement credits earned by a worker during the period of his membership in a pension plan.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Futures Contract	Legally binding agreement to buy or sell a commodity.	*Metallurgy*
Futures market	A trade center for quoting prices on contracts for the delivery of a specified quantity of a commodity at a specified time and place in the future.	*Energy*
Fuzzy Logic	Fuzzy logic is designed for situations where information is inexact and traditional digital on/off decisions are not possible. It divides data into vague categories such as "hot", "medium" and "cold".	*Control Engineering*
Fuzzy Logic controller	a rule based methodology in which system inputs (observables) are systematically and mathematically related to system outputs (controllables). A Fuzzy controller is a highly non-linear function. In the common engineering sense, the formulation of a Fuzzy controller is not model based; that is, the rules which govern the controller are not necessarily derived from a physics-based model of the system. Rather, the designer describes in approximate or vague terms the relationships between quantities thought or desired to hold true. There is nothing fuzzy about the logic itself; it is the words, represented with Fuzzy sets, that are ambiguous or uncertain. With Fuzzy logic a controller may be designed to employ experience and common sense knowledge, since rules-of-thumb exist mainly in the form of linguistic statements that are usually, but not always, true.	*Petroleum Drilling*
Fuzzy Logic	an extension of classical Boolean logic that uses Fuzzy sets rather than Boolean sets; is based on rules of the form "if … then …" in which inputs convert outputs--one fuzzy set transforming another.	*Petroleum Drilling*
Fuzzy rule	a logic statement that associates Fuzzy set input to Fuzzy set output. For example, If <Error> is [Near_Zero], Then <DStabilizer_Force> should be [No_Change]. Here, [Near_Zero] is a Fuzzy set that describes the observable <Error> in the vicinity of zero. [No_Change] is a Fuzzy set that describes the controllable <DStabilizer_Force> in the vicinity of zero.	*Petroleum Drilling*
Fuzzy set	a mathematical concept whereby the degree to which an element belongs to a particular notion about some domain of definition is classified as completely true (1), completely false (0), or partially true/false ([0-1]). For example, consider the domain of all room temperatures; 76.2 degrees Fahrenheit may be a member of the set of "comfortable room temperatures" to a degree of 0.5, and also of the set of "warm room temperatures" to a degree of 0.5, depending on where the Fuzzy sets (also called degree of membership functions) are defined. The mathematical manipulations of Fuzzy sets--Fuzzy Logic--are not vague.	*Petroleum Drilling*
Fuzzy	a general term that refers to a system or methodology that to some degree employs the use of one or multiple Fuzzy sets. Fuzzy controller, Fuzzy expert system, and Fuzzy neural net each are examples of different methodological systems that share the employment of fuzzy sets in their designs.	*Petroleum Drilling*
FWD	front- or four-wheel drive	*Mechanical*
FZG	Forschungstelle für Zahnräder und Getriebau	*Lubrication*
FZG Four Square Gear Oil Test	Used in developing industrial gear lubricants to meet equipment manufacturer's specifications. The FZG test equipment consists of two gear sets, arranged in a four square configuration, driven by an electric motor. The test gear set is run in the lubricant at gradually increased load stages until failure, which is the point at which a 10 milligram weight loss by the gear set is recorded. Also called Niemann Four Square Gear Oil Test.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
G	G	*Forestry*
g units or gravitational units.	A way to express an acceleration, in terms of a ratio. Divide a given acceleration by the appropriate value (on Earth use 9.80665 m/s² or 386.087 in/sec² or 32.1739 ft/sec²).	*Reliability Engineering*
G	Gas.	*Petroleum Drilling*
G.A.F. Carbonyl Iron Powders	Trade mark for microscopic, almost perfect spheres of extremely pure iron. They are produced in ten carefully controlled grades, ranging in particle size from one-half to fifteen microns in diameter. The iron content of some types is as high as 99.6–99.9%.	*Material Process*
G/C—Gas Condensate	G/C – Gas Condensate	*Petroleum Drilling*
G/C	Gas Condensate.	*Petroleum Drilling*
G-11	Trade mark for a brand of hexachlorophene.	*Material Process*
G-4	Trade mark for a brand of dichlorophene.	*Material Process*
G-942	Trade mark for specialty tanning product based on the partial sodium salt of a polymeric carboxylic acid. Viscous straw colored liquid approximately 25% solids. Use as a plumping and tanning agent, primarily for light weight skins.	*Material Process*
GAAP	See Generally Accepted Accounting Principles.	*Energy*
GaAs MESFET	A Gallium Arsenide (GaAs) Metal-Semiconductor Field-Effect-Transistor (MESFET) is a transistor built with gallium arsenide semiconductor material. The conducting channel is built using a metal-semiconductor (Schottky) junction.	*Electrical Engineering*
Gabbie	a hook on the end of a rope or chain. (Scot.).	*Mining*
Gabbro	A dark, coarse-grained igneous rock.	*Mining*
Gablock	see Ringer and Chain.	*Mining*
Gabon (1975-1994)	Gabon (1975-1994)	*Energy*
Gad or Moil	an iron wedge used for breaking down coal.	*Mining*
Gadolinite (YFeBe2(SiO4) 2O2)	A natural silicate of beryllium, iron, and the yttrium and rare earth metals. Black, greenish black, or brown, luster vitreous to greasy, hardness 6.5–7.0.	*Material Process*
Gadolinium (Gd)	Element having atomic number 64. Exhibits a high degree of magnetism, especially at low temperatures. Crystalline compounds of gadolinium, especially gadolinium sulfate octahydrate, are used in magnetic method of obtaining extremely low temperatures. Gadolinium may be of importance in the control of nuclear reactors.	*Material Process*
Gafite (–CH2CClCOOCH3–)	Trade mark for methyl alphachloroacrylate polymer in thermoplastic cast sheets. Glazing for supersonic aircraft, component in instruments, dials, lenses, signs, etc., is used.	*Material Process*
Gage	A standard SAE designation of wire sizes. Expressed in AWG (American wire gage). The larger the number the smaller the wire size.	*Mechanical Engineering*
Gage Factor	A measure of the ratio of the relative change of resistance to the relative change in length of a piezoresistive strain gage.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gage Factor	A measure of the ration of the relative change of resistance to the relative change in length of a resistive strain sensor (strain gage).	*Electrical Engineering*
Gage Length	The distance between two points where the measurement of strain occurs.	*General Engineering*
Gage Length	The distance between two points where the measurement of strain occurs.	*Electronic Process*
Gage manometer	A differential pressure gage in which pressure is indicated by the height of a liquid column of known density. Pressure is equal to the difference in vertical height between two connected columns multiplied by the density of the manometer liquid. Some forms of manometers are "U" tube, inclined tube, well, and bell types.	*Mechanical, Process, and Operations*
Gage pressure	Absolute pressure minus local atmospheric pressure.	*Electronic Process*
Gage Pressure	A form of differential pressure measurement in which atmospheric pressure is used as a reference.	*Electrical Engineering*
Gage Pressure Transducer	A transducer which measures pressure in relation to the ambient pressure.	*Electronic Process*
Gage, Pressure	A gage which indicates the pressure in the system to which it is connected.	*Mechanical, Process, and Operations*
Gage, Vacuum	A pressure gage for pressures less than atmospheric.	*Mechanical, Process, and Operations*
Gagging	a small embankment or heap of slack or rubbish made at the entrance to a heading as a means of fencing it off (S. Staffs.).	*Mining*
Gain	The amount of amplification used in an electrical circuit.	*Electrical*
Gain	The ratio of change in output divided by the change in input that caused it. Both input and output must be in the same units; hence gain is a dimensionless number.	*Electrical Engineering*
Gain (of the controller)	This is another way of expressing the "P" part of the PID controller. GAIN = 100/(Proportional Band). The more gain a controller has the faster the loop response and more oscillatory the process.	*Process Control Engineering*
Gain (of the process)	Gain is defined as the change in input divided by the change in output. A process with high gain will react more to the controller output changing. For example, picture yourself taking a shower. You are the controller. If you turned the hot water valve up by half a turn and the temperature changed by 10 degrees this would be a higher gain process than if the temperature changed only 3 degrees.	*Process Control*
Gain Error	The gain error of a data converter indicates how well the slope of an actual transfer function matches the slope of the ideal transfer function. Gain error is usually expressed in LSB or as a percent of full-scale range. Gain error can be calibrated out with hardware or in software. Gain error is the full-scale error minus the offset error.	*Electrical Engineering*
Gain Margin	The difference in the logarithms of the amplitude ratios at the frequency where the combined phase angle is 180 degrees lag is the GAIN MARGIN.	*Process Control*
Gain Sharing	any method whereby workers participate with management in gains due to increased productivity.	*Industrial Relations*
Gain, Closed Loop	The gain of a closed loop system, expressed as the ration of the output change to the input change at a specified frequency.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gain, Dynamic	The magnitude ration of the steady-state amplitude of the output sign from an element or system to the amplitude of the input signal to that element or system, for a sinusoidal signal. Note: It may be expressed as a ratio, or in decibels as 20 times the log of that ratio for a specified frequency.	*Process Control*
Gain, Loop	The ratio of the change in the return signal to the change in its corresponding error signal at a specified frequency. Note: The gain of the loop elements is frequently measured by opening the loop, with appropriate terminations. The gain so measured is often called the open loop gain.	*Process Control*
Gain, Proportional	The ratio of the change in output due to proportional control action to the change in input.	*Process Control*
Gain, Static	The value of the gain approached as a limit as frequency approaches zero.	*Process Control*
Gain,	a transverse, channel or cutting made in the sides of a roadway for the insertion of a dam or permanent stopping to prevent any gas escaping or air entering and to retain the dam in a firm position (S. Staffs.).	*Mining*
Gainful Occupation	any work for which a person receives pay or in which the person helps in the production of goods or services.	*Industrial Relations*
Gait,	a journey or a trip. Sometimes used for the distance a man travelled along the waggonway (N. East).	*Mining*
gal	gallon	*Energy*
Galactose (C6H12O6) A monosaccharide	Galactose (C6H12O6) A monosaccharide commonly occurring in milk sugar or lactose. White crystals soluble in water and alcohol, slightly soluble in glycerol.	*Material Process*
Galacturonic acid ($C_6H_{12}O_7$)	A compound found as a major constituent of plant pectine. It exhibits mutarotation, having both an alpha and a beta form. Soluble in water , slightly soluble in hot alcohol, insoluble in ether.	*Material Process*
Galalith	Trade name of a well known casein plastic of foreign make.	*Material Process*
Gale	a royalty, Forest of Dean.	*Mining*
Galee.	the owner of a gale (F. of D.).	*Mining*
Galega	Whole plant of Galega officinalls.	*Material Process*
Galena (galenite, lead glance) (PbS)	Natural lead sulfide. Color lead gray, streak lead gray, luster metallic. Soluble in strong nitric acid, also in excess of hot hydrochloric acid.	*Material Process*
Galena	Lead ore; sulfur and lead	*Mining*
Galex	Trade name for a stable non-oxidizing rosin consisting principally of dehydroabietic acid. Soluble in ordinary organic solvents, paraffin wax, beeswax, carnauba wax, natural and reclaim rubber and many natural and synthetic resins. Uses for rubber based pressure sensitive adhesives and tapes, water insoluble adhesives, extender for natural and synthetic resins, in the manufacture of soldering fluxes, metal salts, greases and lubricants, soaps, etc..	*Material Process*
Galipot gum	A resin similar to Burgundy pitch, obtained from Pinus maritima.	*Material Process*
Gall"	A swelling or outgrowth of tissue induced by a pathogen or insect on a slant. [1] Fin.Swe.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gallamine triethiodide acid (C6H3 (OCH2CH2N (C2H5)3I)3)	White, fluffy, hygroscopic powder, m.p. 150 °C (302 °F). Freely soluble in water, soluble in alcohol, very slightly soluble in chloroform, insoluble in ether.	*Material Process*
Gallery	A horizontal or a nearly horizontal underground passage, either natural or artificial.	*Mining*
Galliard balls	large ironstone concretions in sandstone, (Yorks.).	*Mining*
Galliard or Calliard	a compact sandstone with splintery fracture. - see Cank; or another name for ganister, (Yorks.).	*Mining*
Gallic acid (C6H2 (OH)3CO2H (H2O))	Colorless or slightly yellow, crystalline needles or prismas. Soluble in alcohol and glycerol, sparingly soluble in water and ether.	*Material Process*
Galling	An action that can occur when unsuitable materials, particularly stainless steels, rub together. It is typified by deep scoring and a build up of material.	*Industrial Engineering*
Galling	A form of wear in which seizing or tearing of the gear or bearing surface occurs.	*Lubrication*
Gallium (Ga)	Silver white metal. Element of atomic number 31. Soluble in acid, alkali and slightly soluble in mercury. Gallium reacts with most metals at high temperatures. It is prepared commercially from bauxite, containing approximately one ounce of galium per ton. Also, prepared commercially from zinc ores.	*Material Process*
Gallium arsenide	A semiconductor material used for optoelectronic products such as LEDs, and for high-speed electronic devices.	*Electrical Engineering*
Gallium arsenide field-effect transistor	GaAsP Gallium Arsenide Phosphide (or, Gallium Arsenic Phosphide): A semiconductor material used for optoelectronics, including LEDs and photodiodes.	*Electrical Engineering*
Gallium arsenide field-effect transistor	**Gallium arsenide field-effect transistor** - GaAsP	*Electrical Engineering*
Gallon	cubic inches) used to measure fuel oil. One barrel equals 42 gallons.	*Energy*
Gallowa	horse or pit pony. (N. East).	*Mining*
Gallows timber	a crown-tree with a prop placed under each end, (N. East).	*Mining*
Gals	another name for pit ponies (?girls).	*Mining*
Galvanic attack	Corrosion behavior caused by the current generated when one metal type is in contact with a different metal type.	*Chemical Engineering*
Galvanic cell	Electrochemical cell in which the corrosion and associated electrical current are due to the contact of two dissimilar metals.	*Material Process*
Galvanic corrosion	Corrosion formed from galvanic attack.	*Chemical Engineering*
Galvanic corrosion	corrosion associated with the current of a galvanic cell consisting of two dissimilar conductors in an electrolyte solution, or two similar conductors in dissimilar electrolytes	*Materials Process*
Galvanic couple	The contact of one metal type with another as seen with a steel bolt in an aluminum sheet or a copper joint on an iron pipe, which allows a differential current to be generated.	*Chemical Engineering*
Galvanic Isolation	Refers to a design technique that separates signal current from AC power distribution introduced stray noise current.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Galvanic protection	Galvanic protection Design configuration in which the structural component to be protected is made to be the cathode and, thereby, protected from corrosion.	*Material Process*
Galvanic protection Design configuration	Galvanic protection Design configuration in which the structural component to be protected is made to be the cathode and, thereby, protected from corrosion.	*Material Process*
Galvanic Series	A list of metals and alloys arranged according to their relative corrosion potentials in a given environment.	*Paint and Coatings*
Galvanic series	Systematic listing of relative corrosion behavior of metal alloys in an aqueous environment, such as seawater.	*Material Process*
Galvanic Series of Metals	a listing of metals and alloys arranged according to their relative electrode potentials in a specified environment; indicates what metal(s) will corrode first when two or more metals are in contact	*Materials Process*
Galvanised	Galvanised (U.S. Galvanized) steel is widely used in steam applications. Galvanisation is the chemical process to keep it from corroding. The steel gets alloyed in layers of zinc, as zinc is a protective metal that will not rust. The zinc does not form a seal around the metal, by through a chemical reaction becomes permanently a part of the material being galvanised. See also Stainless Steel.	*Industrial*
Galvanising	A hot dip process for deposition of zinc for galvanic corrosion protection of steel.	*Paint and Coatings*
Galvanization	Production of a zinc coating on a ferrous alloy for the purpose of corrosion protection.	*Material Process*
Galvanized	Zinc coating for corrosion resistance.	*Wire Rope & Cable*
Galvanized iron (hot-dip process)	Iron coated with zinc by dipping the metal into a bath of molten zinc held at a temperature somewhat above the melting point (810–875°F) (432.22–458.33°C).	*Material Process*
Galvanized Rope	Rope made of galvanized wire.	*Wire Rope & Cable*
Galvanized steel	Steel with a zinc coating for the purpose of corrosion protection.	*Material Process*
Galvanized Strand	Strand made of galvanized wire.	*Wire Rope & Cable*
Galvanized Wire	Wire coated with zinc.	*Wire Rope & Cable*
Galvanizing	The process by which steel is coated with a layer of zinc. The zinc coating provides the steel with greater corrosion resistance.	*Metallurgy*
Galvanizing	the act of coating steel with zinc in order to provide barrier and cathodic protection from corrosion	*Materials Process*
Galvanizing temperature	the temperature at which the molten zinc bath is kept in order to react with the steel; typically, this temperature is between 830 F (443 C) and 850 F (454 C)	*Materials Process*
Galvanometer	An instrument that measures small electrical currents by means of deflecting magnetic coils.	*General Engineering*
Galvene	Brand name of proprietary line of chemical restrainers used in acid pickling of iron, steel, and ferrous alloys.	*Material Process*
Galvoline	Brand name for a proprietary product consisting of a cored magnesium ribbon used as a continuous anode for the cathodic protection of buried pipe lines and other metal structures.	*Material Process*
Galvo-link	Trade mark for a cored, link type magnesium anode used in the cathodic protection of water heater tanks.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Galvomag	Trade mark for magnesium alloy composition for use in anode in cathodic protection.	*Material Process*
Galvopak	Brand name for a proprietary product consisting of magnesium anode packed with back –fill material. Used in the cathodic protection of buried pipe lines and other metal structures.	*Material Process*
Galvorod	Trade mark for a cored magnesium rod used as an anode in the cathodic protection of water heater tanks.	*Material Process*
Gambir (gambier, catechu, pale, tetra japonica)	Dried aqueous extract from the leaves and twigs of an Indian shrub.	*Material Process*
Gamboge (gambogia)	A gum-resin from Garcinia hanburii.	*Material Process*
Gamete	One of two sex cells that unite at fertilization to form a zygote.	*Agriculture*
Gamma	A unit of measurement of magnetic intensity.	*Mining*
Gamma Correction	The application of a function that transforms brightness or luminance values. Gamma functions are usually nonlinear but monotonic and designed to affect the highlights (whitest values), midtones (grayscale), and shadows (dark areas) separately. Most commonly applied to make a light-emitting device, such as a display, match the human eye's brightness curve. In other terms: A gamma correction function can be used to alter the luminance (light intensity) of a display such that its brightness (the human-perceived values) looks correct.	*Electrical Engineering*
Gamma Correction	The application of a function that transforms brightness or luminance values. Gamma functions are usually nonlinear but monotonic and designed to affect the highlights (whitest values), midtones (grayscale), and shadows (dark areas) separately. Most commonly applied to make a light-emitting device, such as a display, match the human eye's brightness curve. In other terms - A gamma correction function can be used to alter the luminance (light intensity) of a display such that its brightness (the human-perceived values) looks correct.	*Electrical Engineering*
Gamma layer	the first layer of zinc-iron alloy growth from the base steel formed during the galvanizing process; the chemical composition of this layer is approximately 75% zinc and 25% iron; the Gamma layer has a DPN of 250, compared to the base steel's DPN of 159	*Materials Process*
Gamma ray	Electromagnetic radiation similar to X-rays except that gamma rays originate in the nucleus of an atom whereas X-rays originate in the extra nuclear structure. Gamma rays usually have higher energies and correspondingly shorter wave lengths than X-rays.	*Material Process*
Gammacide	Brand name for insecticide and fungicide products containing benzene hexachloride.	*Material Process*
Gammexane	Trade mark for benzene hexachloride.	*Material Process*
Gance pitch (manjak)	An asphaltite resembling gilsonite in external appearance but having a decidedly black streak instead of a brown one. It is also has a larger percentage of fixed carbon. The best known glance pitch comes from the Barbadoes, the material found on the surface of the veins being harder, more brittle and of a higher fusing point than that at the lower mine levels. Black in mass, conchoidal to hackly fracture, bright to fairly bright luster, black streak (on porcelain). Soluble in carbon disulfide.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gang	a number of tubs moving together along a haulage road. Also known as a Train, Set or Run.	*Mining*
Gang Boss	a minor supervisor in charge of a small group or gang operation.	*Industrial Relations*
Gang Rider	a miner who rode on or with the trams to act as a guard. A train attendant. - see Gang.	*Mining*
Gangue	The minerals and rock material mined with a metallic ore but valueless in themselves or used only as a by product. They are separated from the ore in the milling and extraction processes. Common gangue materials are quartz, calcite, limonite, feldspar, pyrite, and rock of various kinds.	*Material Process*
Ganister	hard siliceous sandstone seatearth, often with root traces (pencil ganister). (Can be used, crushed, to make fire bricks).	*Mining*
Ganister	A highly refractory siliceous sedimentary rock used for the manufacture of refractory brick. Typical analysis 98.20% SiO2, 0.30% Fe2O3, 0.90% Al2O3, 0.15% CaO, 0.10%MgO.	*Material Process*
Gannen	a bord down which coals where transported in tubs on rails, as opposed to in corves or on runners. (N. East).	*Mining*
Ganney	a small piece of timber. (Som.).	*Mining*
Gannin board	a main roadway. (N. East).	*Mining*
Gannins	coal workings at the end of tunnels. (N. East).	*Mining*
Gantrisin	Trade mark for sulfisoxazole. A soluble sulfonamide drug.	*Material Process*
Gantt Chart	A bar chart of scheduled activities that shows the duration and sequence of activities and resources planned.	*Maintenance*
Gantt Chart	a graphic device which is designed to measure the relatin between actual and anticipated production records.	*Industrial Relations*
Gantt Task and Bonus Plan	an incentive method which incorporates the Halsey Plan, but provides an extra bonus for employees who reach the standard or 100% efficiency.	*Industrial Relations*
GAO	General Accounting Office (US)	*Petro-Chemical Abbreviations*
Garland	a wooden or cast iron curb (gutter) set in the walling of a pit shaft to catch and convey away into a pipe or a lodge any water which runs down the sides of the shaft; or a wooden frame, rectangular in shape, strengthened with iron corner-plates, used for keeping the lumps of coal together on the top of a tram in a mine where heavy loading was practiced. The coals being piled high on the tram.	*Mining*
Garnet	Ferrimagnetic ceramic with a crystal structure similar to that of the natural gem garnet.	*Material Process*
Garnierite (Ni, Mg)6 (OH) 6Si4 O11 H2O)	A natural hydrous nickel-magnesium silicate, occurring as a natural alteration of magnesium silicate rocks. Color apple green, luster dull to earthy.	*Material Process*
Garspar	A mixture of finely ground glass and quartz, produced in the grinding of plate glass.	*Material Process*
Gas	A non-solid, non-liquid combustible energy source that includes natural gas, coke-oven gas, blast-furnace gas, and refinery gas.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gas	One of the three states of mater. A material in the gaseous state is characterized by very low density and viscosity, relatively great expansion and contraction with changes in pressure and temperature. Ability to diffuse readily into other gases and ability to distribute itself readily with almost complete uniformity throughout the whole of any container.	*Material Process*
Gas Tungsten Arc Welding (GTAW)	An arc welding process that employs a tungsten (nonconsumable) electrode. Shielding is obtained from a gas or gas mix-	*Maintenance and Repair*
Gas black (carbon black, channel black, furnace black)	Another name for carbon black, produced from natural gas burned in an insufficient supply of air, used as a pigment.	*Material Process*
Gas cap	methane burning as a blue cone shape on the testing flame of a safety lamp, the height of the cone indicating the percentage of methane present in the mine atmosphere.	*Mining*
Gas Carburizing	See Carburising	*Paint and Coatings*
Gas Chromatagraphs	Gas chromatagraphs are used to analyze the make up of a gas at various points in the process. It has been suggested that neural networks might be used to replace their functions in some circumstances at much lower cost.	*Control Engineering*
Gas coal	coal which yielded large amounts of commercial gas with little sulfur or other impurities.	*Mining*
Gas Condensate Well Gas	Natural gas remaining after the removal of the lease condensate.	*Energy*
Gas cooled fast breeder reactor (GCFB)	A fast breeder reactor that is cooled by a gas (usually helium) under pressure.	*Energy*
Gas drain	a heading driven for the sole purpose of carrying firedamp away from the waste or old workings, or a borehole drilled to drain off firedamp.	*Mining*
Gas Field	A field containing natural gas but no oil.	*Petroleum Drilling*
Gas field	A field containing natural gas but no oil.	*Petroleum Drilling*
Gas Flow Rate	The flow rate of gas (e.g., liters per minute) through the spraying torch.	*Paint and Coatings*
Gas Injection	The process whereby separated associated gas is pumped back into a reservoir for conservation purposes or to maintain reservoir pressure.	*Petroleum Drilling*
Gas injection	The process whereby separated associated gas is pumped back into a reservoir for conservation purposes or to maintain the reservoir pressure.	*Petroleum Drilling*
Gas Metal Arc Welding (GMAW)	An arc welding process that employs a continuous solid filler metal (consumable) electrode. Shielding is obtained entirely from an externally supplied gas or gas mixture 4,8 (Some methods of this process have been called MIG or CO2 welding.)	*Maintenance and Repair*
Gas Nitriding	See Nitriding	*Paint and Coatings*
Gas Nitrocarburizing	See Nitrocarburizing	*Paint and Coatings*
Gas oil	Middle-distillate petroleum fraction with a boiling range of about 350°-750° F, usually includes diesel fuel, kerosene, heating oil, and light fuel oil.	*Petroleum Engineering*
Gas oil	A liquid petroleum distillate with a viscosity and boiling range between kerosene and lubricating oil. The boiling range is about 450–800°F (232.22–436.66°C). Used for absorption oil, cracking in petroleum refineries and in enriching water gas.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gas plant operator	Any firm, including a natural gas processing plant owner, that operates a gas plant and keeps the gas plant records.	*Energy*
Gas pocket	A clearly defined area caused by trapped gas, resulting in a different degree of reflection over the area.	*Material Process*
Gas processing unit	A facility designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. Another function of natural gas processing plants is to control the quality of the processed natural gas stream. Cycling plants are considered natural gas processing plants.	*Energy*
Gas to liquids (GTL)	A process that combines the carbon and hydrogen elements in natural gas molecules to make synthetic liquid petroleum products, such as diesel fuel.	*Energy*
Gas Turbine	An engine that uses the energy of expanding gases passing through a multistage turbine to create rotating power.	*Reliability Engineering*
Gas turbine plant	A plant in which the prime mover is a gas turbine. A gas turbine consists typically of an axial-flow air compressor and one or more combustion chambers where liquid or gaseous fuel is burned and the hot gases are passed to the turbine and where the hot gases expand drive the generator and are then used to run the compressor.	*Energy*
Gas Welding	Welding process in which coalescence is produced by heating with a gas flame or flames, with or without the application of pressure and with or without the use of filler metal.4	*Maintenance and Repair*
Gas well	A well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no completions for the production of crude oil.	*Energy*
Gas well productivity	Derived annually by dividing gross natural gas withdrawals from gas wells by the number of producing gas wells on December 31 and then dividing the quotient by the number of days in the year.	*Energy*
Gas, Gaseous	The state of matter distinguished from the solid and liquid states by: relatively low density and viscosity; relatively great expansion and contraction with changes in pressure and temperature; the ability to diffuse readily; and the spontaneous tendency to become distributed uniformly throughout any container.	*Industrial*
Gas/Oil Ratio	The volume of gas at atmospheric pressure produced per unit of oil produced.	*Petroleum Drilling*
Gas/oil ratio	The volume of gas at atmospheric pressure produced per unit of oil produced.	*Petroleum Drilling*
Gaseous Fuels	Liquefied or compressed hydrocarbon gases (propane, butane or natural gas), which are finding increasing use in motor vehicles as replacements for gasoline and diesel fuel.	*Lubrication*
Gaseous reduction	A cathodic reaction that can lead to the corrosion of an adjacent metal.	*Material Process*
Gash Vein	A vein wide above and narrow below.	*Mining*
Gasification	A method for converting coal, petroleum, biomass, wastes, or other carbon-containing materials into a gas that can be burned to generate power or processed into chemicals and fuels.	*Energy*
Gasification	Any of various processes by which coal is turned into low, medium, or high Btu gases.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gas-insulated switchgear	**Gas-insulated switchgear** - see Switchgear.	*Electrical*
Gasket	A component softer than the parts to be sealed, which is compressed between two flanges to prevent the system fluid leaking to atmosphere.	*Industrial Engineering*
Gasket	A component whose purpose is to seal a joint between two larger components, softer than the surfaces of the joint being sealed and usually squeezed by means of bolting to affect the seal.	*General Mechanical*
Gasket Kit	A collection of gaskets required to overhaul an engine or part of an engine.	*Mechanical Engineering*
Gasohol	A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. Also see Oxygenates.	*Energy*
Gasoil	European and Asian designation for No. 2 heating oil and No. 2 diesel fuel.	*Energy*
Gasoline	See Motor gasoline (finished).	*Energy*
Gasoline (petrol, motor spirits)	A mixture of volatile hydrocarbons suitable for operation of an internal combustion engine. The major components are usually hydrocarbons with boiling points ranging from 60–200°C (140–392°F). These include straight-chain and branched-chain paraffins, naphthenes, and aromatic hydrocarbons, such as n-heptane, iso-octane, methyl cyclohexane, benzene and toluene. Alcohols and other combustibles are also present in some special gasolines.	*Material Process*
Gasoline alkylate	Gasoline made by alkylation.	*Material Process*
Gasoline Antioxidant No. 22 Di-sec-butyl-para-phenylenediamine containing no solvent	A mobile liquid readily soluble in gasoline in all proportions at room temperature. A using for reducing the of gum in gasoline. Concentration required: 0.001-0.005% by weight.	*Material Process*
Gasoline Antioxidant No. 5	A solution of n-butyl-ara-aminophenol in alcohols having the following weight composition: 50% n-butyl-para-aminophenol, 30% anhydrous isopropanol, 20% anhydrous methanol. the solution is readily soluble in gasoline in normal use concentrations. A using for reducing the formation of gum and precipitation of lead in gasoline. Required concentration 0.002–0.1% by weight.	*Material Process*
Gasoline blending components	Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.	*Energy*
Gasoline gas	A mixture of atmospheric air and light hydrocarbons vapor in varied percentages generally above the explosive limit , produced by allowing air to bubble through a volatile gasoline under controlled conditions. This gas was developed to meet the requirements of isolated localities where the quantity of gas required is so small that the installation of the usual form of coal-or water-gas apparatus was not profitable. Typical composition: Illuminants 1.5%, hexane (C6H14) 10.3%, oxygen (O2) 18.5%, nitrogen (N2) 69.7%, candle power varies.	*Material Process*
Gasoline grades	The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades - Regular, Midgrade, and Premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gasoline motor, (leaded)	Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon may vary. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.	*Energy*
Gasoline treated as blendstock (GTAB)	Non-certified Foreign Refinery gasoline classified by an importer as blendstock to be either blended or reclassified with respect to reformulated or conventional gasoline. GTAB is classified as either reformulated or conventional quality based on emissions performance, formulation, and intended end use.	*Energy*
Gasoline, casinghead	Gasoline, casinghead See gasoline natural.	*Material Process*
Gasoline, cracked	Gasoline produced by the thermal and /or catalytic decomposition of high boiling components of petroleum. In general such gasolines have higher octane ratings than gasoline produced by fractional distillation of petroleum. The difference is due to the prevalence of unsaturated, aromatic and branched-chain hydrocarbons in the cracked gasoline. The actual properties vary widely with the nature of the starting material, and the temperature, time, pressure and catalyst used in cracking process.	*Material Process*
Gasoline, ethyl	Gasoline, ethyl See gasoline leaded.	*Material Process*
Gasoline, leaded (gasoline, ethyl)	Gasoline to which tetraethyl lead has been added to increase its antiknock properties.	*Material Process*
Gasoline, natural (gasoline, casinghead)	A volatile gasoline obtained by recovering the butane, pentane, and hexane hydrocarbons present in small proportion in certain natural gases. It is used in blending to produce a finished gasoline with adjusted volatility.	*Material Process*
Gasoline, polymer	A gasoline produced by polymerization of low molecular weight hydrocarbons such as ethylene, propene, and butenes. It is used in small amounts for blending with other gasolines to improve their octane number.	*Material Process*
Gasoline, reformed	A high octane gasoline obtained from low octane gasoline by heating the vapors to a high temperature or by passing the vapors through a suitable catalyst.	*Material Process*
Gasoline, straight run	Gasoline produced	*Material Process*
Gasoline/Ethanol Blend	A spark-ignition automotive engine fuel containing denatured fuel ethanol in a base gasoline. It may be leaded or unleaded.	*Lubrication*
Gastex	Trade mark for semi reinforcing furnace carbon blacks for use in rubber.	*Material Process*
Gas-Turbine Electric Power Plant	A plant in which the prime mover is a gas turbine. A gas turbine typically consists of an axial-flow air compressor and one or more combustion chambers where liquid or gaseous fuel is burned. The hot gases expand to drive the generator and then are used to run the compressor.	*Energy*
GATC	gross additive treat cost	*Petro-Chemical Abbreviations*
Gate	A device or structure by means of which the flow of may be stopped or regulated. Also, a section of conveyor equipped with a hinged mechanism for movable service often called a hinged section.	*Equipment*
Gate	The closure element of a gate valve (sometimes called wedge or disc).	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gate station	Location where the pressure of natural gas being transferred from the transmission system to the distribution system is lowered for transport through small diameter, low pressure pipelines.	*Energy*
gate valve	a valve regulated by the position of a circular plate.	*Chemical*
Gate valve	A straight through pattern valve in which closure element is a wedge situated between two fixed seating surfaces, with means to move it in or out of the flow stream in a direction perpendicular to the pipeline axis. Used as a block valve, or on-off valve.	*General Mechanical*
Gate-end box	the electrical supply point (panel) at the intake end of the face which supplies the electrical power to the shearer by means of a trailing cable.	*Mining*
Gate-end loader	Gate-end loader, - see Stage loader.	*Mining*
Gatehouse	A house or structure at the gate of a dam, reservoir, etc., with equipment or controls for regulating the flow of water.	*Civil Engineering*
Gateside pack	a pack built to support the gate road.	*Mining*
Gather	to drive a heading through broken or faulty ground to reach the coal on the other side. (Derbys.).	*Mining*
Gatherer	A company primarily engaged in the gathering of natural gas from well or field lines for delivery, for a fee, to a natural gas processing plant or central point. Gathering companies may also provide compression, dehydration, and/or treating services.	*Energy*
Gathering conveyor; gathering belt	Any conveyor which is used to gather coal from other conveyors and deliver it either into mine cars or onto another conveyor. The term is frequently used with belt conveyors placed in entries where a number of room conveyors deliver coal onto the belt.	*Mining*
Gathering system	The pipelines and other infrastructure that move raw gas from the wellhead to processing and transmission facilities.	*Petroleum Engineering*
Gatterman–Koch reaction	The formation of aromatic aldehydes from phenols by the use of anhydrous hydrogen cyanide, dry hydrogen chloride, and an aluminum chloride or zinc	*Material Process*
Gauge	A pre-calibrated device for determining the relative size or shape of an object compared to a standard (such as a Drift). A device to measure pressure of a pressure containing system.	*Petroleum Engineering*
Gauge door	a door fitted in a roadway in the mine with a sliding section, which acts as a shutter. The shutter was used to regulate the flow of air along the roadway. - see also Ventilation regulator.	*Mining*
Gauge, Pressure	An instrument, usually with a threaded connection, for measuring and indicating the pressure in a piping system at the point at which it is connected.	*Mechanical*
Gaussian error function	Mathematical function based on the integration of the bell-shaped curve. It appears in the solution to many diffusion related problems.	*Material Process*
Gaussian curve, Normal curve, Normal distribution	Refers to a symmetrical bell-shaped distribution whose shape is given by a specific equation (called the normal equation) in which the mean and standard deviation are variables. It is commonly assumed that the random error of an analytical method fits the Gaussian distribution and therefore can be characterized by calculating the standard deviation. The standard deviation is not a valid statistic if a distribution is not Gaussian.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gaussian distribution	see Normal distribution	*Reliability Engineering*
Gaussian frequency-shift keying	A type of FSK modulation which uses a Gaussian filter to shape the pulses before they are modulated. This reduces the spectral bandwidth and out-of-band spectrum, to meet adjacent-channel power rejection requirements.	*Electrical Engineering*
Gaussian minimum shift keying	GMSK is a form of frequency shift keying (FSK) used in GSM systems. The tone frequencies are separated by exactly half the bit rate. It has high spectral efficiency.	*Electrical Engineering*
Gautten	a Scots term for a ditch or gutter cut in the floor of the roadway to allow water to be drained away. Also pronounced 'gatton'. (Scot.). They were also known as a 'Grip' in S. Derbys., a 'Culvert' in Coventry and a 'Sough' in Lancs.	*Mining*
Gaveller	the Crown Agent or Gale Giver, who granted gales to the Free Miners of the Forest of Dean.	*Mining*
Gavelock	an iron bar, used as a lever. (N. East). - see also Gablock.	*Mining*
Gawl	an unevenness in the coal wall or face. (Lancs.).	*Mining*
Gay-Lussac acid	The sulfuric acid-nitrogen oxides mixture which is the product of the Gay-Lussac power in the chamber process for manufacture of sulfuric acid.	*Material Process*
Gaylussite (Na2Ca(CO3)2 5H2O)	Natural hydrated carbonate of sodium and calcium, found in dry lakes. Colorless to yellowish white, luster vitreous.	*Material Process*
Gazogene	A combustible gas mixture made by passing a limited quantity of air over charcoal, developed as a substitute for gasoline.	*Material Process*
Gbion	A metal cylinder filled with stones and sunk in water, used in laying the foundations of a dam or jetty.	*Civil Engineering*
GDI	Gasoline Direct Injection - a gasoline engine design that utilizes fuel injection directly into the combustion chamber.	*Mechanical, Process, and Operations*
GDP	Gross Domestic Product	*Petro-Chemical Abbreviations*
GDTC	gross delivered treating cost	*Petro-Chemical Abbreviations*
Gear	A machine part which transmits motion and force by means of successively engaging projections, called teeth. The smaller gear of a pair is called the pinion; the larger, the gear. When the pinion is on the driving shaft, the gear set acts as a speed reducer; when the gear drives, the set acts as a speed multiplier. The basic gear type is the spur gear, or straight-tooth gear, with teethe cut parallel to the gear axis. Spur gears transmit power in applications utilizing parallel shafts. In this type of gear, the teeth mesh along their full length, creating a sudden shift in load from one tooth to the next, with consequent noise and vibration. This problem is overcome by the helical gear, which has teeth cut at an angle to the center of rotation, so that the load is transferred progressively along the length of the tooth from one edge of the gear to the other. When the shafts are not parallel, the most common gear type used is the bevel gear, with teeth cut on a sloping gear face, rather than parallel to the shaft. The spiral bevel gear has teeth cut at an angle to the plane of rotation, which, like the helical gear, reduces vibration and noise. A hypoid gear resembles a spiral bevel gear, except that the	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	pinion is offset so that its axis does not intersect the gear axis; it is widely used in automobiles between the engine driveshaft and the rear axle. Offset of the axes of hypoid gears introduces additional sliding between the teeth, which, when combined with high loads, requires a high-quality EP oil. A worm gear consists of a spirally grooved screw moving against a tooth wheel; in this type of gear, where the load is transmitted across sliding, rather than rolling surfaces, compounded oils or EP oils are usually necessary to maintain effective lubrication.	
Gear Oil	A high-quality oil with good oxidation stability, load-carrying capacity, rust protection, and resistance to foaming, for service in gear housings and enclosed chain drives. Specially formulated industrial EP gear oils are used where highly loaded gear sets or excessive sliding action (as in worm gears) is encountered.	*Lubrication*
Gear reducer	A reduction gear, commonly used on fan drivers to reduce driver speed to fan speed requirements. Also known as Speed Reducer.	*Facility Engineering*
Gearbox (gear housing)	A casing for gear sets that transmit power from one rotating shaft to another. A gear box has a number of functions: it is precisely bored to control gear and shaft alignment, it contains the gear oil, and it protects the gears and lubricant from water, dust, and other environmental contaminants. Gear boxes are used in a wide range of industrial, automotive, and home machinery. Not all gears are enclosed in gear boxes; some are open to the environment and are commonly lubricated by highly adhesive greases.	*Lubrication*
Gearbox	The transmission attached to the rear of the engine. Open wheeled cars have "sequential" shift patterns, which is more like a motorcycle gear change than the traditional "H" pattern on most street cars.	*NASCAR*
Gearhead	the drive unit of a conveyor.	*Mining*
Gearless mill drive (GMD)	a system consisting of a ringmotor and its associated equipment such as transformers and control systems. Its main application is to drive (rotate) mills in the minerals or cement industry.	*Electrical*
Gearmesh frequency	A potential vibration frequency on any machine employing gears. Multiply the number of teeth on a gear times its RPM, then divide by 60	*Reliability Engineering*
Gearmotor	A motor and speed reducer combination where the two units are flanged for connection to each other and have one output shaft; or where the two units are closely coupled with the motor resting on a base which is an integral part of the speed re	*Equipment*
Gears	heavy wooden props. Two uprights and a crown piece being a set of gears or a pair of gears, used to support the roof. (Scot).	*Mining*
Gedanite	A resin resembling rosin, not containing succinic acid. Found on this shores of the Baltic.	*Material Process*
Gees	a mixture of alternate hard and soft layers of coal with smut partings.	*Mining*
Geiger counter	An instrument used in the search for radioactive minerals, particularly uranium, as it is capable of detecting (by means of a Geiger Mueller tube) the rays emanating from such minerals. It registers the frequency or intensity of these rays either visually (by dial or flashing light), audibly (by earphones) or both.	*Mining*
Gel	The name given to any gelatinous solid mass produced from a solution of a colloid body, opposed to sol.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
GEL	A colloidal solution in which the intermingling of internal and external phases results in a system viscosity greater than the viscosity of the external phase alone, i.e., a jelly-like substance.	*Mechanical, Process, and Operations*
Gel Layer	Thin layer of retained molecules that forms on a membrane surface during filtration.	*Contamination Control*
Gel paint (thixotropic paint)	A paint formulation which has a semi-solid or gel consistency when undisturbed but which flows readily under the brush or when stirred or shaken. After removal of the stress, it becomes stiff again and has little tendency to spill, drip, or run. The thixotropic quality is obtained by the carefully controlled reaction of a relatively small proportion of a polyamide resin with an alkyd resin vehicle.	*Material Process*
Gel Strength	The minimum shearing stresses that will produce permanent deformation of a colloidal suspension.	*Petroleum Engineering*
Gelamite	Trade mark for a semigelatin high explosive of relatively high weight strength of 65% very good water resistance.	*Material Process*
Gelatin	A protein obtained by boiling skin, ligaments, tendons, bones, etc. with water. Its production differs from that of glue in that the raw materials are selected, cleaned and treated with special care so that the resulting product is cleaner, purer and generally clearer and lighter in color than glue. Colorless or slightly yellow powder.	*Material Process*
Gelatin, explosive	A powerful explosive formed by mixing collodion cotton with about nine times its weight of nitroglycerin, the product being a galatinized mass. It is less sensitive to shock and friction than ordinary dynamics and at one time was largely used. High explosive.	*Material Process*
Gelation	Formation of a gel.	*Material Process*
Gelbvieh	A breed of beef cattle that originated in Baveria , Germany. It is red. Registration is with the American Gelbvieh Association	*Agriculture*
gelding	A castrated male horse.	*Agriculture*
Gelex	Trade mark for semi-gelatin dynamite shaving plasticity and water resistance ratings between the ammonia dynamites and special gelatins. Have a very good fume rating. It is used in mining metallic ores, gypsum, limestone, in quarry medium hard rock, and in construction working.	*Material Process*
Gelfoam	Trade mark for an absorbable surgical sponge.	*Material Process*
Gelloid	Trade mark for a line of purified extracts of various types of Irish moss seaweed which are rich in mucilaginous content. The gel producing ingredient is known as calcium carragheen sulfate. Products of varying gel strength and solubility are prepared by a specialized extraction and filtration procedure with subsequent solvent treatment to give dry, odorless, non-toxic, edible powders used in extensive food and pharmaceutical applications, as stabilizers, emulsifiers, moisture retentive agents, and emollient bases.	*Material Process*
Gelobel	Trade mark for gelatin type permissible explosives, high density and high water resistance ratings.	*Material Process*
Gelsemine (C20H22O2N2)	White crystals, poisonous, soluble in alcohol, ether, and dilute acids.	*Material Process*
Gelsemium (yellow jasmin, wild woodbine)	Yellow masses, chief constituents gelsemine, gelseminine and gelsemic acid.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gelva	Trade mark for vinyl acetate polymers. Available in a variety of aqueous emulsions, as solids or in organic solution. Gelva emulsions generally contain 55% solids with emulsion viscosities unusually stable. They are used as adhesives, binders, coatings, paints, permanent starches, and in textile and paper finishing. They are readily compatible with many plasticizers, small amounts of solvents, other resins and extenders. Solid Gelva polyvinyl acetate is available in several grades. Major uses are as hot melt adhesives, as a chewing gum base, and general coating purposes.	*Material Process*
Gelva C-3 Emulsion	A 55% solids emulsion of an alkali soluble copolymer of vinyl acetate. It is used for adhesives, textile sizes and finishes, paints, floor polishes, leather finishes, paper, coatings, etc.	*Material Process*
Gelva C-3-V-10, C-3-V-20, C-3-V-30	Gelva C-3-V-10, C-3-V-20, C-3-V-30 Alkali soluble copolymers, and Gelva C-5-V-10 a copolymer with greater alkali solubility, are used in the adhesive and coating field being especially valuable in paper coating and book binding where recovery of paper scrap is desirable.	*Material Process*
Gelva Emulsion S 55	A heterogeneous mixture of particle sizes, possessing exceptional quick tack as an adhesive and used as an all purpose emulsion having outstanding mechanical stability.	*Material Process*
Gelvatol	Trade mark for polyvinyl alcohol resins. Compatible with many natural and synthetic resins and used for adhesives, textile sizing, paper coating, emulsifying agents and to form gas proof films having excellent tensile strength. These resins are all water soluble and resistant to most organic solvents.	*Material Process*
Gem	Prefix used in organic chemistry, which is an abbreviation of geminate, meaning two identical groups attached to the same carbon atom.	*Material Process*
Geminate	Geminate See gem.	*Material Process*
Gene	the DNA code in the cells of all living things; they determine physical characteristics such as fur color	*Agriculture*
gene -	A sequence of DNA that is related to a particular trait.	*Agriculture*
General Electric Case	on December 14, 1964, the NLRB handed down its decision in one of the most bitterly litigated cases in the Board's history.	*Industrial Relations*
General Electric X-Ray Rule	departing from the precedent, the NLRB in 1946 decided that "a mere naked assertion" of majority representation by a union did not have the same standing as a formal petition for certification.	*Industrial Relations*
General Labor Union	a term generally applied to an organization of workers which accepts into membership all those desirous of joining.	*Industrial Relations*
General Log-Linear Model	This is an accelerated life testing model that can account for multiple non-thermal stresses as acceleration factors.	*Reliability Engineering*
General Packet Radio Service	A radio technology for GSM networks that adds packet-switching protocols and shorter set-up time for ISP connections; it offers the possibility to charge by amount of data sent rather than connect time.	*Electrical Engineering*
General purpose coals	coals that were graded other than high-quality steam or coking coal	*Mining*
General Purpose I/O	A flexible parallel interface that allows a variety of custom connections.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
General Purpose Interface Bus	A standard bus for controlling electronic instruments with a computer. Also called IEEE-488 bus because it is defined by ANSI/IEEE Standards 488-1978, and 488.2-1987. Also called HP-IB, a trademarked term of Hewlett-Packard, which invented the protocol.	*Electrical Engineering*
General Strike	the concerted and sympathetic refusal of workers throughout an entire geographic or political area to perform their normal services or activities.	*Industrial Relations*
General Wage Increase	a wage adjustment given at one time to all or a significant group of the workers in a plant, company, or industry.	*Industrial Relations*
General yielding	The slow failure of a material due to plastic deformation occurring at the yield strength.	*Material Process*
Generalised Gamma Distribution	It is a kind of distribution which s normally not often used by itself to model life data and is not as frequently used as other distributions. This distribution has the ability to mimic the attributes of other distributions such as Weibull or log-normal, based on the values of the distribution's parameters. It helps in making a choice about which type of distribution to use to model a particular set of data since it can behave like any of them.	*Reliability Engineering*
Generalized gamma distribution	While not as frequently used for modeling life data as other life distributions, the generalized gamma distribution does have the ability to mimic the attributes of other distributions such as the Weibull or lognormal, based on the values of the distribution's parameters. While the generalized gamma distribution is not often used to model life data by itself, its ability to behave like other more commonly-used life distributions is sometimes used to determine which of those life distributions should be used to model a particular set of data.	*Reliability Engineering*
Generally accepted accounting principles (GAAP)	Defined by the FASB as the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time, includes both broad guidelines and relatively detailed practices and procedures.	*Energy*
Generated Contaminant	Caused by a deterioration of critical wetted surfaces and materials or by a breakdown of the fluid itself.	*Oil Analysis*
Generating facility	An existing or planned location or site at which electricity is or will be produced.	*Energy*
Generating station	A station that consists of electric generators and auxiliary equipment for converting mechanical, chemical, or nuclear energy into electric energy.	*Energy*
Generating Station (Generating Plant or Power Plan	The location of prime movers, electric generators, and auxiliary equipment used for converting mechanical, chemical, and nuclear energy into electric energy.	*Energy*
Generating Unit	Combination of connected prime movers that produce electric power.	*Energy*
Generation	The process of producing electric energy by transforming other forms of energy; also, the amount of electric energy produced, expressed in kilowatt hours.	*Energy*
Generation (Electricity)	Process of producing electric energy by transforming other forms of energy.	*Energy*
Generation Charges	Part of the basic service charges on every customer's bill for producing electricity. Generation service is competitively priced and is not regulated by Public Utility Commissions. This charge depends on the terms of service between the customer and the supplier.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Generation company	An entity that owns or operates generating plants. The generation company may own the generation plants or interact with the short-term market on behalf of plant owners.	*Energy*
Generation Company (Genco)	A regulated or non-regulated entity (depending upon the industry structure) that operates and maintains existing generating plants. The Genco may own the generation plants or interact with the short term market on behalf of plant owners. In the context of restructuring the market for electricity, Genco is sometimes used to describe a specialized "marketer" for the generating plants formerly owned by a vertically-integrated utility.	*Energy*
Generation Dispatch and Control	Aggregation and dispatching (sending off to some location) generation from various generating facilities, providing backup and reliability services.	*Energy*
Generation mix	The generation mix is a term used to describe the contribution various sources of electricity make to the power supply serving a particular region or population. The portion of renewable energy in the global generation mix is rising in response to concern over climate change and increasing demand for electrical power.	*Electrical*
Generation	The successive developmental stages from reproduction to reproduction, e.g., egg, larva, pupa, adult.	*Forestry*
Generator	Machine used to convert mechanical energy into electrical energy.	*Energy*
Generator	A device that converts rotating mechanical movement into electric power. The current generated can be either alternating (AC) or direct (DC). ABB manufactures a range of generators, including wind-turbine generators. In a simple AC generator, a loop of wire is placed between the poles of a permanent magnet. The magnet is then rotated and the electromotive force produced by the movement of the electric field causes a current to flow in the wire. This is the principle of the synchronous motor and big generators in power plants. A DC generator operates on the same principle as the AC generator, but includes a device (a commutator), which effectively prevents the current from alternating.	*Electrical*
Generator capacity	The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.	*Energy*
Generator nameplate capacity (installed)	The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.	*Energy*
Genetic Algorithms (Gas)	These are routines which are capable of self adaption. As with neural networks, they are based on an analogy with nature; in this case the best algorithms breed with each other to provide new variants in a "survival of the fittest". As yet this cutting edge technology is not widely used in process control.	*Control Engineering*
Genetic engineering	Human-directed alteration of genetic code through any of a variety of biotechnical means.	*Agriculture*
Genetically Modified Organism (GMO)	an organism that has been altered genetically, typically through the transfer of DNA from another organism. Alterations result in the expression of new characteristics not naturally belonging to that organism. Genetic modification is currently allowed in conventional agriculture in the United States. (also Genetic Engineering)	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Genin	The steroid portion which is linked to a sugar residue in certain glycosides. Important genins are found in the digitalis glycosides which are used in medicine as hearth stimulants.	*Material Process*
General Counsel	under the Taft-Hartley Act, the legal officer of the NLRB who has the responsibility to issue complaints in cases involving unfair labor practices under the Act.	*Industrial Relations*
Gentex	Brand name of line of water dispersed organic pigment dye stuff. It is used for the printing of textiles.	*Material Process*
Gentex Supra	Proprietary name for pigments for textile printing.	*Material Process*
Gentisic acid (C6H3 (OH)2COOH) Crystals, m.p. 199-200 °C (°F)	soluble in water, alcohol, and ether, insoluble in carbon disulfide, chloroform, and benzene.	*Material Process*
Gentlemen's Agreement	an agreement or understanding based solely on the good will and word of the parties involved.	*Industrial Relations*
GEO	natural gas engine oil	*Petro-Chemical Abbreviations*
Geochemistry	The study of the chemical properties of rocks.	*Mining*
Geocronite (Pb5(Sb,As) 2 S8)	Light lead gray mineral, luster metallic, hardness 2.5.	*Material Process*
Geode	A cavity studded around with crystals or mineral matter, a rounded stone containing such a cavity.	*Mining*
Geographic Information Systems (GIS)	A computer system capable of assembling, storing, manipulating, and displaying geographically referenced information	*Petroleum Drilling*
Geographic Information Systems (GIS)	A computer system capable of assembling, storing, manipulating, and displaying geographically referenced information.	*Petroleum Drilling*
Geographic Wage Differentials	variations in wages paid for similar work by companies located in different sections of the country.	*Industrial Relations*
Geographical Mobility	a measure of the movement of workers in a particular labor market area.	*Industrial Relations*
Geologic assurance	State of sureness, confidence, or certainty of the existence of a quantity of resources based on the distance from points where coal is measured or sampled and on the abundance and quality of geologic data as related to thickness of over burden, rank, quality, thickness of coal, areal extent, geologic history, structure, and correlations of coal beds and enclosing rocks. The degree of assurance increases as the nearness to points of control, abundance, and quality of geologic data increases.	*Energy*
Geologic considerations	Conditions in the coal deposit or in the rocks in which it occurs that may complicate or preclude mining. Geologic considerations are evaluated in the context of the current state of technology and regulations, so the impact on mining may change with time.	*Energy*
Geologic sequestration	A type of engineered sequestration, where captured carbon dioxide is injected for permanent storage into underground geologic reservoirs, such as oil and natural gas fields, saline aquifers, or abandoned coal mines.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Geological and geophysical (G) costs	Costs incurred in making geological and geophysical studies, including, but not limited to, costs incurred for salaries, equipment, obtaining rights of access, and supplies for scouts, geologists, and geophysical crews.	*Energy*
Geological Log	A detailed description of all underground features discovered during the drilling of a well, including types of formations encountered and their physical characteristics.	*Petroleum Engineering*
Geological repository	A mined facility for disposal of radioactive waste that uses waste packages and the natural geology as barriers to provide waste isolation.	*Energy*
Geologist	One who studies the constitution, structure, and history of the earth's crust, conducting research into the formation and dissolution of rock layers, analyzing fossil and mineral content of layers, and endeavoring to fix historical sequence of development by relating characteristics to known geological influences (historical geology).	*Mining*
Geology	The science or study of rocks in the earth.	*Mining*
Geology	The science concerned with the study of the rocks which compose the earth.	*Mining*
Geometric isomerism	The existence of isomeric forms of a compound because of symmetry or lack of symmetry about the double bond in the molecule of an organic compound.	*Material Process*
Geometry, Spherical	The plane geometry on the surface of a sphere. In a plane geometry, the basic concepts are points and lines. In spherical geometry, points are defined in the usual way, but lines are defined such that the shortest distance between two points lies along them. Therefore, lines in spherical geometry are great circles. A great circle is the largest circle that can be drawn on a sphere. The longitude lines and the equator are great circles of the Earth. Latitude lines, except for the equator, are not great circles. Great circles are lines that divide a sphere into two equal hemispheres. Spherical geometry is used by pilots and ship captains as they navigate around the globe. Working in spherical geometry has some non-intuitive results. For example, did you know that the shortest flying distance from Florida to the Philippine Islands is a path across Alaska? The Philippines are south of Florida - why is flying north to Alaska a short-cut? The answer is that Florida, Alaska, and the Philippines are collinear locations in spherical geometry (they lie on a great circle). Another odd property of spherical geometry is that the sum of the angles of a triangle is always greater than 180°. Small triangles, like those drawn on a football field, have very, very close to 180°. Big triangles, however, (like the triangle with veracities: New York, L.A. and Tampa) have significantly more than 180°.	*Mathematical*
Geometry, Euclidean	The geometry with which we are most familiar is called Euclidean geometry. Euclidean geometry was named after Euclid, a Greek mathematician who lived in 300 BC. His book, called "The Elements", is a collection of axioms, theorems and proofs about squares, circles acute angles, isosceles triangles, and other such things. Most of the theorems which are taught in high schools today can be found in Euclid's 2000 year old book. Euclidean geometry is of great practical value. It has been used by the ancient Greeks through modern society to design buildings, predict the location of moving objects and survey land.	*Mathematical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Geometry, Hyperbolic	The geometry of which the Non-Euclid software is a model. Hyperbolic geometry is a "curved" space, and plays an important role in Einstein's General theory of Relativity. Hyperbolic geometry is also has many applications within the field of Topology. Hyperbolic geometry shares many proofs and theorems with Euclidean geometry, and provides a novel and beautiful prospective from which to view those theorems. Hyperbolic geometry also has many differences from Euclidean geometry. The following sections discuss and explore hyperbolic geometry in some detail.	*Mathematical*
Geometry, Non-Euclidean	The geometry that is different from Euclidean geometry. Each Non-Euclidean geometry is a consistent system of definitions, assumptions, and proofs that describe such objects as points, lines and planes. The two most common non-Euclidean geometries are spherical geometry and hyperbolic geometry. The essential difference between Euclidean geometry and these two non-Euclidean geometries is the nature of parallel lines: In Euclidean geometry, given a point and a line, there is exactly one line through the point that is in the same plane as the given line and never intersects it. In spherical geometry there are no such lines. In hyperbolic geometry there are at least two distinct lines that pass through the point and are parallel to (in the same plane as and do not intersect) the given line.	*Mathematical*
Geon	Lactice Water dispersions of polyvinyl chloride resins. Unplasticized, plasticized, and internally plasticized forms available. Total solids approximately 50%, pH ranges from 6-9. Properties of value include low moisture vapor transmission, low gas permeability, resistance to flame and many chemicals. Decorative, washable, and wear resistant coatings for paper and fabric.	*Material Process*
Geon	General Purpose Resins General purpose thermoplastic resins for calendaring, coating, extrusion, and injection molding. They are characterized by thermal and light stability, toughness, chemical inertness, resistance to water and flame, and electrical insulation properties.	*Material Process*
Geon Plastics for Extrusion and Injection Molding	Completely compounded vinyl plastics with a selective degree of hardness, gloss, chemical resistance, weathering ability, flexibility at low temperatures, nontoxicity, abrasion resistance and flame resistance.	*Material Process*
Geon Resins and Compounds for Rigid Applications	Resistant to chemicals, water, flame, and abrasion. Designed for compounding without plasticizer to provide desired rigidity and strength. The properties of tensile strength impact resistance, flexibility, and chemical and electrical resistance vary from resin to resin, so compounding to various specifications is possible. Formulated rigid compounds are widely used for extrusion and molding.	*Material Process*
Geon Polyblend	A colloidal blend of nitrile rubber and polyvinyl chloride in which the rubber is used as the plasticizer. The nitrile plasticizer is nonmigrating, nonextractable, and nonvolatile. Polyblend can be used as a thermoplastic vinyl, as a vulcanizate, or to modify conventional vinyls and rubbers.	*Material Process*
Geon Solution Resins	Designated for high solids solutions, these high molecular weight polymers and copolymers are soluble in ketone systems and meet requirements for a wide range of application specifications in the coating industries. A modified vinyl-vinylidene chloride copolymer is specifically designed for direct solubility in toluene, xylene, hydrocarbons, and aromatic naphthas. They form coatings that have good adhesion to tin, aluminum, steel, fabric, paper, and other cellulosic materials. Coatings may be sprayed, brushed, or rolled. water and fire resistant fabrics, paint and lacquer formulations.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Geophysical exploration	The study of the physics of the Earth, especially its electrical, gravitational and magnetic fields and propagation of elastic (seismic) waves within it. Geophysical data are used by exploration and development personnel to make predictions about the presence, nature and size of subsurface hydrocarbon accumulations.	*Petroleum Engineering*
Geophysical survey	A scientific method of prospecting that measures the physical properties of rock formations. Common properties investigated include magnetism, specific gravity, electrical conductivity and radioactivity.	*Mining*
Geophysics	The study of the physical properties of rocks and minerals.	*Mining*
Geopressured	A type of geothermal resource occurring in deep basins in which the fluid is under very high pressure.	*Energy*
Geordy	safety-lamp invented by George Stephenson.	*Mining*
Geotextile	A synthetic material placed beneath road fill and used to confine the road aggregate and to distribute the weight of the load.	*Forestry*
Geothermal energy	Hot water or steam extracted from geothermal reservoirs in the earth's crust. Water or steam extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.	*Energy*
Geothermal plant	A plant in which the prime mover is a steam turbine. The turbine is driven either by steam produced from hot water or by natural steam that derives its energy from heat found in rock.	*Energy*
Geothermal Power	The natural heat of the Earth that is conducted or convected to the Earth's surface through volcanoes and hot springs. By harnessing this energy and using it to power steam turbines, we can convert geothermal energy into electricity that we can use.	*Energy*
Geothermal	An electric generating station in which steam tapped from the earth drives a turbine-generator, generating electricity.	*Energy*
German Energy Savings Directive (EnEV)	The German Energy Savings Directive (EnEV) came into force in February 2002 and defines minimum standards for the insulation and the quality of the heating system of new and existing residential buildings. The aim of the Directive is to reduce the primary energy demand for space heating and the hot water preparation.	*Thermal Management*
Germans	Germans, -see Straw fuse.	*Mining*
Germicide	Any substance that kills germs. A disinfectant.	*Chemistry*
Germination	The process within a seed that leads to visible penetration of the seed coat by the radicle. It begins with water uptake and involves formation and activation of enzymes that convert starch, fats and protein in the endosperm and/or cotyledons into smaller chemical components that are transported to sites of embryo growth.	*Agriculture*
Geronimo Line	An escape line that provides a rapid escape path for the Derrickman if needed due to well conditions or mechanical failure.	*Petroleum Drilling*
Get or Getting	the mining or extraction of coal from the seam prior to loading.	*Mining*
Getter	one who works out the coal.	*Mining*
Gettering	A process used to capture oxygen and remove it from a region of silicon wafer where device circuitry is developed.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Geyes	inferior cannel coal, also known as Jacks, Rattlejacks, Jay, Jays, Jay coal or Johnnies.	*Mining*
Geyser	A special type of thermal spring that periodically ejects water with great force.	*Energy*
GF-2/3	passenger car motor oil classifications (ILSAC) prior to 2004	*Petro-Chemical Abbreviations*
GF-4	passenger car motor oil classification (ILSAC) from 2004 through Sept 30, 2011	*Petro-Chemical Abbreviations*
GF-5	passenger car motor oil classification (ILSAC) first licensed Oct 1, 2010	*Petro-Chemical Abbreviations*
GFC	Groupement Français de Coordination	*Petro-Chemical Abbreviations*
GGBF	Ground granulated blast furnace slag. A by-product of iron blast furnaces. The slag is ground into granules finer than Portland cement and can be used as an ingredient in concrete.	*Environmental Engineering*
Ghent Plan	a system, inaugurated by the city of Ghent in 1900-1901, designed to encourage private voluntary organizations to extend or establish systems of unemployment benefit payments to their members.	*Industrial Relations*
GHG	greenhouse gas	*Petro-Chemical Abbreviations*
Ghost Town	a term applied to a community once active and prosperous, but which has become depopulated.	*Industrial Relations*
Gibbs phase rule	General relationship between microstructure and state variable.	*Material Process*
Gibs	another word for 'sprags', i.e. holing props.	*Mining*
Gig or Ginny	gravity or self-acting haulage, or a winding engine. (Scot.).	*Mining*
Giga	One billion	*Energy*
Gigabit Interface Converter	A removable transceiver module permitting Fibre-Channel and Gigabit-Ethernet physical-layer transport.	*Electrical Engineering*
Gigawatt	This is a unit of electric power equal to one billion watts, or one thousand megawatts - enough power to supply the needs of a medium-sized city.	*Energy*
Gigawatt (GW)	One billion watts or one thousand megawatts.	*Energy*
Gigawatt hour (GWh)	One billion watt hours.	*Energy*
Gigawatt-electric (GWe)	One billion watts of electric capacity.	*Energy*
Gigawatt hour (GWh)	One billion watt hours.	*Energy*
Gild (Guild) System	a system of manufacturing prior to the industrial revolution in Europe, in which the master craftsmen organized in a tightly knit organization called the "gild", regulated by trade.	*Industrial Relations*
Gilsonite	Trademark name for uintaite (or uintahite), a black, brilliantly lustrous natural variety of asphalt found in parts of Utah and western Colorado.	*Energy*
Gin	an old form of hoisting apparatus, usually powered by a horse. –see Cog and rung gin and Horse whim.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ginger (zingiber)	Irregularly branched pieces, aromatic odor, aromatic burning taste. Ginger oil (volatile), a resin and gingerol. It is using in medicine, confectionery, condiment and soft drinks.	*Material Process*
Ginger oil	A pale yellow thick liquid, characteristic odor, aromatic, somewhat burning taste. Soluble in alcohol, ether, and chloroform, also in benzyl benzoate, diethyl phthalate, mineral oil, and most fixed oils, insoluble in glycerin, propylene glycol, and water.	*Material Process*
Ginging	the walling of a pit shaft with brick, rather than lining the shaft with timber. Also called 'gingoni'. (Derbys.).	*Mining*
Gin-pit	a shallow mine or pit shaft worked by a gin.	*Mining*
Ginseng (panax)	Root of perennial herb Panax quinquefolium having sweet, somewhat aromatic taste.	*Material Process*
Ginze	Slang term for a worker of the lowest "rank", often a rookie with no oilfield experience whatsoever.	*Petroleum Drilling*
GIPSA	Grain Inspection, Packers and Stockyards Administration, a unit within the USDA.	*Agriculture*
Girard's P reagent (C5H5NClCH2 CONHNH2)	White to faintly pinkish crystals with little or no odor, m.p.190-200 °C (374-392 °F). Soluble in water, insoluble in oils. It is using for separation of aldehydes and ketones from natural oily or fatty materials, extraction of hormones.	*Material Process*
Girard's T reagent (CH3)3NClCH2 CONHNH2)	White to faintly pinkish crystals, little or no odor, m.p. 182-192 °C (359.6-377.6 °F). Soluble in water, insoluble in oils, very hygroscopic. It is using for separation of aldehydes and ketones from natural oily or fatty materials, extraction of hormones.	*Material Process*
Girbotol absorption process (amine absorption process)	A process for the removal of hydrogen sulfide or carbon dioxide from a gaseous mixture. An organic amine such as ethanolamine or diethanolamine, which are basic is allowed to flow down a tortuous path through a tower where it is contacted by and absorbs and hydrogen sulfide or carbon dioxide from the gas to be purified while it is moving up to tower. The amine which is contaminated with hydrogen sulfide or carbon dioxide is sent from the bottom of the tower to a steam stripper, where it flows countercurrent to steam, which strips the hydrogen sulfide or carbon dioxide from it. The process implying diethanolamine is widely used in the petroleum industry for purifying refinery and natural gases and for recovery of hydrogen sulfide for sulfur manufacture. Removal of carbon dioxide from gases is usually done with monoethanolamine.	*Material Process*
Girder	a straight or arched steel roof support.	*Mining*
Girdles	sandstone bands in shale, (N. East).	*Mining*
Girdling	A physical cutting or disruption of the cambial sap flow that often results in tree mortality.	*Forestry*
Girdling	Destruction of tissue in a ring around a twig, branch, or stem.	*Forestry*
Girt	(See Horizontal Tie).	*Facility Engineering*
GIS	See: Geographic Information Systems	*Petroleum Drilling*
Gitoxin (C41H64O14)	A digitalis glycoside. White needles, m.p. 266-269 °C (510.8 - 516.2. °F), slightly soluble in water, alcohol, and chloroform.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
GK	Compound Trade name for a hotpour	*Material Process*
GL-4/5	gear service characteristics (API)	*Petro-Chemical Abbreviations*
Glacial acetic acid	Acetic acid in concentrated form, m.p. 16.7 °C (62.06 °F).	*Material Process*
Glacial Drift	A general term for unconsolidated sediment transported by glaciers and deposited directly on land or in the sea.	*Petroleum Engineering*
Glacial drift	Sedimentary material that has been transported by glaciers.	*Mining*
Glacial striations	Lines or scratches on a smooth rock surface caused by glacial abrasion.	*Mining*
Glaciofluval	Pertaining to the meltwater streams flowing from wasting glacier ice, and especially to the deposits and landforms produced by such streams.	*Petroleum Engineering*
Glance coal	another term for anthracite.	*Mining*
Gland	The component that is used to compress the gland packing.	*Industrial Engineering*
Gland follower or gland flange	The component used to hold down or retain the gland in the stuffing box.	*Mechanical*
Gland Nut	The gland nuts are used to exert a force on the gland.	*Industrial Engineering*
Gland or Gland bushing	That part of a valve which retains or compresses the stem packing in a stuffing box (where used) or retains a stem O-ring, lip seal, or stem O-ring bushing. Sometimes manually adjustable. See "Packing," "Stuffing Box."	*Mechanical*
Gland or gland bushing	The part of the valve which retains or compresses the stem packing in a stuffing box.	*General Mechanical*
Gland Packing	A soft conformable material fitted to a valve stuffing box to create a seal between the process fluid and the atmosphere.	*Industrial Engineering*
Gland plate	The plate in a valve which retains the gland, gland bushing or stem seals and sometimes guides the stem.	*Mechanical*
Glasphalt	A road-surfacing material composed of asphalt and crushed glass. To reduce to a level or to practicable degrees of inclination. Example: to grade a road.	*Civil Engineering*
Glass	An inorganic product of fusion which has cooled to a rigid condition without crystallizing.	*Engineering Physics*
Glass-	Fine grained, crystalline ceramic produced by the controlled devitrification of a glass.	*Material Process*
Glass	Glass Noncrystalline solid unless otherwise noted, with a chemical composition comparable to a crystalline ceramic. An amorphous transparented or translucent brittle material usually made by fusion of silica, soda ash, lime, and salt cake or similar materials. Other materials are used for various special glasses. The composition of ordinary window glass(soda lime glass, lime glass) maybe expressed as approximately 20% sodium oxide, 5% calcium oxide, 70-75% silica and small amounts of other components. Ordinary glass is very slowly dissolved by water, but more rapidly attacked by alkaline solutions.	*Material Process*
Glass and Ceramic Workers of North America; United (AFL-CIO)	one of the major unions in the glass industry, formerly with the C.I.O.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Glass Bottle Blowers Association of the United States and Canada (AFL-CIO)	the United Green Glass Workers' Association formed in 1890 and withdrew from the Knights of Labor in 1891.	*Industrial Relations*
Glass colors	This term is applied to chemicals or mixtures used to confer special properties on glass. In addition to the color producing compounds separately cited under various colored glasses the following are included as glass colors: acid resistant, alkali resistant, leadless type, sulfide resistant, very soft nonresistant etc.	*Material Process*
Glass Cutters League of America; Window (AFL-CIO)	early organization of window glass cutters that dates from the time of the Knights of Labor.	*Industrial Relations*
Glass fiber	A continuous filament or staple fiber having unusual resistance to heat and chemicals. It is the strongest fiber known and is perfectly elastic up to its ultimate strength. It is attacked by hydrofluoric acid and alkalies, resistant to most other chemicals and solvents. Colored by resin-bonded pigments or by dyeing an applied protein film. It is not flammable. Electrical insulation, plastic laminates, filter cloth and paper, surgical sutures, fireproof curtains and drapes.	*Material Process*
Glass forming	Processing technique for a glass.	*Material Process*
Glass safety	A thin plastic sheet is cemented between two sheets of plate glass. The plastic is usually polyvinyl butyral, but various other materials have been used. If the glass is broken, the pieces do not fly but remain attached to the plastic. the term is also applied to highly tempered solid glass.	*Material Process*
Glass sand	A sand suitable for making glass. the principal component is quartz. A typical analysis is silica (SiO2) 99.41%, aluminum trioxide (Al 2O3) 0.21%, iron trioxide (Fe2O3) 0.07%, calcium oxide (CaO) 0.07%, and magnesium oxide (MgO) 0.68%.	*Material Process*
Glass transition temperature	The temperature range, above which a glass becomes a supercooled liquid, and below which, it is a true, rigid solid.	*Material Process*
Glass Transition Temperature	The glass transition temperature or Tg is a temperature range which marks a change in mechanical behavior. Above the glass transition temperature a polymer will behave like a ductile solid or highly viscous liquid. Below Tg the material will behave as a brittle solid. Depending on the desired properties materials may be used both above and below their glass transition temperature.	*Metallurgy*
Glass-ceramic	A fine-grained crystalline material that was formed as a glass and subsequently devitrified (crystallized).	*Engineering Physics*
Glassine	A thin transparent paper used for packaging and made with addition of a urea formaldehyde resin to improve strength characteristics.	*Material Process*
Glaze	Glass coating applied to a ceramic such as clay ware pottery.	*Material Process*
Glennie blink, the miners' name for 'Nystagmus'	Glennie blink, the miners' name for 'Nystagmus'. - see also Stag.	*Mining*
Glitch Immunity	A term used in microprocessor supervisory circuit datasheets to describe the maximum magnitude and duration of a negative-going VCC supply-voltage pulse without causing the reset output to assert.	*Electrical Engineering*
Global climate change	Global climate change: See Climate change	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Global climate change	This term usually refers to the gradual warming of the earth caused by the greenhouse effect. Many scientists believe this is the result of man-made emissions of greenhouse gases such as carbon dioxide, chlorofluorocarbons (CFC) and methane, although there is no agreement among the scientific community on this controversial issue.	*Mining*
Global Positioning System	A satellite-based navigation system in which two or more signals, received from satellites, are used to determine the receiver's position on the globe.	*Electrical Engineering*
Global System for Mobile Communications	A land, mobile, pan-European, digital, cellular radio-communications system.	*Electrical Engineering*
Global System for Mobile Communications	A land, mobile, pan-European, digital, cellular radio-communications system.	*Electrical Engineering*
Global warming	An increase in the near surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is today most often used to refer to the warming some scientists predict will occur as a result of increased anthropogenic emissions of greenhouse gases.	*Energy*
Global warming potential (GWP)	An index used to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emission of one kilogram of a greenhouse gas to that from the emission of one kilogram of carbon dioxide over a fixed period of time, such as 100 years.	*Energy*
Globe Doctrine	the policy set forth by the NLRB in the Matter of Globe Machine and Stamping Company. In which the Board provided for special balloting to determine the representation wishes of employees.	*Industrial Relations*
Globe valve	A valve whose closure element is a flat disc or conical plug sealing on a seat which is usually parallel to the flow axis. Can be used for throttling services.	*General Mechanical*
Globe valve	a type of stemmed valve that is used for flow control. The valve has a globe shaped plug that rises or falls vertically when the stem handwheel is rotated.	*Chemical*
Glory hole	An open pit from which ore is extracted, especially where broken ore is passed to underground workings before being hoisted.	*Mining*
Gloss	Brightness or luster of a body proceeding from a smooth surface.	*Material Process*
Glue	An impure or degraded form of gelatin obtained by action of heat and water on protein animal tissues of bones, hides, horns. It absorbs cold water with much swelling and dissolves in hot water, the solution solidifying to jelly on cooling.	*Material Process*
Glut	pieces of timber used for packing behind the crib or tubbing in a shaft. (N. East); or a thin tapering wedge of wood used to fill in gaps between posts and their lids (N. Staffs.); or a wooden wedge driven into a water feeder to stop or reduce the flow.	*Mining*
Glutamic acid (COOH(CH2)2CH (NH2) COOH)	Alfa amino glutaric acid, a nonessential amino acid present in all complete proteins. the naturally occurring form is L(+)-glutamic acid. The monosodium salt, L(+)-sodium glutamate, is important commercially as a flavoring intensifier.	*Material Process*
Glutaric acid (COOH (CH2)2COOH)	n-pyrotartaric acid is colorless crystals, m. p. 97 °C (206.6 °F). Soluble in water, alcohol and ether.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Glutaronitrile (NC(CH2) CN)	Colorless to straw colored viscous liquid, b.p. 144-146 °C (291.2-294.8°F). Soluble in water and alcohol, insoluble in ether and carbon disulfide.	*Material Process*
Glutathione (C10H17) O6N3S)	A universal component of the living cell. Contains glutamic acid, cysteine, and glycine chemically bound. Hydrolysis sets free these three constituent amino acids. White crystalline powder, colorless, m.p. 190-192 °C (374-377.6°F), mild sour taste, soluble in water, insoluble in alcohol. The especial interest as relates to radiation damage.	*Material Process*
Gluten	Vegetable albumen. A mixture of proteins derived from grain. The protein of bread. A yellowish gray powder or a gray-brown sticky tough mass that is insoluble in water and remains after the starch is washed out of wheat flour with water. Soluble in alkali and strong acetic acid. Crude commercial gluten contains 5-20% starch as a filler. Gluten uses to supplement corn bran, for production of whole-corn proteins, as gluten meal for cattle feed, destarched gluten with associated fiber and fate in coatings, adhesives and plastic compositions and also in amino acid production.	*Material Process*
Glutin	Amorphous, odorless, tasteless protein, having great adhesive strength. Soluble in hot water. A constituent of glue.	*Material Process*
Glutol (glutoform, formaldehyde gelatin)	A hard, clear transparent mass which may be pulverized, or white to yellow odorless powder. Insoluble in cold water, soluble in hot water under pressure.	*Material Process*
Glyceraldehyde (glyceric aldehyde) (HOCH2CHOHCHO)	Isomeric with dihydroxyacetone. It is produced by the oxidation of sugars in the body. DL glyceraldehydes tasteless crystals from alcohol–ether mixture, m.p. 145 °C (293°F), insoluble in benzene, petroleum ether and pentane.	*Material Process*
Glyceride	An ester of glycerol and fatty acids in which one or more of the hydroxyl groups of the glycerol have been replaced by acid radicals. The latter may be identical or different, so that the glyceride may contain up to three different acid groups. Glycerides occur naturally or may be made synthetically. Mono- and triglycerides are of commercial importance.	*Material Process*
Glyceride	Glyceride An ester of glycerol and fatty acids in which one or more of the hydroxyl groups of the glycerol have been replaced by acid radicals. The latter may be identical or different, so that the glyceride may contain up to three different acid groups. Glycerides occur naturally or may be made synthetically. Mono- and triglycerides are of commercial importance.	*Material Process*
Glyceril tripropionate (C3H5(OCOC2H5)3) (glycerol triproprionate)	Solubility in water 0.313% of weight. Plasticizer.	*Material Process*
Glycerin	Glycerin See glycerol.	*Material Process*
Glycerin carbonate (hydroxymethyl ethylene carbonate or 2,3-carbonate-1-propanol)	Pale yellow, odorless, hygroscopic liquid. Boiling range 125-130 °C (257-266°F). Solvent, miscible with water, alcohol, ether, soluble in ethylene dichloride, insoluble in carbon tetrachloride, benzene, and aliphatic hydrocarbons.	*Material Process*
Glycerin dynamite	A grade of glycerol.	*Material Process*
Glycerinophosphoric acid	Glycerinophosphoric acid. See glycerophosphoric acid.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Glycerogen	A glycerol substitute consisting of 35% glycols, 35% glycerol, 25-28% hexitol, erythritol and other compounds. Colorless, reasonably sweet in taste, non-toxic and resembling glycerol in viscosity. It derivates by continuous catalytic hydrogenolysis of sugar at 200 °C (392°F) and 325 atmospheres. Glycerogen is used as softening and conditioning agent in tobacco, cellulose films, cosmetics and pharmaceuticals.	*Material Process*
Glycerol mannitan laurate	A mixed poly alcohol fatty acid ester. Red-brown oily liquid. Dispersible or insoluble in water and most solvents. Wetting agent, spreading agent in insecticides.	*Material Process*
Glycerol boriboate	Pale yellow liquid obtained by heating glycerin, sodium borate and boric acid. Composition varies Soluble in cold water, absolute alcohol, other alcohols, glycerin. Used as adhesive , binder, fabric softener, fire resistant on fabrics.	*Material Process*
Glycerol diacetate (C3H5(OH)(OOCCH3)2)	A plasticizer. Also called diacetin.	*Material Process*
Glycerol esters	Products of esterification of glycerol with acids some are useful as plasticizers, e.g. the glycol acetate.	*Material Process*
Glycerol glue	See glue.	*Material Process*
Glycerol monoacetate (C3H5(OH) (OOCCH3))	A plasticizer. Also called acetin.	*Material Process*
Glycerol monolaurate (glyceryl monolaurate, lauryl glycerin)	Glycerol monolaurate (glyceryl monolaurate, lauryl glycerin) (C11H23 COOCH2CHOHCH2OH) Cream colored, semi-solid paste, very faint odor. Dispersible in water, soluble in methanol, ethanol, toluene, naphtha, mineral oil, cotton seed oil, ethyl acetate. An ester of glycerol and lauric acid. Emulsifying and dispersing agent for the manufacture of food products. Emulsifying agent for oils, waxes and solvents, antifoaming agent, dry-cleaning soap base.	*Material Process*
Glycerol monooleate (glyceryl monooleate) (C17H33 COO CH2CHOH CH2OH)	A yellow oil, insoluble in water, soluble in alcohol and most organic solvents.	*Material Process*
Glycerol monoricinoleate (glyceryl monoricinoleate) (C17H33OCOOC3H5 (OH) 2) Orange–red, oily liquid	Glycerol monoricinoleate (glyceryl monoricinoleate)(C17H33OCOOC3H5 (OH) 2) Orange–red, oily liquid, soluble in methanol, ethanol, toluene, cotton seed oil, ethyl acetate, disperses in water, insoluble in naphtha, and mineral oil. It is used for nondrying emulsifying agent, solvent, plasticizer, in polishes, in cosmetics, in textile, paper, and leather processing. Lowers surface tension. High lubricating value even at low temperatures.	*Material Process*
Glycerol monostearate (monostearin or glyceril monostearate) (C17H35 COOCH2CHOHCH2OH)	Pure white or cream-colored, wax-like solid with faint odor, and fatty, agreeable taste. Dispersible in hot water. Soluble (hot) in alcohol, oils and hydrocarbons. It is stearic acid ester of glycerol. Thickening and emulsifying agent for margarine, shortenings and other food products, emulsifying agent for oils, waxes and solvents, protective coating for hygroscopic powders, cosmetics etc.	*Material Process*
Glycerol of borax	Borax dissolved in glycerol, used in medicine.	*Material Process*
Glycerol triacetate (C3H5(OH) (OOCCH3)3)	A plasticizer. Also called triacetin.	*Material Process*
Glycerol tributyrate (CH3CH2CH2CO)3 C3H5O3)	A plasticizer. Also called tributyrin.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Glycerol triproprionate (C3H5(OCO C2H5) (OOCCH3)3)	A plasticizer. Also called tripropionin.	*Material Process*
glycerol	A molecule to which 1, 2 or 3 fatty acids or phosphate may attach.	*Agriculture*
Glycerol, or Glycerin, Glycyl alcohol (CH2OHCHOHCH2OH)	Colorless liquid or rhombic crystals. Clear, colorless, or pale yellow, odorless, sweet, warm taste, hygroscopic. It is soluble in water and alcohol, insoluble in ether, benzene and chloroform. Purifying by redistillation ion exchange techniques. Glycerol is used as a modifier in numerous plastics, especially to increase the transparency of cast phenolics. It also has a hardening effect. Glycerol is used for alkyd resins, explosives, ester gums, medicine, pharmacy, perfumery, plasticizer for regenerated cellulose, cosmetics, conditioning tobacco, liqueurs, solvent, printers ink rolls etc...	*Material Process*
Glycerophosphoric acid (C3H5(OH)2 H2 PO4) (gycerolphosphoric acid or glycerinophosphoric acid)	Colorless, odorless liquid, soluble in water and alcohol. It derivates by interaction of glycerol and phosphoric acid. It is used in medicine and manufacture of glycerophosphates.	*Material Process*
Glyceryl benzoate (C3H5(OOCC6H5)3) (tribenzoin)	Colorless, non hygroscopic, crystalline solid. Soluble in most anhydrous lacquer solvents with the exception of petroleum hydrocarbons.	*Material Process*
Glyceryl monolaureate	See glycerol monolaureate.	*Material Process*
Glyceryl monooleate	See glycerol monooleate.	*Material Process*
Glyceryl monoricinoleate	See glycerol monoricinoleate.	*Material Process*
Glyceryl monostearate	See glycerol monostearate.	*Material Process*
Glyceryl phthalate (glycerol phthalate)	Water white, solid resin. Insoluble in water. Soluble (hot) in methanol, ethanol, acetone, and ethyl acetate. Partly soluble in toluene and naphtha. Synthetic resin used in the manufacture of varnishes, lacquers, etc.	*Material Process*
Glyceryl tri – [1, 2 hydroxystearate] (C3H5 (OOCOC17H35)3) (castor, oil hydrogenated)	Hard, brittle wax-like solid, yellowish cream to milk, white in color. Used as lubricants, metallic stearates, waxes, plasticizers, cosmetics, chemical intermediate.	*Material Process*
Glyceryl tributyrate (C3H5(OCOC3H7)3)	Glyceryl tributyrate (C3H5(OCOC3H7)3) (tributyrin or glycerol tributyrate) Plasticizer, soluble in water 0.010%.	*Material Process*
Glyceryl triricinoleate (C3H5(OOCOC2H5)3) (glyceryl ricinoleate)	The triglyceride of ricinoleic acid. It constituent about 80% of Castrol oil. A light amber oil, non-drying emulsifying oil.	*Material Process*
Glycine (NH2CH2COOH) (amino acid)	The principal amino acid in sugar cane. White very sweet crystals, soluble in water, insoluble in alcohol and ether. It is derivated by the action of concentrated ammonium hydroxide on monochloro acetic acid, or by alkaline hydrolysis of gelatin. Uses as buffering agent. Not to be confused with the photographic developer, para-hydroxyphenyl aminoacetic acid, also known as glycine, which is poisonous.	*Material Process*
Glycocholic acid (C26H43NO6) (cholyglycine)	Occurs as sodium salt in bile. It is formed by the combination of the amino acid glycine with cholic acid. As the sodium salt, it aids in the digestion and absorption of fats. Crystallizes from water containing 1.5 moles water (H2O). Practically insoluble in water. The sodium salt is soluble in water and alcohol.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Glycocoll. See glycine.	Glycocoll See glycine.	*Material Process*
Glycogen (animal starch, liver starch) (C6H10O5)n)	A glycose polysaccharide. It is the storage carbohydrate of the animal organism, found especially in the liver and rested muscle. White powder, forms a dextro-rotatory colloidal solution, partially soluble in water, sweet tasting. It is isolated from liver by treatment with 30% sodium hydroxide solution and precipitating glycogen from the solution with alcohol.	*Material Process*
Glycol Ethylene glycol.	Glycol Ethylene glycol.	*Material Process*
Glycol diacetate (-CH3COOCH2CH2 OOCCH3)	Colorless liquid, faint odor, soluble in alcohol, ether, benzene, slightly soluble in water (10%). A solvent.-ester. Solvent for cellulose esters and ethers, resins, lacquers, printing inks.	*Material Process*
Glycol sebacate (-CH2CH2 OCO(CH2)8 COO-)n	A plasticizer. Also called Paraplex.	*Material Process*
Glyptal	An alkyd synthetic resin made by heating together phthalic anhydride and glycerol used in paints, varnishes, lacquers, and as a shellac substitute.	*Material Process*
GM	General Motors	*Petro-Chemical Abbreviations*
GMOT	General Motors oxidation test	*Petro-Chemical Abbreviations*
Gneiss	A layered or banded crystalline metamorphic rock, the grains of which are aligned or elongated into a roughly parallel arrangement.	*Mining*
GNP	Gross National Product	*Energy*
GO	Gear Operated - The actuation of a valve thru a – ear set which multiplies the torque applied to the valve stem. See "BGO", "MGO."	*Mechanical*
Goaf	The area from which the coal has been entirely extracted. The word is thought to have been derived from the Welsh word for cave. Along with 'goave' the term is often found in technical books on coal mining but is seldom, if ever, used by miners. The term 'gob' is the more common name. - see also Waste.	*Mining*
Gob	To leave in a mine coal and other materials that cannot be sold.	*Energy*
Gob fire	spontaneous combustion or fire in the waste.	*Mining*
Gob Pile	A pile of loose waste material in a mine, or backfill waste material packed in stopes (steps or layers) to support the roof of a mine. A gob pile is also called a "honey" or "refuse" pile. This term is primarily used in underground mining.	*Energy*
Gob road	-see Scour	*Mining*
Gob side	the side of a roadway that ran parallel to the waste, or the waste side of a conveyor that runs along the coalface.	*Mining*
Gob stink	- see Fire stink.	*Mining*
Gob	The term applied to that part of the mine from which the coal has been removed and the space more or less filled up with waste. Also, the loose waste in a mine. Also called goaf.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Goff or Goth	A sudden outburst of coal at the working face accompanied by a loud report. As a rule the coal and stone are projected from the face in a very shattered, and often powdered, condition. The outburst is due to the settlement of the roof producing a state of strain in the coal or its roof, or floor, eventuating in the sudden rupture, which is termed 'goth'. Firedamp may, or may not, be liberated by this occurrence.	*Mining*
Going board	where the crane, flat, or station, is not at the end of the headways-course at the face, and the coals are brought down to it by a board for one, two, or more pillars, this board is called the going (or "gannen") board. (N. East).	*Mining*
Going headways	usually the headways-course next to the face. (N. East).	*Mining*
Going Rate, The	the predominant rate or the rate most commonly paid to workers in a specific occupation in an industry or area.	*Industrial Relations*
GO-J	Mack gear oil specification	*Petro-Chemical Abbreviations*
Gold loan	A form of debt financing whereby a potential gold producer borrows gold from a lending institution, sells the gold on the open market, uses the cash for mine development, then pays back the gold from actual mine production.	*Mining*
Gold Panning in the American West Outcrop	That portion of a vein appearing at the surface.	*Mining*
Gold Plating	The electrolytic deposition of gold for decorative or electrical applications.	*Paint and Coatings*
Gold standard	The method, procedure, or measurement that is widely accepted as being the best available, against which new developments should be compared.	*Quality Engineering*
Goldbricking	giving the appearance or pretense of working.	*Industrial Relations*
Golden ratio	Golden ratio. The irrational number [(5½)+1]/2= 1.618, which plays a fundamental role in numerous shapes in the natural world, including the recently discovered quasi -crystals.	*Material Process*
Golden ratio The irrational number	**Golden ratio.** The irrational number **[(5½)+1]/2=1.618, which plays a fundamental role in numerous shapes in the natural world, including the recently discovered quasi-crystals.**	*Material Process*
Goldfinger v. Feintuch	a case in which the New York Court of Appeals upheld the right of a union to engage in secondary picketing where it was peaceful and in furtherance of the union's efforts to persuade customers not to buy in stores selling products produced by union labor under sub-standard wage conditions.	*Industrial Relations*
Go-Line	Used In Relation To Mobile Equipment. Equipment Which Is Available, But Not Being Utilized Is Typically Parked On The Go-Line. This Term Is Used Interchangeably With Ready Line.	*Plant Engineering*
Gompers' Non-Partisan Policy	the policy of the American Federation of Labor, attributed to Samuel Gompers, which sought to use the two major political parties to assist the A.F. of L. to achieve its industrial objectives without being committed to either party.	*Industrial Relations*
Gompers v. Buck Stove and Range Company	a case involving the secondary boycott and the use by the A.F. of L. of its "Unfair" and "We do not patronize" lists.	*Industrial Relations*

Term	Definition	*Industry*
Gompersite	an individual who supported the labor policies of Samuel Gompers.	*Industrial Relations*
Gompertz Model	A reliability growth model that is used to model reliability at different stages of development and produces an S-shaped reliability growth curve.	*Reliability Engineering*
Good engineering practice (GEP) scheme	A scheme approved by the BC Oil and Gas Commission under regulation for the exploration, evaluation and development of petroleum and natural gas (now referred to as a special project).	*Petroleum Engineering*
Good Utility Practice	Methods and practices that are approved by a significant portion of the industry.	*Energy*
Good-Faith Bargaining	negotiations between representatives of union and company to reach a mutually satisfactory agreement setting forth the conditions of employment under a collective bargaining contract.	*Industrial Relations*
Goodwill	One of the intangible values beyond its net worth that a business acquires from suppliers and customers as a result of their business relationships. It is promoted by granting more business as a reward for good service, sharing plans and forecasts, working together to solve problems, mutual research and developing, etc.	*Procurement*
Goon	a slang term for a person, pluggly, thug, roughneck, slugger, etc. hired by an employer or union during a labor dispute to create or resist violence.	*Industrial Relations*
Goon Squad	a group of thugs or sluggers who are hired by an employer or union to create or resist violence.	*Industrial Relations*
Goose	a water barrel or tub taken down the mine for the horses, or to suppress the dust when shot-firing. (F. of D.).	*Mining*
Gooseneck	The curved connection between the rotary hose and the swivel.	*Petroleum Drilling*
GOR	Gas To Oil ratio refers to the amount of crude oil produced compared to produced natural gas. High GOR wells produce more gas than oil. In Texas, a gas well is defined as one where the GOR is 100 Mcf/bbl or more.	*Petroleum Drilling*
Goskins or ghoskins	nodules of inferior quality ironstone.	*Mining*
Gossan	The rust-colored capping or staining of a mineral deposit, generally formed by the oxidation or alteration of iron sulfides.	*Mining*
GOT	Graphic Operator Terminal. A kind of HMI.	*Control Engineering*
Got-on-Knobs	an early system of working the Thick Coal of South Staffordshire. A kind of bord and pillar system. The main roads were driven to the boundary and the coal was then worked on the retreat (S. Staffs.).	*Mining*
Gouge	Fine, putty-like material composed of ground-up rock found along a fault.	*Mining*
Gout water	foul mine water (F. of D.).	*Mining*
GOUT	Formation of swellings at nodes or at the base of buds.[1]	*Forestry*
Government Employees	workers employed by an instrumentality of government.	*Industrial Relations*
Government Seizure	a procedure used by the government, usually during a war period or other emergency, to take over the operation plants necessary to the prosecution of the war effort.	*Industrial Relations*
Government-owned stocks	Oil stocks owned by the national government and held for national security. In the United States, these stocks are known as the Strategic Petroleum Reserve.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gowl	The roof and sides were said to 'gowl' or 'gowl out' when they began to break down and cause trouble. (Derbys.).	*Mining*
GPA	gasoline performance additives	*Petro-Chemical Abbreviations*
GPH	Volumetric flow rate in gallons per hour.	*General Engineering*
GPM	(Abbr.) Gallons per minute	*Facility Engineering*
GPS	global positioning system	*Petro-Chemical Abbreviations*
Grab sample	A sample from a rock outcrop that is assayed to determine if valuable elements are contained in the rock. A grab sample is not intended to be representative of the deposit, and usually the best-looking material is selected.	*Mining*
Graben	A downfaulted block of rock.	*Mining*
Grade	classification system of food quality	*Agriculture*
Grade and Gradation	the rate of decent or ascent (slope) and the act of becoming a different grade.	*Petroleum Drilling*
Graded	An engineering term pertaining to a soil, or an unconsolidated sediment, consisting of particles of several or many sizes, or having a uniform or equable distribution of particles from coarse to fine.	*Petroleum Engineering*
Graded index fiber	Optical fiber with a parabolic variation in index of refraction within the core.	*Material Process*
Grades, Rope	Classification of wire rope by the wire's metallic composition and the rope's nominal strength.	*Wire Rope & Cable*
gradient	the rate of change in value of a physical or chemical parameter per unit change in position. For example, hydraulic gradient is equal to the difference in head measured at two points (usually wells) divided by the distance separating the two points. The dimensions of head and distance are both lengths, therefore the gradient is expressed as a dimensionless ratio (L/L).	*Chemical*
Gradualism	the process of achieving a goal or result through slow progression and by degrees so that wide acceptance can be achieved through education.	*Industrial Relations*
Graduated Wage	generally has reference to wages which are adjusted on the basis of length of service with the company, or length of service coupled with certain standards of performance.	*Industrial Relations*
Graduation mark	The marks that define the scale intervals on a measuring instrument are known as graduation marks.	*Reliability Engineering*
Graft copolymer	Combination of polymeric components in which one or more components is grafted onto a main polymeric chain.	*Material Process*
Graft in Union	the acquisition by union officials or employees of money, position, or profit through dishonest means.	*Industrial Relations*
Grain	Individual crystallite in a polycrystalline microstructure.	*Material Process*
Grain boundary diffusion	Enhanced atomic flow along the relatively open structure of the grain boundary region.	*Material Process*
Grain boundary dislocation (GBD)	Linear defect within a grain boundary, separating regions of good correspondence.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Grain growth	Increase in average grain size of a polycrystalline microstructure due to solid state diffusion.	*Material Process*
Grain Inspection, Packers and Stockyards Administration, (GIPSA)	A unit within the USDA.	*Agriculture*
Grain or Green	the 'cleat' or most pronounced planes of division traversing coal seams from roof to floor (N. Staffs.).	*Mining*
Grain-size number	Index for characterizing the average grain size in a microstructure.	*Material Process*
Gram atom	Avogadro's number of atoms of a given element.	*Material Process*
Grand Lodge	the term applied to the head office of a union organized along fraternal lines or using the language of fraternal societies.	*Industrial Relations*
Grange	an organization of farmers that provides support and plans social functions	*Agriculture*
Granite	A coarse-grained intrusive igneous rock consisting of quartz, feldspar and mica.	*Mining*
Granolith	A composition stone for pavements, made from crushed granite or the like and cement.	*Civil Engineering*
Granular Powder	Particles having approximately equidimensional nonspherical shapes.	*Paint and Coatings*
Granular structure	Apparent incomplete fusion of and at least partial retention of their original form by the particles from which a plastic is formed, either within it or on its surface.	*Material Process*
Granule	An information granule is a term used by some fuzzy logic experts to describe a fuzzy set of objects which can be seen as a unit in fuzzy logic calculations.	*Control Engineering*
Graphite	Flexible carbon material used to make gaskets and packing. The gaskets may be flat graphite sheet or have metal inserts for added strength. The packing is a combination of lattice braided rings used as anti-extrusion or wiper rings and die-formed rings which are compressed to affect the seal.	*General Mechanical*
Graphite	Flexible carbon material used to make gaskets and packing. The gaskets may be flat graphite sheet or have metal inserts for added strength. The packing is a combination of lattice braided rings used as anti-extrusion or wiper rings and die-formed rings which are compressed to effect the seal.	*Mechanical*
Grass	a type of plant with jointed stems, slender flat leaves and spike like flowers such as corn and wheat	*Agriculture*
Grass crop	another name for the outcrop of a coal seam. (Scot.).	*Mining*
Grass Fed	a USDA standard requiring that an animal's only feed source be grass or forage, except for milk consumed prior to weaning. Animals are required to have continuous access to pasture during the growing season. Grass-fed animals may not be fed grain or grain byproducts at any time during their lifetime.	*Agriculture*
Grathe	to put in order, to dress or replace a worn clack or bucket leather in a mine pump.	*Mining*
Gravel-Packed Well	A well in which filter material is placed in the annular space to increase the effective diameter of the well, and to prevent fine-grained sediments from entering the well.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Graveyard Shift	a work schedule, usually in plants on continuous operation, which begins around midnight and ends during the early morning.	*Industrial Relations*
Gravimetric Analysis	A method of analysis whereby the dry weight of contaminant per unit volume of fluid can be measured showing the degree of contamination in terms of milligrams of contaminant per liter of fluid.	*Oil Analysis*
Gravimetric value	The weight of suspended solids per unit volume of fluid. A method employing membrane filters for this determination is outlined in Society of Automotive Engineers Aerospace Recommended Practices - 785.	*Mechanical, Process, and Operations*
Gravity	An attractive force between two objects; each object accelerates at a rate equal to the attractive force divided by the object's mass. Objects near the surface of the earth tend to accelerate toward the earth's center at a rate of ; this value is often called the gravitational constant and denoted as g.	*Engineering Physics*
Gravity Bracket	Brackets designed to permit gravity conveyors to be attached to the ends of a powered conveyor.	*Manufacturing*
Gravity Conveyor	Roller or wheel conveyor over which objects are advanced manually by gravity.	*Manufacturing*
Gravity dam	A dam resisting the pressure of impounded water through its own weight.	*Civil Engineering*
Gravity meter, gravimeter	An instrument for measuring the gravitational attraction of the earth; gravitational attraction varies with the density of the rocks in the vicinity.	*Mining*
Gravity Separation	A method of separating two components from a mixture. Under the influence of gravity, separation of immiscible phases (gas-solid, liquid-solid, liquid-liquid, solid-solid) allows the denser phase to settle out.	*Lubrication*
Gravity Unit	One gravity unit (abbreviated g) is an acceleration of 32.2 feet per second per second.	*Electrical Engineering*
Gray cast iron	A form of cast iron containing sharp graphite flakes that contribute to a characteristic brittleness.	*Material Process*
Gray Dogs	laminated sandstone with coal streaks.	*Mining*
Grease	A lubricant composed of an oil or oils thickened with a soap, soaps or other thickener to a semisolid or solid consistency.	*Lubrication*
Grease fitting	A device which permits injection of grease into a bearing surface.	*General Mechanical*
Grease Fitting	A small fitting which connects a grease gun and the component to be lubricated. The fitting is installed by a threaded connection, leaving a nipple to which the grease gun attaches.	*Lubrication*
Grease Gun	A tool (normally hand-powered) which is used for lubrication tasks. By squeezing the trigger of the gun, grease is applied through an aperture to a specific point.	*Lubrication*
Grease marks	Dull or pitted surface areas caused by excessive amounts of lubricants. Term not recommended.	*Material Process*
Green engineering	Environmentally sensitive engineering design.	*Material Process*
Green flag	The green flag is used by the starter to signal drivers that the race is under way, either at the start of the event or at the conclusion of a full-course yellow flag condition. Green flags are used by corner workers on road courses to let drivers know that they have passed beyond a yellow flag area and may resume passing.	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Green Hands	workers who are new to a job or occupation, or inexperienced in the performance of the work.	*Industrial Relations*
Green Power	Power that is generated from renewable energy sources. Specific definitions of green power vary in each state. Typically, wind, solar and bio-mass fuels are considered sources of green power.	*Energy*
Green pricing	In the case of renewable electricity, green pricing represents a market solution to the various problems associated with regulatory valuation of the nonmarket benefits of renewables. Green pricing programs allow electricity customers to express their willingness to pay for renewable energy development through direct payments on their monthly utility bills.	*Energy*
Green rock	an igneous intrusion into the coal measures, sometimes burning and/or destroying part or all of the coal seam (S. Staffs.).	*Mining*
Green roof	roof of the coal at the face that has not had to stand open long supported on timber before being underpinned by the advancing pack.	*Mining*
Greener	a very strongly marked cleavage plane in the coal seam, which is specially utilized in working off the coal (N. Staffs.).	*Mining*
Greenfield Plant	This refers to a new electric power generating facility built from the ground up.	*Energy*
Greenhouse effect	The result of water vapor, carbon dioxide, and other atmospheric gases trapping radiant (infrared) energy, thereby keeping the earth's surface warmer than it would otherwise be. Greenhouse gases within the lower levels of the atmosphere trap this radiation, which would otherwise escape into space, and subsequent re-radiation of some of this energy back to the Earth maintains higher surface temperatures than would occur if the gases were absent.	*Energy*
Greenhouse gases	Those gases, such as water vapor, carbon dioxide, nitrous oxide, methane, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride, that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.	*Energy*
Greenstone belt	An area underlain by metamorphosed volcanic and sedimentary rocks, usually in a continental shield.	*Mining*
Greet stone	coarse grained, gritty sandstone.	*Mining*
Gregarious	Living in groups or communities.	*Forestry*
Grew or Grewn	When the coal seam passes by fine graduations into the shale roof (or floor), the roof (or floor) and the seam are said to be 'grewn'.	*Mining*
Grey bind	a sandy mudstone or shale.	*Mining*
Grey literature	Grey literature is the kind of material that is not published in easily accessible journals or databases. It includes things like conference proceedings that include the abstracts of the research presented at conferences, unpublished theses, and so on.	*Quality Engineering*
Grey metal	shale.	*Mining*
Grey post	sandstone.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Greyhound Cases	cases in which the Supreme Court in 1983 upheld orders of the NLRB disestablishing company dominated unions.	*Industrial Relations*
Grid	Matrix of an electrical distribution system.	*Energy*
Grid code	This term refers to the requirements developed by power utilities that power generators of all kinds must meet to ensure the proper functioning and stability of the electrical transmission and distribution grid. that define grid fault and other conditions that must be responded to by wind power plants. These include regulations such as n-1 and fault ride-through capabilities (see n-1 and Fault ride-through).	*Electrical*
Grid Operator	The entity that oversees the delivery of electricity over the grid to the customer, while assuring consistently high levels of reliability, and public and worker safety. The grid operator potentially could be independent of the utilities and suppliers.	*Energy*
Grid reliability	Power utilities strive to maintain electricity supplies without unexpected dips or surges that can cause disruptions ranging from flickering lights to equipment damage. To avoid these problems, utilities therefore need to control the flow of power under normal running conditions and in emergency situations. This is done by installing sophisticated switching and protection equipment (fuses, circuit breakers, transformers, etc.) in substations, and monitoring equipment (protection relays, phase monitoring units, thermal line sensors etc) at strategic points on the grid. The monitoring units measure the rate and direction of power flow, its stability, the temperature of hot power lines, and other parameters critical to the normal functioning of the grid. The data are transmitted to a central computer, which uses them to calculate the settings for the control equipment housed in the substations and generating plants. This allows power flow to be directed, compensating for overloaded sections of the grid and even shutting down certain connections to prevent the spread of disturbances or to allow maintenance work to be carried out. (See FACTS, Network control, SCADA, Wide-Area Monitoring Systems.)	*Electrical*
Grid	The starting order of cars, as determined by qualifying position.	*NASCAR*
Grids	Parallel, channel-shaped, cast-iron supports that hold the steam plates away from the press platens during knockout operation and also provide air spaces between plates and platens to reduce loss of heat.	*Material Process*
Grievance	any complaint by an employee or by a union, concerning any aspect of the employment relationship.	*Industrial Relations*
Grievance Machinery	the provisions set up, usually in th collective bargaining agreement, to resolve problems which arise out of the agreement.	*Industrial Relations*
Grievance Adjustment	methods of settling or adjusting a grievance vary from contract to contract.	*Industrial Relations*
Grievance Committee	the group of union and/or management representatives that reviews grievances after they have come up the lower steps of the grievance machinery.	*Industrial Relations*
Grieve	the man who weighed the coal coming out of the mine for the coal owner. The 'pitheadsman'. (Scot.).	*Mining*
Griffith crack model	Prediction of stress intensification at the tip of a crack in a brittle material.	*Material Process*
Grimes	a term used in S. Wales for 'bobbers' and 'bell moulds'. - see Coal balls.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Grinding	The removal of material by the use of fixed abrasives like grinding wheels or emery paper.	*Paint and Coatings*
Grinding	mechanically removing material from a work-piece with a grinding wheel or abrasive belt	*Materials Process*
Grip Length	Total distance between the underside of the nut to the bearing face of the bolt head; includes washer, gasket thickness etc.	*Maintenance*
Grisley	coarse pyritous coal, irregular in thickness, and possessing spherical structure.	*Mining*
Grist	a black coaly stratum found in the proximity of a coal seam (S. Wales).	*Mining*
Grit	the inside of a corn kernel exposed after the outer covering, or hull, is removed	*Agriculture*
Grit Blasting	A pressurized stream of hard metal or oxide grit material used to clean and roughen surfaces prior to coating.	*Paint and Coatings*
Grit-blasting	abrasive blasting with small irregular pieces of steel, malleable cast iron or hard nonmetallic materials	*Materials Process*
Grizzle	inferior coal with an admixture of specks and patches of pyrites, often sooty in appearance.	*Mining*
Grizzly	A grating (usually constructed of steel rails) placed over the top of a chute or ore pass for the purpose of stopping the larger pieces of rock or ore.	*Mining*
Grizzly (or mantle)	A grating, usually constructed of steel rails, placed over the top of a chute or ore pass for the purpose of stopping large pieces of rock or ore that may hang up in the pass.	*Mining*
Grizzly	Bars set in a flume to strain out the large stones used in hydraulic mining.	*Mining*
Groin	Also, "groyne" a small jetty extending from a shore to prevent beach erosion.	*Civil Engineering*
Grommet	An endless circle or ring fabricated from one continuous length of strand or rope.	*Wire Rope & Cable*
Groove	The opening provided for a groove weld.	*Maintenance and Repair*
Groove Angle	The total included angle of the groove between parts to be joined by a groove weld.	*Maintenance and Repair*
Groove Face	That surface of a member included in the groove.	*Maintenance and Repair*
Groove Radius	The radius of a J or U groove.	*Maintenance and Repair*
Groove Weld	A weld made in the groove between two members to be joined. The standard type of groove welds are square, single-V, single-bevel, single-U, single-J, double-V, double-U, double-bevel, double-J, and flat-land single, and double-V groove welds.	*Maintenance and Repair*
Groove	see Line.	*NASCAR*
Grooved Drum	Drum with a grooved surface that accommodates the rope &/or wire rope and guides it for proper winding.	*Wire Rope & Cable*
Grooves	Circumferential channels between the tread ribs of a tire	*Mechanical Engineering*
Grooving	A tread cutting process in which grooves of varying depths and angles are cut into a tire's tread to improve forward traction, braking, or lateral stability.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gross	All acreage covered by any working interest, regardless of the percentage of ownership in the interest.	*Energy*
Gross additions to construction work in progress for the month	This amount should include the monthly gross additions for an electric plant in the process of construction.	*Energy*
Gross Additive Treating Cost (GATC)	The cost of additive in one volume unit of finished product not including base fluid credit or shipping costs.	*Lubrication*
Gross Average Hourly Earnings	a figure computed monthly by the Bureau of Labor Statistics as part of its regular employment and pay-roll reporting program.	*Industrial Relations*
Gross Average Weekly Earnings	a figure computed monthly by the Bureau of Labor Statistics as part of its regular employment and pay-roll reporting program.	*Industrial Relations*
Gross Axle Weight Rating (GAWR)	The maximum weight that the front or rear axle can carry. The front and rear gross axle weights must not exceed the front and rear GAWR's. Gross Combination Weight Rating (GCWR) - The total weight of the loaded tow vehicle and the loaded trailer.	*Mechanical Engineering*
Gross calorific value	The gross calorific value indicates the amount of heat that is released when the fuel is burned, including the heat contained in the flue gases (so-called condensation heat).	*Thermal Management*
Gross company-operated production	Total production from all company-operated properties, including all working and nonworking interests.	*Energy*
Gross Delivered Treating Cost (GDTC)	The cost of additive in one volume unit of finished product including shipping cost, but not base fluid credit.	*Lubrication*
Gross domestic product (GDP)	The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.	*Energy*
Gross domestic product (GDP) implicit price deflator	The implicit price deflator, published by the U.S. Department of Commerce, Bureau of Economic Analysis, is used to convert nominal figures to real figures.	*Energy*
Gross energy intensity	Total consumption of a particular energy source(s) or fuel(s) by a group of buildings, divided by the total floor space of those buildings, including buildings and floor space where the energy source or fuel is not used, i.e., the ratio of consumption to gross floor space.	*Energy*
Gross gas withdrawal	The full-volume of compounds extracted at the wellhead, including nonhydrocarbon gases and natural gas plant liquids.	*Energy*
Gross Generation	Amount of electric energy produced by generating units as measured at the generator terminals.	*Energy*
Gross head	A dam's maximum allowed vertical distance between the upstream's surface water (headwater) forebay elevation and the downstream's surface water (tailwater) elevation at the tail-race for reaction wheel dams or the elevation of the jet at impulse wheel dams during specified operation and water conditions.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Gross input to atmospheric crude oil distillation units	Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.	*Energy*
Gross inputs	The crude oil, unfinished oils, and natural gas plant liquids put into atmospheric crude oil distillation units.	*Energy*
Gross national product (GNP)	The total value of goods and services produced by the nation's economy before deduction of depreciation charges and other allowances for capital consumption. It includes the total purchases of goods and services by private consumers and government, gross private domestic capital investment, and net foreign trade.	*Energy*
gross profit	The difference between the warehouse cost and retail price, expressed as a percentage of the retail price.	*Agriculture*
Gross value	The theoretical value of ore determined simply by applying the assay of metal or metals and the current market price. It must be used only with caution and severe qualification.	*Mining*
Gross value royalty	A share of gross revenue from the sale of minerals from a mine.	*Mining*
Gross Vehicle Weight (GVW)	The total weight of the vehicle, including passengers, fuel, cargo, and attachments.	*Mechanical Engineering*
Gross vehicle weight rating (GVWR)	Vehicle weight plus carrying capacity.	*Energy*
gross weight	Full weight of a shipment, including both goods and packaging.	*Agriculture*
Gross withdrawals fuel on the lease	Full well stream volume from both oil and gas wells, including all natural gas plant liquids and nonhydrocarbon gases after oil, lease condensate, and water have been removed. Also includes production delivered as royalty payments and production used as fuel on the lease.	*Energy*
Gross working interest	The reporting company's working interest plus the proportionate share of any basic royalty interest or overriding royalty interest related to the working interest.	*Energy*
Gross working interest ownership basis	Gross working interest ownership is the respondent's working interest in a given property plus the proportionate share of any royalty interest, including overriding royalty interest, associated with the working interest.	*Energy*
Ground	1. The electrical neutral line having the same potential as the surrounding earth. 2. The negative side of DC power supply. 3. Reference point for an electrical system.	*Electrical*
Ground	A conducting path, intentional or accidental, between an electric circuit or equipment and the earth, or some large conducting body serving in place of the earth (a voltage reference).	*Electrical Engineering*
Ground control	The regulation and final arresting of the closure of the walls of a mined area. The term generally refers to measures taken to prevent roof falls or coal bursts.	*Mining*
Ground crab	-see Crab.	*Mining*
Ground effects	In airplanes, this refers to a cushion of air that builds up as a plane nears the ground. In racecars, this refers to artificially generated low-pressure areas underneath the car that help it adhere to the ground. This is done by "tunnels' on each side of the bottom of the car, which start off small near the front and gradually get bigger towards the rear, creating a vacuum as the car moves forward	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	using the ground as the fourth side of the tunnel. The specifications of these ground effects tunnels are carefully monitored. Rules specify the dimensions of the tunnels and how high the outside edge of each tunnel must be from the ground. The greater the gap between the tunnel side and the ground, the more air escapes and the less downforce is generated.	
Ground Loop	A current loop created when a signal source and a signal measurement device are grounded at two separate points on a ground bus through which noise currents flow. These currents generate voltage drops between the two ground connections, causing measurement errors.	*Reliability Engineering*
Ground Potential	Zero potential with respect to the ground or earth.	*Electrical*
Ground pressure	The pressure to which a rock formation is subjected by the weight of the superimposed rock and rock material or by diastrophic forces created by movements in the rocks forming the earth's crust. Such pressures may be great enough to cause rocks having a low compressional strength to deform and be squeezed into and close a borehole or other underground opening not adequately strengthened by an artificial support, such as casing or timber.	*Mining*
Ground State	an atom with all of electrons in the lowest possible energy levels that do not violate the Pauli Exclusion Principle	*Physics*
Ground water	The supply of fresh water found beneath the Earth's surface, usually in aquifers, which supply wells and springs. It provides a major source of drinking water.	*Petroleum Drilling*
Grounded Junction	A form of construction of a thermocouple probe where the hot or measuring junction is in electrical contact with the sheath material so that the sheath and thermocouple will have the same electrical potential.	*Electrical*
Grounded Neutral	A circuit operates with grounded neutral when the neutral is metallically connected to ground and there is a provision for immediate removal of a faulted element.	*Electrical*
Grounding Conductor	A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes; usually colored green.	*Electrical*
Groundwater	water held underground that has seeped through soil layers and bedrock	*Agriculture*
groundwater	the water contained in the pore spaces of saturated geologic media.	*Chemical*
Groundwater (confined)	Groundwater under pressure significantly greater than atmospheric, with its upper limit the bottom of a bed with hydraulic conductivity distinctly lower than that of the material in which the confined water occurs.	*Petroleum Engineering*
Groundwater (unconfined)	Water in an aquifer that has a water table exposed to the atmosphere.	*Petroleum Engineering*
Groundwater Contamination	Occurs when water carries contaminants downward, infiltrating the soil to the groundwater without being adequately filtered or naturally treated.	*Petroleum Engineering*
Groundwater Recharge	Inflow of water to a groundwater reservoir from the surface. Infiltration of precipitation and its movement to the water table is one form of a natural recharge. Also, the volume of water added by this process.	*Petroleum Engineering*
Groundwater Table	The surface between the zone of saturation and the zone of aeration. The surface of an unconfined aquifer.	*Petroleum Engineering*
Group 3	A petroleum products spot market trading hub based in Tulsa, Oklahoma that serves the U.S. Mid-Continent region.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Group Bonus	a method of wage payment based on the performance of a group of persons on the job.	*Industrial Relations*
Group Insurance	a program designed to provide low-cost protection to large groups of workers through a plan, generally negotiated with an insurance company, to cover life, accident, sickness, hospitalization, and medical and surgical benefits.	*Industrial Relations*
Group Leader	a worker who acts as a foremen, usually over a small group of employees.	*Industrial Relations*
Group name	The DOE/EIA-assigned name identifying a composite supply source (i.e., commonly metered gas streams from more than one field), which is often the case in contract areas, field areas, and plants. A group name can also be a pipeline purchase (i.e., FERC Gas Tariff, Canadian Gas, Mexican Gas, and Algerian LNG). Emergency purchases and short term purchases are also group names. Group Code - The DOE/EIA-assigned code identifying a composite supply source.	*Energy*
Group quarters	Living arrangement for institutional groups containing ten or more unrelated persons. Group quarters are typically found in hospitals, nursing or rest homes, military barracks, ships, halfway houses, college dormitories, fraternity and sorority houses, convents, monasteries, shelters, jails, and correctional institutions. Group quarters may also be found in houses or apartments shared by ten or more unrelated persons. Group quarters are often equipped with a dining area for residents.	*Energy*
GROUP SELECTION	A specific type of selective cutting resulting in the removal of small groups of trees in order to regenerate shade-intolerant trees.	*Forestry*
Group	A group is a logical grouping of assemblies with similar characteristics. All assemblies in a group have the same initial average enrichment, the same cycle/reactor history, the same current location, the same burnup, the same owner, and the same assembly type.	*Energy*
Grout	A fluid mixture of cement or bentonite with water of a consistency that can be forced through a pipe and placed as required.	*Petroleum Engineering*
grout	a watery mixture of cement (and commonly bentonite) without aggregate that is used to seal the annular space around well casings to prevent infiltration of water or short-circuiting of vapor flow.	*Chemical*
Grouting	The process of sealing off a water flow in rocks by forcing thin cement slurry, or other chemicals into the cervices; usually done through a diamond drill hole.	*Mining*
Grove	an old term for a mine, usually a lead or iron mine, but in the early days of coal mining it was also used for a coalmine. (Derbys.). –see also Day hole.	*Mining*
Growl	Coal pillars were said to growl when they were undergoing a crushing weight. (Mids.).	*Mining*
GRPE	Groupe de Rapporteurs pour la Pollution et l'Energie	*Petro-Chemical Abbreviations*
GRUB	An insect larva; a term loosely applied, usually to larvae of Coleoptera; larva is thick-bodied with well-developed thoracic legs but no abdominal prolegs.	*Forestry*
Grubstake	Finances or supplies of food, etc., furnished a prospector on promise of some share in any discoveries he make.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
GSA	General Services Administration (US)	*Petro-Chemical Abbreviations*
GTAB	gasoline treated as blend stock	*Petro-Chemical Abbreviations*
GTL	gas to liquids	*Petro-Chemical Abbreviations*
Guarantee on Trial Rate	a minimum rate set while trial runs are made on new work in order to set piece rates.	*Industrial Relations*
Guaranteed Annual Wage	a plan adopted by some employers to provide a stable labor force on a year-round basis.	*Industrial Relations*
Guaranteed Base Rate	the amount guaranteed per hour or other period for workers on piece rates or other incentive wage-payment plans.	*Industrial Relations*
Guaranteed Earnings	provision under some contracts which safeguards for an employee a guaranteed minimum wage where failure to maintain production is caused by machinery breakdown or other causes beyond the employee's control.	*Industrial Relations*
Guaranteed Employment	a program, instituted by an employer or by joint negotiation with a union, assuring workers a specified number of hours of work per week pr number of weeks per year.	*Industrial Relations*
Guard Rail	Members paralleling the path of a conveyor and limiting the objects or carriers to movement in a defined path.	*Equipment*
Guard Rail Cable	A galvanized wire rope or strand erected along a highway.	*Wire Rope & Cable*
Guerilla Unionism	a term used to describe activities of a union whose prime concern is with violence and ruthlessness in its dealing with employers.	*Industrial Relations*
Guernsey	A breed of dairy cattle that originated on the Isle of Guernsey, in the British Isles.	*Agriculture*
Guffey Coal Act	a law passed by Congress in 1937 for the purpose of stabalizing the coal industry through price regulation and promotion of fair competition.	*Industrial Relations*
Gug	a self acting haulage incline. Also known as a 'running gug'. (Som.).	*Mining*
GUI	The standard abbreviation for Graphic User Interface; this is an interface which uses graphics rather than characters to communicate.	*Control Engineering*
Guided Wave testing (GWT)	One of latest methods in the field of non-destructive evaluation. The method employs mechanical stress waves that propagate along an elongated structure while guided by its boundaries. This allows the waves to travel a long distance with little loss in energy. Nowadays, GWT is widely used to inspect and screen many engineering structures, particularly for the inspection of metallic pipelines around the world. In some cases, hundreds of meters can be inspected from a single location. It is also known as Long range ultrasonic testing.	*Reliability Engineering*
Guides	Vertical rails of wood, metal or wire ropes to guide the cages in the shaft. -see Conductor and Rigid conductors. Also called 'cage guides' or 'shaft guides'. Generally of two types, i) rigid guides of timber or steel (rails or channels), or ii) rope guides, comprising steel wire ropes hung from the headframe and held vertical and taut by weights hung at their lower ends.	*Mining*

Term	Definition	*Industry*
GUIDES	The timber along the sides of a shaft for the purpose of steadying, or guiding, the cage or conveyance.	*Mining*
Guides	The timber rails installed along the walls of a shaft for steadying, or guiding, the cage or conveyance.	*Mining*
Guilds	organizations of skilled craftsmen which acted as mutual benefit societies to take care of the needs of their members.	*Industrial Relations*
Guimpe	A type of garment covering the neck and shoulders, often part of a nun's habit	*Breakroom*
Guinier–Preston zone	Structure developed in the early stages of precipitation of an Al–Cu alloy.	*Material Process*
Gulch Claims	Minerals found in gullies which are usually dry during part of the year.	*Mining*
Gulch	A ravine.	*Mining*
Gulching	the moving and crackling noise made by a weight coming on (N. Staffs.).	*Mining*
Gullet	a fissure in the strata allowing amounts of water or gas into the pit. (N. East).	*Mining*
Gum	free-burning small coal, slack or duff. (Scot.).	*Mining*
Gum	Viscous exudation from trees or plants which hardens on exposure to air but, unlike a resin, is soluble either in cold water or alcohol. The name is often loosely6 applied to natural resins in the varnish industry.	*Material Process*
Gum flinger	a 'gummer' who throws cuttings into the goaf. Also called a 'gum stower'.	*Mining*
Gummer	a person or machine used to clean the cuttings behind the coal-cutting machine; or a device attached to a coal cutter that deposits cuttings ejected behind the machine; or a device attached to and driven by an A F C that removes fine material deposited under the delivery sprockets.	*Mining*
Gummings	fine coal dust resulting from the action of a chain, bar, or gib coal-cutting machine, or just a general term for fine coal. Also known as 'Buggy', 'Bug-dust', 'Scuftings' or 'Kirvings'.	*Mining*
Guncotton	Highly nitrated cellulose, of about 13% nitrogen content, used as a propellant charge in gunifer, not used as such in lacquers or plastics.	*Material Process*
Gunite	mortar supplied by a cement gun to the roof and sides of an excavation or the face of a stopping; or to spray with a cement gun.	*Mining*
Gunite	A cement applied by spraying to the roof and sides of a mine passage.	*Mining*
Gurdy or Gurdy wheels	an arrangement of three pulleys with breaks for use on a self-acting incline. (Scot.).	*Mining*
Gurney flap	On the front and rear wings there are often small vertical strips along the trailing edges of the wings, set at 90 degrees to the plane of the wing. Because these strips greatly reduce turbulent air behind the wing, they can add significant downforce with a minimal amount of drag. On the rear wing, it can be easily exchanged for a different size during a pit stop. American racing legend Dan Gurney is generally credited with creating this device, which is also known as a "wickerbill."	*NASCAR*
GUS	Global User Station	*Control Engineering*
Gusher	An oil well that comes in with such great pressure that oil flows out of the well head into the air. Such wells used to be commonplace, but with improved drilling methods, notably the use of drilling mud, gushers are a rarity today.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Guss and crook or Guss harness	a length of rope fastened around the waist of the carting boy or 'twin-boy'. The rope was attached to a chain and crook, which was used to pull along the carts or puts underground.	*Mining*
Gutter	a ditch cut in the main roadways to carry water away from the workings, or an airway through the goaf; or long narrow cavities in the roof of the face or a roadway.	*Mining*
Guy Line	Strand or rope, usually galvanized, for stabilizing or maintaining a structure in fixed position.	*Wire Rope & Cable*
GVW	gross vehicle weight	*Petro-Chemical Abbreviations*
GW	see Gigawatt	*Energy*
Gwe	See Gigawatt-electric.	*Energy*
GWh	see Gigawatthour	*Energy*
GWP	see Global Warming Potential	*Energy*
Gypsum	Calcium sulfate dihydrate ($CaSO_4$ $2H_2O$) a sludge constituent from the conventional lime scrubber process, obtained as a byproduct of the dewatering operation and sold for commercial use.	*Energy*
Gypsum	A sedimentary rock consisting of hydrated calcium sulfate.	*Mining*
Gyratory crusher	A machine that crushes ore between an eccentrically mounted crushing cone and a fixed crushing throat. Typically has a higher capacity than a jaw crusher.	*Mining*
Gyro	Can be either a wireline (lowered down into the wellbore) or MWD based (instrument placed near the drill bit when well is being drilled) device that uses an electronic gyro-compass to determine the angle of the well. Gyro tools can provide the angle of the wellbore and direction. This information ensures that the well is going in the right direction, stays on target, and does not collide with other wells. Gyro surveys are also required by the Texas Railroad Commission on each vertical or horizontal oil and gas well.	*Petroleum Drilling*
H	H	*Forestry*
--H--	--H--	*Petroleum Drilling*
H1 Lubricant	Food-grade lubricants used in food processing environments where there is some possibility of incidental food contact. Lubricant formulations may only be composed of one or more approved base stocks, additives and thickeners (if grease) listed in Guidelines of Security Code of Federal Regulations (CFR) Title 21, §178.3570.	*Lubrication*
H2 Lubricant	Lubricants used on equipment and machine parts in locations where there is no possibility that the lubricant or lubricated surface contacts food. Because there is not the risk of contacting food, these lubricants do not have a defined list of acceptable ingredients. They cannot, however, contain intentionally heavy metals such as antimony, arsenic, cadmium, lead, mercury or selenium. Also, the ingredients must not include substances that are carcinogens, mutagens, teratogens or mineral acids.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
H2S	Hydrogen Sulfide.	*Petroleum Engineering*
H2S Service	Hydrogen Sulfide Service. A term to indicate that equipment material specifications meet the requirements of NACE Standard MR-0175, for use in controlling fluid containing partial pressure (a specific percentage as nominated by the standard) of Hydrogen Sulfide.	*Petroleum Engineering*
H3 Lubricant	Also known as soluble or edible oil. These are used to clean and prevent rust on hooks, trolleys and similar equipment.	*Lubrication*
HA	The absolute pressure on the surface of the liquid in the supply tank. Typically atmospheric pressure (vented supply tank), but can be different for closed tanks. Don't forget that altitude affects atmospheric pressure (HA in Denver, CO will be lower than in Miami, FL). Always positive (may be low, but even vacuum vessels are at a positive absolute pressure)	*Heat Transfer Process*
Haarlem oil (linseed oil)	Sulfurated and terebinthinated, Duch drops. Brownish- red oil, soluble in oil of turpentine, insoluble in water.	*Material Process*
Habeas Corpus, Writ of	an order issued by a competent court ordering the person having custody of another person to produce him at a specific time and place and to show cause to the court why the person should not be set free.	*Industrial Relations*
Haber process	Original process for synthesis of ammonia from nitrogen and hydrogen.	*Material Process*
Haber-Bosch process	Early process for synthesis of ammonia, operating at 200 atmospheres pressure, 550 °C, (1022°F), with a promoted iron catalyst.	*Material Process*
Habitat	An area in which a specific plant or animal can naturally live, grow, and reproduce.	*Forestry*
Habitat diversity	A variety of food or cover for wildlife that is often critical to the survival of a species.	*Forestry*
HACCP	Hazard Analysis and Critical Control Points (HACCP) was started by NASA in conjunction with the Apollo space program to insure astronaut food supplies were safe to consume over the course of their mission. The logic was simple for NASA; keep the astronauts from getting sick during the mission. According to the United States Food and Drug Administration (FDA) HACCP is "a state of the art approach to food safety." Consisting of seven principles, HACCP outlines the guidance for, and implementation of the food safety program to include both animal and plant products.	*Maintenance*
Hack	a heavy pick used in shaft sinking or for breaking stone.	*Mining*
Hackney	There are two hackney breeds, one a horse, the other a pony. Both are bred for their brilliant, high-stepping performance in harness. The Hackney horse developed in Great Britain in the early 18th Century as a stylish, spirited light horse favored by English sportsmen and aristocrats as a carriage horse. The Hackney pony was developed by crossing the Hackney horse	*Agriculture*
Hade	The angle made by the line of a fault with the vertical: paradoxically, when this angle approaches 90° the fault is said to be one having a 'low hade'.	*Mining*
Hafnium (Hf)	Element of atomic number 72, metal resembling zirconium. Very difficult to separate from zirconium.	*Material Process*
Hag	to hag, to cut with an axe, or to bring down the coal with a pick. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hagafilm	Trade mark for a protective film forming amine added to boilers or steamlines to inhibit condensate corrosion caused by oxygen and low pH. Available in liquid and solid forms.	*Material Process*
Hagamin	Trade mark for powdered organic dispersing agent and antifoam compound used for minimizing scale formation in boilers.	*Material Process*
Hagen–Poiseuille equation	Equation that relates the mass rate of flow in a tube as proportional to the pressure difference per unit length and to the fourth power of the tube radius. The law is valid for fully developed laminar flow.	*Chemical*
Hagen-poiseuille Law	The friction factor of Darcy's Formula or the ratio of 64 to Reynold's Numbers when flow is laminar.	*Mechanical, Process, and Operations*
Hague Case	case in which former Mayor Frank Hague and other officials of Jersey City, N.J. were enjoined from enforcing so-called street meting ordinance that had been invoked by the officials to forbid union members to hold meetings in streets and parks.	*Industrial Relations*
Hairpin	A sharp, 180-degree turn.	*NASCAR*
Halane	Trade mark for 1,3-dichloro5,5-dimethylhydantoin. It contains 66% minimum, available chlorine and reacts with water to liberate hydrochlorous acid at a slow and controlled rate. Major uses are in dry household laundry bleaches and in water treating.	*Material Process*
Halazone (HOOCC6H4SO2NCl2) (para-sulfondichloramino-benzoic acid)	Halazone (HOOCC6H4SO2NCl2) (para-sulfondichloraminobenzoic acid) White crystalline powder strong chlorine odor, affected by light, soluble in glacial acetic acid, benzene, slightly soluble in water, chloroform, insoluble in petroleum ether. It is used in the form of tablets as a powerful water disinfectant.	*Material Process*
Half bar or Split bar	a long prop split down the middle used with props or dowties as roof supports. Also called 'Planks'. (N. East).	*Mining*
Half Bridge	Two active elements or strain gages.	*Electronic Process*
Half cell reaction	Chemical reaction associated with either the anodic or the cathodic half of an electrochemical cell.	*Material Process*
Half course	a road driven in seam at an angle of about 45° to the full dip.	*Mining*
Half effect	Sideways deflection of charge carriers associated with the application of a magnetic field perpendicular to an electrical current.	*Material Process*
Half heading system	a method of ripping at the end of a longwall advancing face in which the line of the rib side of the face working coincides with the centerline of the gate being driven, following the face. Half of the cross sectional area of the ripping adjacent to the face resembles a normal ripping while the other half resembles a solid heading.	*Mining*
Half life	In water treatment, the time it takes to lose "of a slug fed product from the system through blowdown, drift and windage when taking into account its continuous concentration by evaporation and dilution by fresh makeup.	*Chemical Engineering*
Half life	The time required for the decomposition of half of a sample of a radioactive substance, and this a measure of the rate of such processes. Half lives vary from fractions of a second for some of the radioactive elements produced in recent nuclear studies to thousands of year for relatively stable radioactive elements such as uranium. **The term is also applied to any process in which a single substance changes in some way.**	*Material Process*

Please see the Appendix for further illustration

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Half life	Half life. The time required for the decomposition of half of a sample of a radioactive substance, and this a measure of the rate of such processes. Half lives vary from fractions of a second for some of the radioactive elements produced in recent nuclear studies to thousands of year for relatively stable radioactive elements such as uranium. The term is also applied to any process in which a single substance changes in some way.	*Material Process*
Half-Duplex	One way at a time data communication; both devices can transmit and receive data, but only one at a time.	*Electrical*
Half-edge seam	a highly inclined seam of coal. Hence the term 'cutting half-edge' meaning cutting on a steep incline. (Scot.). - see also Rearing seams.	*Mining*
Half-Flash	An ADC architecture which uses a bank of comparators first to digitize the upper half bits, then uses a digital-to-analog converter (DAC) to subtract that voltage from the input, and then digitizes what remains of the input signal to get the lower half bits. Also see application note 748, "The ABCs of ADCs."	*Electrical Engineering*
Half-life	The time it takes for an isotope to lose half of its radioactivity.	*Energy*
Halfmarrows	young putters. –see also Foal. (N. East).	*Mining*
Halibut liver oil (haliver oil) Pale yellow	Halibut liver oil (haliver oil) Pale yellow to dark red liquid characteristic, slightly fishy but not rancid odor and fishy taste. Soluble in alcohol, ether, chlorophor, and carbon disulfide, insoluble in water.	*Material Process*
Halite	Rock salt.	*Mining*
Halite (NaCl) (rock salt)	A natural sodium chloride found in the earth in beds varying from a few feet to over three thousand feet in thickness. Color , white or colorless, but often yellow, brown, deep blue from impurities, streak, white, vitreous luster, taste salty.	*Material Process*
Haliver oil	See halibut oil.	*Material Process*
Hall Effect	The phenomenon whereby a force is brought to bear on a moving electron or hole by a magnetic field that is applied perpendicular to the direction of motion. The force direction is perpendicular to both the magnetic field and the particle motion directions.	*Engineering Physics*
Hall Effect Sensor (Hall Sensor)	A type of position sensor that senses magnetic field strength and produces a voltage that changes with this strength. Hall sensors can have digital or analog outputs.	*General Mechanical*
Hall Effect Technology	The description given to the following phenomena; when a semiconductor, through which a current is flowing, is placed in a magnetic field, a difference in potential (voltage) is generated between the two opposed edges of the conductor in the direction mutually perpendicular to both the field and the conductor. Typically used in sensing magnetic fields.	*Electrical Engineering*
Hall process	The electrolitic process by means of which metallic aluminum is recovered from aluminum oxide (usually bauxite). The aluminum oxide, after being purified from iron and other substances in preliminary chemical operations, is dissolved in a bath of molten cryolite (sodium aluminum fluoride). Passage of a direct current through this molten mixture results in formation and liberation of carbon dioxide at the carbon anodes, and production and collection of molten aluminum in the in the bottom of the cell, whose carbon lining serves as the cathode. The molten aluminum is periodically tapped through a suitable opening.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Halloysite (Al2O2 3SiO2 2H2O)	A variety of clay used to some extent in refractories and as a petroleum cracking catalyst.	*Material Process*
Halo Effect	a term used to describe a noticeable error among those who rate employees because of the frequency with which a single or general impression tends to permeate the rating of all other factors.	*Industrial Relations*
Halocarbon plastics	Plastic based on resins made by the polymerization of monomers composed only of carbon and a halogen or halogens. The halocarbon plastics are characterized by extreme chemical resistance, excellent electrical properties, and good resistance to heat.	*Material Process*
Halogen lamp	A type of incandescent lamp that lasts much longer and is more efficient than the common incandescent lamp. The lamp uses a halogen gas, usually iodine or bromine, that causes the evaporating tungsten to be redeposited on the filament, thus prolonging its life. Also see Incandescent lamp.	*Energy*
Halogen Tin Addition Agent 2 Special	A clear, colorless stable liquid. It uses for continuous tin platting on steel strip and copper or steel wire. Bath permits high current densities and rapid plating.	*Material Process*
Halogenated substances	A volatile compound containing halogens, such as chlorine, fluorine or bromine.	*Energy*
Halogenation	Incorporation of one of the halogen elements, usually chlorine or bromine, into a chemical compound. Thus benzene is treated with chlorine to form chlorobenzene and ethylene is treated with bromine to form ethylene dibromide Compounds of chlorine and bromine are sometimes used as the source of the halogen, phosphorous pentachloride being a good example.	*Material Process*
Halogens	The chemically related elements, fluorine, chlorine, bromine and iodine.	*Material Process*
Halopont	Trade mark for a line of pigment colors used for tinting white paper.	*Material Process*
Halotrichite (FeAl2(SO4) 22H2O)	A natural sulfate of iron and aluminum. Colorless to white, yellowish, or greenish, usually in groups of needle-shaped crystals, or incrustations. Taste astringent.	*Material Process*
Halsey Premium (Gain Sharing) Plan	considered the first incentive wage plan which offered a guaranteed wage in addition to an extra bonus for output in excess of the standard.	*Industrial Relations*
HALT	Acronym for Highly accelerated life test. See Accelerated Life test.	*Reliability Engineering*
Hamamelis (witch-hazel, winter bloom, snapping hazel, striped alder, tobacco wood)	Alcoholic extract used in medicine, pharmacy, toilet preparations.	*Material Process*
Hambone	see 'Fork'.	*Mining*
Hamburg blue	A name applied loosely to any of a number of the varieties of iron blue pigments.	*Material Process*
Hammer pond	An artificial pond for maintaining a head of water at a water mill.	*Civil Engineering*
Hammer Unions	(Wing Unions) fast acting connectors and commonly used in temporary flowlines. Hammer Unions consists of 3 pieces.	*Petroleum Engineering*
Hammer Weld	Method of manufacturing large pipe (usually NPS 20 or DN 500 and larger) by bending a plate into circular form, heating the overlapped edges to a welding temperature, and welding the longitudinal seam with a power hammer applied to the outside of the weld while the inner side is supported on an over-hung anvil.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hammer Wrench	"Flogging Spanner" A wrench with a heavy box end and shortened heavy handle having an elongated square shaped end. Designed to allow heavy striking with a sledge hammer to tighten or loosen nuts on stud bolts.	*Petroleum Engineering*
Hammertone	Trade name for an enamel finish resembling hammered metals.	*Material Process*
Hampshire	A black hog with a white belt over the shoulders. It is one of the oldest breeds in the United States. Although its origins are unknown, it is believed to have derived from old British breeds common in Scotland and bordering English counties. It is thought to have come to America between 1825-1835. Once locally known by many names, in 1904 the name Hampshire was adopted by its breed association, the Hampshire Swine Registry. The breed has been highly popular in the United States since 1910.	*Agriculture*
Hanane	A mixture of bis-(dimethylamino)-fluorophosphine oxide and bis-(dimethylamino(-phosphonous anhydride. Colorless liquid, faint odor. Soluble in water and most organic liquids. Dangerous to handle. Used as a systemic insecticide to control mealybugs on cocoa plants.	*Material Process*
Hand	Term used to describe the touch or handle of fabrics.	*Material Process*
Hand Cleanser	A cleaner designed to clean hands with an emphasis on removing oils, grease and other occupational soils.	*Chemistry*
Hand gears	a hand-operated windlass, used at the beginning of a shaft sinking or to wind coal from a shallow mine shaft (S. Staffs.).	*Mining*
Hand Labor Work	work which requires the actual manual manipulation of materials by physical handling.	*Industrial Relations*
Hand loading	An underground loading method by which coal is removed from the working face by manual labor through the use of a shovel for conveyance to the surface. Though rapidly disappearing, it is still used in small-tonnage mines.	*Energy*
Hand move	An irrigation system in which sections of sprinkler pipe are moved by hand, one by one, from one setting to another.	*Agriculture*
Hand wheel	A wheel-shaped valve operating device intended to be grasped with one or both hands which allows turning the valve stem or operator shaft to which it is attached.	*Mechanical*
Handbook	See Cochrane Handbook for Systematic Reviews of Interventions (formerly Cochrane Reviewers' Handbook)	*Quality Engineering*
Handbook Advisory Group (HAG)	The Handbook Advisory Group is an advisory group to the CCSG. It is responsible for the Cochrane Handbook for Systematic Reviews of Interventions (previously called the Cochrane Reviewers' Handbook). Also called: HAG	*Quality Engineering*
Hand-filled	to fill coal using a shovel on to a face conveyor as opposed to machine-loading; or to separate the large from the small coals in the mine and fill them by hand into a tub or corf etc. Also called 'handgot'.	*Mining*
Handgot	-see Hand-filled.	*Mining*
Handicapped Worker	a person who has mental or physical disabilities which limit his working potential.	*Industrial Relations*
Handicapped Worker Rate	a special rate, below the legal minimum, permitted under the Fair Labor Standards Act for workers who are physically handicapped.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Handicraft Economy	one of the stages of economic development in which specialized handwork was performed either in th family unit or a small productive organization.	*Industrial Relations*
Handling	the process by which steel articles are carried throughout the galvanizing facility, by chain, wire, hook, or racked in a fixture	*Materials Process*
Handover	Switching an on-going call to a different channel or cell in a wireless cellular network. Also known as "handoff."	*Electrical Engineering*
Handrail	A horizontal or sloping rail placed along an access way or at the edge of a platform. Usually at 3'-6" above the walkway or floor. (See Safety Handrail. See OSHA for design criteria.)	*Facility Engineering*
Handsearching, Handsearcher	Handsearching within The Cochrane Collaboration refers to the planned searching of a journal page by page (i.e. by hand), including editorials, letters, etc., to identify all reports of randomized controlled trials and controlled clinical trials. All the identified trials, regardless of the topic, are sent to the United States Cochrane Center, for inclusion in CENTRAL, and forwarding to the US National Library of Medicine (NLM) for re-tagging in MEDLINE. Trials that are within the scope of a Cochrane Review Group or Field go into their specialized register of trials. A handsearching manual is available through the US Cochrane Center. A journal handsearch registration form must be completed for each journal title and sent to the US Cochrane Center to avoid duplication of effort.	*Quality Engineering*
Handshake	An interface procedure that is based on status/data signals that assure orderly data transfer as opposed to asynchronous exchange.	*Electrical*
Handwheel	A manual override device used to stroke a valve or limit its travel. The handwheel is sometimes referred to as a hand jack. It may be top-mounted, side-mounted, in-yoke mounted or shaft-mounted and declutchable.	*Industrial Engineering*
Handy flux	Trade mark for flux useful with silver brazing alloys between 1100 and 1600°F (533.33 and 871.11 °C). Said to dissolve and absorb nearly all refractory oxides, including chromium oxide. Made in paste form and applied by brush. At 800 °F (426.66 °C) it begins to melt and is fully liquid and active at 1100 °F (533.33 °C) where its water clear appearance serves as a temperature guide. Claimed to be the best flux for taking full advantage of Sil-Fos and Easy Flo low temperature brazing alloys.	*Material Process*
Hang or Hing	the lie or hade of a fault. (Bris.); or a slope or an incline. (Scot.).	*Mining*
Hanger	Refers to several different tools. The casing hanger is the portion of a wellhead assembly which provides support for the casing string when it is lowered into the wellbore. The liner hanger is used to hang casing liners (casing strings that do not reach the surface) from the internal wall of a previous casing string. The instrument hanger is a downhole tool on which downhole gauges or instruments that are to be temporarily left in the wellbore are attached. The tubing hanger attaches to the topmost tubing joint in the wellhead to support the tubing string.	*Petroleum Drilling*
Hangers and Supports	Hangers and supports include elements which transfer the load from the pipe or structural attachment to the supporting structure or equipment. They include hanging-type fixtures such as hanger rods, spring hangers, sway braces, counterweights, turnbuckles, struts, chains, guides, and anchors and bearing-type fixtures such as saddles, bases, rollers, brackets, and sliding supports.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hanging coal	undercut coal that fails to fall.	*Mining*
Hanging wall	The wall or rock on the upper or top side of a vein or ore deposit.	*Mining*
Hanging wall	The rock on the upper side of a vein or ore deposit.	*Mining*
Hansa	Trade mark of proprietary line of pigments. Used for wallpaper, lacquer, plastics, paints, rubber and coated paper. Characterized by very good fastness to light, etc.	*Material Process*
Hansa Yellow	A class name for a group of organic azo pigments that have good brightness, light-fastness and alkali resistance. Their tinting strength is about four times that of a good chrome yellow of approximately the same shade. Hansa Yellow has comparatively poor opacity in enamels and poor flow and is seldom used except where a non-toxic pigment is required, prohibiting the use of a chrome or cadmium yellow. The heat resistance of Hansa Yellow is not particularly good, and therefore it is not well adapted for use in baking enamels.	*Material Process*
Hansgirg process	The production of magnesium from magnesium oxide by carbon reduction. Magnesium oxide is fed into an electric arc furnace lined with carbon where it is vaporized at a temperature of 2100 °C (3812 °F). The mixture of magnesium vapor and carbon monoxide is withdrawn from the furnace and cooled to 200 °C (392 °F) by diluting with natural gas (so the carbon monoxide will not oxidize the magnesium). A fine dust, containing 65% magnesium mixed with the oxide and carbon, is collected with electrostatic precipitators and sublimed at 750°C (1382°F) in electric retorts using high vacuum. The product thus obtained is better than 99% pure magnesium.	*Material Process*
HAPEM	Hazardous Air Pollution Exposure Model	*Petro-Chemical Abbreviations*
Hard binds	see Blackband ironstones.	*Mining*
Hard Chromium Plating	The electrolytic deposition of chromium to form a very hard (1000Hv), tough coating with good wear resistance. The structure is micro-cracked.	*Paint and Coatings*
Hard Facing	A material that is harder than the surface to which it is applied. It is normally used to resist fluid erosion or to reduce the chance of galling between moving parts. Hard facing may be applied by fusion welding, diffusion or spray coating the material. Stellite is a common material used for this purpose.	*Industrial Engineering*
Hard facing	A surface preparation in which an alloy is deposited on a metal surface usually by weld overlay to increase resistance to abrasion and or corrosion.	*Mechanical*
Hard Failure	This is a failure in a system or equipment which would require the intervention of a specialist to get the system or equipment working again.	*Reliability Engineering*
Hard head	A term applied to the impurities obtained when tin is refined.	*Material Process*
Hard heading	see Stone drift.	*Mining*
Hard Joint	A joint in which the plates and material between the nut and bolt bearing surfaces have a high stiffness when subjected to compression by the bolt load. A joint is usually defined as hard if the bolt is tightened to its full torque and it rotates through an angle of 30 degrees or less after it has been tightened to its snug condition.	*Maintenance*
Hard Labor	labor requiring unusual physical exertion.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hard magnet	Magnet relatively immobile domain walls.	*Material Process*
Hard Rock Mine	A tunnel that is dug into solid rock for the sole purpose of finding valuable or precious rocks, minerals, or metals.	*Mining*
Hard sphere	Atomic or ionic model of an atom as a spherical particle with a fixed radius.	*Material Process*
Hard spot	Glossy spot having insufficient impregnation. Small isolated lump of transparent partially colloided material occurring in or under the surface of a transparent plastic. (Also, called cat's eye, cold shot, cold slug, fish eye, stone and tear drop.)	*Material Process*
Hard Water	Water containing soluble salts of calcium and magnesium, and sometimes iron.	*Chemistry*
Hard drawn Wire	As applied to aluminum and copper, wire that has been cold drawn to final size so as to approach the maximum strength obtainable.	*Electrical*
Hardcopy	Output in a permanent form (usually a printout) rather than in temporary form, as on disk or terminal display.	*Electrical*
Hardcopy	Output in a permanent form (usually a printout) rather than in temporary form, as on disk or display terminal.	*Electronic Process*
Hardenability	A measure of the depth to which a specific ferrous alloy may be hardened by the formation of martensite upon quenching from a temperature above the upper critical temperature.	*Engineering Physics*
Hardened Washers	The force under the head of a bolt or nut can exceed, at high preloads, the compressive yield strength of the clamped material. If this occurs excessive embedding and deformation can result in bolt preload loss. To overcome this hardened washers under the bolt head can be used to distribute the force over a wider area into the clamped material. A more modern alternative is to use a flange headed nuts and bolts.	*Maintenance*
Hardener	Chemical curing or hardening agent. Example, formaldehyde used to harden protein and for curing some phenolics.	*Material Process*
Hardfacing	The application of a cladding or coating of material designed to resist wear.	*Paint and Coatings*
Hardfacing	A surface preparation in which an alloy is deposited on a metal surface usually by weld overlay to increase resistance to abrasion and or corrosion.	*General Mechanical*
Hardness	The measure of some materials' resistance to deformation by surface indentation or by abrasion.	*Engineering Physics*
Hardness	Parameter defined by Moh's scale.	*Material Process*
Hardness Test	A test designed to assess the resistance to penetration from a load. The surface is indented under a defined load and the depth or area of penetration is measured.	*Paint and Coatings*
Hardness, calcium	The calcium compounds dissolved in water, usually expressed as calcium carbonate.	*Chemical Engineering*
Hardness, carbonate	The calcium and magnesium carbonate and bicarbonate dissolved in water, expressed as calcium carbonate. Other metallic cations such as ferrous iron, barium, zinc and manganous ions are also included.	*Chemical Engineering*
Hardness, magnesium	Magnesium compounds dissolved in water, expressed as calcium carbonate.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hardness, noncarbonate	The difference between the total hardness and the total alkalinity of a water.	*Chemical Engineering*
Hardness, permanent	The hardness that cannot be removed from water by precipitation reactions. Essentially, the same thing as the non-carbonate hardness.	*Chemical Engineering*
Hardness, temporary	The hardness that can be removed from water by precipitation. Essentially, the same as the carbonate hardness.	*Chemical Engineering*
Hardness, total	The sum of the calcium and the magnesium hardness. Also the sum of the permanent hardness and temporary hardness. The U.S. Geological Survey hardness criteria for potable water are: soft water 0-60 ppm, moderately hard water 61-120 ppm, hard water 121-180 ppm, very hard water >180 ppm.	*Chemical Engineering*
Hards	coals of a hard and closed-grained character. (Mids.); or the name given to large pieces of best quality coal. (Som.).	*Mining*
Hardstand	A hard-surfaced area on which heavy vehicles or airplanes can be parked	*Civil Engineering*
Hardstop	cement-like material for sealing stoppings.	*Mining*
Hardware	The electrical, mechanical and electromechanical equipment and parts associated with a computing system, as opposed to its firmware or software.	*Electrical*
Hardwired	To be physically interconnected and intended for a specific purpose. Hardwired logic is essentially unalterable.	*Electrical Engineering*
Hardwood	Relatively high strength wood from deciduous trees with covered seeds.	*Material Process*
Hardwoods (deciduous trees)	Trees with broad, flat leaves shed on an annual basis whose wood hardness varies among individual species.	*Forestry*
Hare Core of Unemployment	that group in the labor market which is able and willing to work but which, even in periods of short labor supply, still remain unemployed.	*Industrial Relations*
Harflex 300X	Trade name for a high molecular weight polymeric type plasticizer. Very viscous, light yellow liquid, odorless, low volatility, heat and light resistant, high compatibility for vinyl resins. Plasticizing vinyl resins used wherever resistance to extraction by cold or boiling water, soapy solutions, gasoline and oils is required.	*Material Process*
Harflex 500X	Trade name for low temperature plasticizer. Light yellow liquid, Extruded products, such as wire coverings and garden hose, unsupported films, such as shower curtains, handbag, coated fabrics, such as upholstery plastisols.	*Material Process*
Hargreaves process	The manufacture of sodium sulfate (salt cake) from sodium chloride and sulfur dioxide. A mixture of sulfur dioxide and air is passed through sodium chloride brine in a countercurrent manner to produce sodium sulfate and hydrochloric acid.	*Material Process*
Harmonic	A sinusoidal quantity having a frequency that is an integral multiple (′2, ′3, etc.) of a fundamental (′1) frequency.	*Reliability Engineering*
Harmonic Distortion	The presence of frequencies in the output of a device that are not present in the input signal, and are multiples of components of the input signal. Clipping is a common cause but other nonlinearities can also introduce harmonics.	*Electrical Engineering*
Harmonic extraction	the working of one or more coal seams by means of a special layout and time sequence of extraction to minimize the effects of subsidence at the surface.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Harmonics	Generally, harmonics are oscillations in the base power frequency. In electrical AC systems, the base frequency is typically 50 or 60 hertz (Hz) and harmonics occur in multiples of this, for example 100 Hz, 150 Hz, 200 Hz, etc. where the base frequency is 50 Hz. Harmonics occur whenever there is a disturbance of the voltage or current, e.g., if the current is interrupted or if AC current is synthesized in a converter. The problem with harmonics is that electrical devices may react differently when exposed to a different frequency than the one they are designed for, which may cause damage. Harmonics are an increasing problem in power systems as most power electronics solutions cause harmonics. Harmonics can be reduced by the use of power filters.	*Electrical*
Harmony Clause	this is a provision in a collective bargaining contract setting the "tone" of employer-union-employee relationships as cooperation in the best interests of all.	*Industrial Relations*
Harotz or harrotz	a bed of hard coal in the Top Hard (Worksop Area); sometimes a term for dirty fusain.	*Mining*
Harp,	a cross between a shovel and a fork. The blade of the shovel was cut away to leave a series of slots to allow the small coal and slack to fall through to be left in the mine. Also known as a Branded shovel, or to fill a hutch with coal at the face using a harp. (Scot.).	*Mining*
Harrie or Herrie	to rob pillars. To load the loose coal that had come down due to the action of weighting or to take a strip of coal without taking the whole pillar. This was an easy way of winning coal but dangerous by taking away support for the roof. (Scot.). - see also Lameskirting and Pillar robbing.	*Mining*
Harris process	Process for the removal of arsenic, antimony, tin, and zinc from virgin or secondary lead by agitating the molten metal with molten caustic soda and salt. All undesirable metals are oxidized and the oxides dissolved in the caustic with exception of silver which is removed in a subsequent desilvering operation.	*Material Process*
HART	HART (Highway Addressable Remote Transducer) is a communications protocol that converts a 4-20mA analog signal into a digital signal, making communication to smart field devices possible.	*Mechanical*
Hartshorn	Spirit oil An alcoholic or aqueous solution of ammonia.	*Material Process*
Harvest	to gather a crop when it is finished growing	*Agriculture*
Hash	Distortion (usually non-harmonic) on a signal. May be viewed on an oscilloscope trace. (slang).	*Reliability Engineering*
HASS	Highly accelerated stress screening. See environmental stress screening (ESS).	*Reliability Engineering*
HASS	Highly accelerated stress screening.	*Reliability Engineering*
Hasson or Hassing	a vertical gutter between the water rings or garlands in a shaft, which carried the water down the shaft to the sump. Also called the 'gauton'. (Scot.).	*Mining*
Hastelloy	Trademark for a series of nickel base alloys, having high resistance to corrosives, such as hot hydrochloric acid, hot sulfuric acid, wet chlorine as well as excellent physical and mechanical properties. Used for agitators, autoclaves, concentrators, heat exchangers, exhausters, evaporators, condensers, dryers, heating and cooling coils, injectors, blowers, burner parts, chlorinating equipment, pickling equipment, pyrometer equipment, thermometer wells, pipe and fittings, pumps, valves, kettles, tanks, and vessels for all kinds of chemical plant service.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hat rollers	cast iron or steel rollers shaped like a hat, revolving on a vertical pin for guiding haulage ropes round curves.	*Mining*
Hatch Act	the Federal Corrupt Practices Act, Section 313 of which was amended by Section 304 of the Labor Management Relations Act of 1947.	*Industrial Relations*
Hatchens	rise roadways from the main levels. (Som.).	*Mining*
Hatchettite	A soft variety of ozocerite or mineral wax. Color yellowish white, yellow, or greenish yellow.	*Material Process*
Hatching	a method of working a steeply inclined thin seam - see Topple, or a self-acting haulage incline in a thin seam. (Bris.).	*Mining*
Hatters' Shakes	a form of industrial mercury poisoning.	*Industrial Relations*
Haulage	the transportation of men or materials from one place to another; or a powered system for transporting tubs, usually involving a rope, track and an engine.	*Mining*
Haulage cost	Cost of loading ore at a mine site and transporting it to a processing plant.	*Energy*
Haulage engine	an engine employed to move coal, men and material along the haulage roadways in a mine.	*Mining*
Haulage Rope	Wire Rope used for pulling movable devices such as cars that roll on a track.	*Wire Rope & Cable*
Haulage	The horizontal transport of ore, coal, supplies, and waste. The vertical transport of the same is called hoisting.	*Mining*
Haulageway	Any underground entry or passageway that is designed for transport of mined material, personnel, or equipment, usually by the installation of track or belt conveyor.	*Mining*
Haunt	the coal trade carried out at the pit head. The term was said to have originated when customers used to come and haunt the pit until they could be supplied (Som.)—see also Coal hill and Landsale.	*Mining*
Hausmannite (Mn3O4)	A natural manganese oxide. Color brownish black to black streak chestnut brown, luster greasy metallic.	*Material Process*
Hauynitte (Na, Ca8Al6 Si6O24 (SO4)2)	A feld spathoid mineral similar to sodalite, found in lava and other igneous rocks.	*Material Process*
Haveg	A molded structural material completely acid-, alkali- and solvent-resistant used for tanks, towers, coolers, piping and valves.	*Material Process*
Hawes-Cooper Act	a statute enacted by Congress on 1929 which permitted any state after January 1934 to regulate or limit within its jurisdiction the sale of goods made by prison labor.	*Industrial Relations*
Hawkins v. Bleakly	a decision by th United States Supreme Court in 1917 holding constitutional a workmen's compensation law of the State of Iowa.	*Industrial Relations*
Hawser	Wire rope, usually galvanized, used for towing or mooring marine vessels.	*Wire Rope & Cable*
Haylage	Livestock feed produced by acid-producing fermentation of grass or alfalfa.	*Agriculture*
Haymarket Riot	a mass meeting in Haymarket Square in Chicago, held on May 4, 1886, to listen to speeches on labor unionism and the eight-hour day, turned into a riot when someone threw a bomb at the police.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Haynes "Manit" Wage Plan	a method of incentive wage payments introduced in 1921 which attempts to reduce all work to a common denominator- Manit, or work performed in a man-minute.	*Industrial Relations*
Haynes Stellite	Trade mark for a series of metal-cutting tool alloy consisting chiefly of cobalt, chromium, and tungsten with only a small percentage of iron.	*Material Process*
Haystellite	Trade mark for tungsten carbide possessing great hardness and toughness. Inserts, composite rod, tube rod, application by welding, to oil-well drilling tools and other parts subjected to extreme abrasion.	*Material Process*
Hazard	A hazard is a situation that poses a level of threat to life, health, property, or environment. It is any situation that has the potential of causing harm to people, property or the environment.	*Reliability Engineering*
Hazard analysis	Hazard analysis is technique for the quantitative assessment of a hazard, after it has been identified by an operability study.	*Material Process*
Hazard potential (HP)	The hazard potential is governed by the number of persons who stay in this impact area without protection.	*Material Process*
Hazard Rate	Hazard rate is the instantaneous speed of failure. Hazard rate is the ratio of failures that occur in an interval to the size of the population at the start of the interval, divided by the length of time.	*Maintenance*
Hazard ratio	A measure of effect produced by a survival analysis. This represents the increased risk with which one group is likely to experience the outcome of interest. For example, if the hazard ratio for death for a treatment is 0.5, then we can say that treated patients are likely to die at half the rate of untreated patients.	*Quality Engineering*
Hazardous Location	Defined as an area in which explosive, toxic, flammable or combustible mixtures are present.	*Electrical Engineering*
Hazardous material	Hazardous material are substances which, by chemical action, cause severe damage on contact with living tissue, or in the case of leakage, materially damage, or even destroy, other goods or the means of transport, they may also cause other hazards.	*Material Process*
Hazardous Material	Any substance having the properties capable of producing adverse effects on the health or safety of people.	*Chemistry*
Hazardous Materials	Materials that have been determined by the Department of Transportation (DOT) to be a risk to health, safety, and property; including such items as explosives, flammable, poisons, corrosives, and radioactive materials. These materials must be packaged, labeled, handled, and transported according to stringent regulation from several agencies (current U.S. regulations appear in the Code of Federal Regulations, Title 49, Parts 171-178). International shipments must comply with docket HM-181, where the term "dangerous goods" is often used interchangeably with hazardous materials.	*Procurement*
Hazardous Occupations	work which has been held dangerous to the health of women and minors by state and federal laws.	*Industrial Relations*
Hazardous Waste	Automotive wastes that are on the EPA's list of hazardous materials or that have one or more hazardous characteristics.	*Mechanical Engineering*
Haze (Internal)	An indefinite cloudy appearance within a transparent plastic.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Haze (Surface)	An indefinite cloudy appearance on the surface of a plastic not describable by the terms Chalking, Frosting, or Lubricant bloom.	*Material Process*
Hazel or Hazle	In some mining areas 'hazel' was an old mining term for sandstone. It was also another name for the roof or top directly above a coal seam.	*Mining*
HAZID	Acronym for Hazard Identification which is a tool for analyzing hazards which is usually applied early in a project as soon as process flow diagrams, draft heat and mass balances, and plot layouts are available. The method is a design-enabling tool, acting to help org anise the HSE deliverables in a project. The structured brainstorming technique typically involves designer and client personnel engineering disciplines, project management, commissioning and operations. The main major findings and hazard ratings help to deliver HSE compliance, and form part of the project Risk Register required by many licensing authorities.	*Reliability Engineering*
Hazop	A Structured Process, Originally Developed By Ici Following The Flixborough Disaster, Intended To Proactively Identify Equipment Modifications And/ Or Safety Devices Required In Order To Avoid Any Significant Safety Or Environmental Incident As A Result Of Equipment Failure. Similar, In Some Respects To Reliability Centered Maintenance, But Not As Rigorous As Reliability Centered Maintenance In Identifying Underlying Causes Of Failure, And Does Not Consider, In Any Depth, The Possibility Of Avoiding Such Incidents Through Applying Appropriate Proactive Maintenance Tasks.	*Plant Engineering*
HAZOP (Hazard and Operability)	HAZOP stands for a structured technique that may be applied typically to a chemical production process, identifying hazards resulting from potential malfunctions in the process. It is essentially a qualitative process. A HAZOP would typically be undertaken by a multi-disciplinary team, asking a series of "what if?" questions using guidewords representing deviations from the intended process parameters. By undertaking a HAZOP at an early design stage, potential problems can be avoided instead of having to make costly modifications. HAZOP is similar in some respects to Reliability-centered Maintenance (RCM), but not as rigorous in identifying underlying causes of failure, and does not consider the possibility of avoiding such incidents through applying appropriate proactive maintenance tasks.	*Maintenance*
HB-40	Trade mark for partially hydrogenated terphenyl. Clear, mobile, high-boiling hydrocarbon, almost colorless, with faint, pleasant odor. Insoluble in water, miscible in all proportions at room temperature with a number of solvents and oils. Plasticizer for vinyl compounds, for styrene water dispersion paints, paper coatings, adhesives and styrene coating resins.	*Material Process*
H-bomb	Abbreviation for hydrogen bomb (nuclear fusion).	*Material Process*
H-Bridge	A circuit diagram which resembles the letter "H." The load is the horizontal line, connected between two pairs of intersecting lines. It is very common in DC motor-drive applications where switches are used in the "vertical" branches of the "H" to control the direction of current flow, and thus the rotational direction of the motor.	*Electrical Engineering*
HBW	Brinell Hardness abbreviation.	*Petroleum Engineering*
HCCI	homogeneous charge compression ignition	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
HCFC	See Hydrochlorofluorocarbon	*Energy*
HDD	See Heating Degree Days.	*Energy*
HDDO	heavy-duty diesel oil	*Petro-Chemical Abbreviations*
HDDT	heavy-duty diesel trucks	*Petro-Chemical Abbreviations*
HDE	heavy-duty engine	*Petro-Chemical Abbreviations*
HDGT	heavy-duty gasoline trucks	*Petro-Chemical Abbreviations*
HDMO	Heavy duty diesel engine oil	*Petro-Chemical Abbreviations*
HDT	heavy-duty trucks	*Petro-Chemical Abbreviations*
HDVIP	Heavy Duty Vehicle Inspection Program	*Petro-Chemical Abbreviations*
Head	The product of the water's weight and a usable difference in elevation gives a measurement of the potential energy possessed by water.	*Energy*
Head coal	an old term for the band of coal next to the roof; or the upper section of a thick seam that was worked in two or more lifts; or the top coal on a loaded wagon. (Scot.).	*Mining*
Head gate	A control gate at the upstream end of a canal or lock. A floodgate of a race, sluice, etc.	*Civil Engineering*
Head Loss	The loss of pressure in a flow system measured using a length parameter (i.e., inches of water, inches of mercury).	*General Engineering*
Head or Heading	a roadway, generally in a coal seam; or to excavate a roadway or narrow passage; or 'head out', to outcrop.	*Mining*
Head out	to outcrop.	*Mining*
Head piece	the top, horizontal wooden bar in a set of roadway supports. Two vertical posts or props comprising the other components. Also called a 'collar'.	*Mining*
Head Pressure	Pressure in terms of the height of fluid, P = yrg, where r = fluid density and y = the fluid column heights. Expression of a pressure in terms of the height of fluid, r = yrg, where r is fluid density and y = the fluid column height. g = the acceleration of gravity.	*General Engineering*
Head section	A term used in both belt and chain conveyor work to designate that portion of the conveyor used for discharging material.	*Mining*
Head tree	a piece of a crown-tree, a foot long or so, placed upon a prop to support the roof.	*Mining*
Head grade	The average grade of ore fed into a mill.	*Mining*
HEAD, STATIC DISCHARGE	The static head from the centerline of the pump to the free discharge surface.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Head, Velocity	The equivalent head through which the liquid would have to fall to attain a given velocity. Mathematically, it is equal to the square of the velocity (in feet) divided by 64.4 feet per second squared.	*Mechanical, Process, and Operations*
Header	In a counterflow tower, the main pipe carrying hot water to a series of laterals for distribution over the fill material. In a crossflow tower, it is the main pipe carrying hot water to the distribution basin of each cell. (See Manifold.)	*Facility Engineering*
Header	A manifold that distributes fluid from a series of smaller pipes or conduits.	*Petroleum Engineering*
Headers	miners who are engaged in the drivage of new roadways underground.	*Mining*
Headframe	The structure surmounting the shaft which supports the hoist rope pulley, and often the hoist itself.	*Mining*
Headgear. Headstocks, Headsticks or Headframe	the head frame of a mine shaft supporting the winding wheels (pulleys). The term may also include all the raised structure around the shaft, which is used for loading and unloading cages. Also called the 'pithead gear'.	*Mining*
Heading	The vein above the drift.	*Mining*
Heading	A vein above a drift. An interior level or airway driven in a mine. In longwall workings, a narrow passage driven upward from a gangway in starting a working in order to give a loose end.	*Mining*
Headings	In placer mining, the mass or gravel above the head of sluice.	*Mining*
Head-On	A condition whereby the target approaches the sensing face of the proximity sensor with its center along the sensing face.	*Electrical Engineering*
Headrace	The race, flume, or channel leading to a water wheel or the like.	*Civil Engineering*
Headroom	the height between the floor and the roof in a roadway.	*Mining*
Heads	see heading.	*Mining*
Headsman	a lad who was not strong enough alone to put, but able to do so with the assistance of a small boy, called a 'foal'. (N. East).	*Mining*
Head-way	a method of working. A roadway driven parallel to the cleat of the coal. Also called 'walls' and 'narrows'. –see also Endways; or a heading driven at right angles to the strike of the seam. (N. East); or a pair of narrow drifts driven into the solid coal.	*Mining*
Headways	When a pair of roadways are driven for exploring or winning the coal, they are called exploring or winning headways, the principal of which is called the fore-headways, and the other the back-headways. (N. East).	*Mining*
Headways course	a line of walls or holings extending from side to side of a panel of boards. (N. East).	*Mining*
Headways face	see End face. Heap, the pit heap. The colliery waste tip. - see also Bing.	*Mining*
Headwork	work which requires the use of the brain rather than brawn.	*Industrial Relations*
Health and Decency Standard of Living	a term used to describe the requirements of a family, which includes low rental housing in a nice neighborhood, with private toilet facilities and adequate light and heat.	*Industrial Relations*
Health and Safety Executive	A UK government agency that monitors organizations to ensure that they carry out their operations abiding by laid down regulations.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Health Benefit Programs	plans, generally worked out through collective bargaining, which provide for sick benefit payments and other programs conducive to maintaining a healthy work force.	*Industrial Relations*
Health Insurance	generally applied to medical services and costs due to illness.	*Industrial Relations*
Health physics	The branch of physics which deals the protection of personnel from the hazards of radiation. The chief duties of a health physicist are to set the standard for safe levels of exposure to various radiations, to aid in the detection of radiation in order to avoid overexposures, and to develop suitable methods for protection against radiation.	*Material Process*
Health, Education and Welfare; Department of	an executive department of government established in 1953 which took over the functions of the Federal Security Agency created in 1939.	*Industrial Relations*
Heap leach solutions	The separation, or dissolving-out from mined rock of the soluble uranium constituents by the natural action of percolating a prepared chemical solution through mounded (heaped) rock material. The mounded material usually contain slow grade mineralized material and/or waste rock produced from open pit or underground mines. The solutions are collected after percolation is completed and processed to recover the valued components.	*Energy*
Heap leaching	A process whereby valuable metals, usually gold and silver, are leached from a heap, or pad, of crushed ore by leaching solutions percolating down through the heap and collected from a sloping, impermeable liner below the pad.	*Mining*
Heapstead	the entire surface works about a colliery shaft including the headgear, loading and screening plant, winding and pumping engines etc. with their respective buildings.	*Mining*
Hearing	the proceeding in which a court or an administrative body receives evidence for the purpose of performing an adjunctionary function or also, in the case of an administrative body, a fact-finding or rule-making function.	*Industrial Relations*
Heat	Thermal energy. Heat is expressed in units of calories or BTU's.	*General Engineering*
HEAT	1. Added energy that causes substances to rise in temperature, fuse, evaporate, expand, or undergo any of various other related changes, that flows to a body by contact with or by radiation from bodies at higher temperatures, and can be produced in a body (as by compression). 2. The energy associated with the random motions of the molecules, atoms, or smaller structural units of which matter is composed (See Joule).	*Mechanical, Process, and Operations*
HEAT	As used in the Health Considerations paragraphs of this document, heat refers to thermal burns for contact with hot surfaces, hot liquids and vapors, steam, etc.	*Petroleum Engineering*
Heat analysis	A chemical analysis conducted by a foundry immediately prior to pouring which measures the exact chemical composition of a particular batch of molten metal.	*General Mechanical*
heat capacity	the quantity of energy that must be supplied to raise the temperature of a substance. For contaminated soils heat capacity is the quantity of energy that must be added to the soil to volatilize organic components. The typical range of heat capacity of soils is relatively narrow, therefore variations are not likely to have a major impact on application of a thermal desorption process.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Heat Capacity (Specific Heat)	This is a measurement of a fluid's capacity to carry heat. It determines indicates how many BTUs it would take to increase 1lb of fluid by 1°F. Heat capacity is used along with other properties to determine efficiency as quantified by the heat transfer coefficient.	*Lubrication*
Heat content	The amount of heat energy available to be released by the transformation or use of a specified physical unit of an energy form (e.g., a ton of coal, a barrel of oil, a kilowatt hour of electricity, a cubic foot of natural gas, or a pound of steam). The amount of heat energy is commonly expressed in British thermal units (Btu). Note: Heat content of combustible energy forms can be expressed in terms of either gross heat content (higher or upper heating value) or net heat content (lower heating value), depending upon whether or not the available heat energy includes or excludes the energy used to vaporize water (contained in the original energy form or created during the combustion process). The Energy Information Administration typically uses gross heat content values.	*Energy*
Heat convertible resin	A thermosetting resin convertible by heat to an infusible and insoluble mass.	*Material Process*
Heat cycle	A tire that has been heated up through use and then cooled down has experienced one heat cycle. This often results in a slight hardening of the tire compound, which can make the tire perform at a high level for a longer period of time. See Scrubbed Tires.	*NASCAR*
Heat distortion point	Temperature at which a standard bar of plastic material will be deflected 0.010 in (0.0245 cm).	*Material Process*
Heat Endurance	The time of heat aging that a material can withstand before failing a specific physical or electrical test.	*Electrical*
Heat exchanger	A device for transferring heat from one substance to another. Heat transfer can be by direct contact, as in a cooling tower, or indirect, as in a shell and tube condenser. Can also be the tube or fin tubed bundles in a wet/dry tower.	*Chemical Engineering*
Heat exchanger	A Device which transfers heat through a conducting wall from one fluid to another. (See "Cooler [Oil].")	*Mechanical, Process, and Operations*
Heat Fusion Joint	A joint made in thermoplastic piping by heating the parts sufficiently to permit fusion of the materials when the parts are pressed together.	*Maintenance and Repair*
Heat load	Heat removed from the circulating water within the tower. It may be calculated from the range and the circulating water flow.	*Chemical Engineering*
Heat mark	Extremely shallow, regular or irregular depression or groove in the surface of a plastic having practically no depth and visible because of a sharply defined rim or roughened surface.	*Material Process*
Heat of fusion	The quantity of heat required to convert unit weight of a solid to the liquid state. This varies somewhat with temperature, and to a much less extent with pressure.	*Material Process*
Heat pump	Heating and/or cooling equipment that, during the heating season, draws heat into a building from outside and, during the cooling season, ejects heat from the building to the outside. Heat pumps are vapor-compression refrigeration systems whose indoor/outdoor coils are used reversibly as condensers or evaporators, depending on the need for heating or cooling.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Heat pump (air source)	An air-source heat pump is the most common type of heat pump. The heat pump absorbs heat from the outside air and transfers the heat to the space to be heated in the heating mode. In the cooling mode the heat pump absorbs heat from the space to be cooled and rejects the heat to the outside air. In the heating mode when the outside air approaches 32 °F or less, air-source heat pumps loose efficiency and generally require a back-up (resistance) heating system.	*Energy*
Heat pump (geothermal)	A heat pump in which the refrigerant exchanges heat (in a heat exchanger) with a fluid circulating through an earth connection medium (ground or ground water). The fluid is contained in a variety of loop (pipe) configurations depending on the temperature of the ground and the ground area available. Loops may be installed horizontally or vertically in the ground or submersed in a body of water.	*Energy*
Heat pump efficiency	The efficiency of a heat pump, that is, the electrical energy to operate it, is directly related to temperatures between which it operates. Geothermal heat pumps are more efficient than conventional heat pumps or air conditioners that use the outdoor air since the ground or ground water a few feet below the earth's surface remains relatively constant throughout the year. It is more efficient in the winter to draw heat from the relatively warm ground than from the atmosphere where the air temperature is much colder, and in summer transfer waste heat to the relatively cool ground than to hotter air. Geothermal heat pumps are generally more expensive ($2,000-$5,000) to install than outside air heat pumps. However, depending on the location geothermal heat pumps can reduce energy consumption (operating cost) and correspondingly, emissions by more than 20 percent compared to high-efficiency outside air heat pumps. Geothermal heat pumps also use the waste heat from air-conditioning to provide free hot water heating in the summer.	*Energy*
Heat pumps	Heat pumps utilize the energy contained in the environment to heat rooms and the domestic water. Their principle of operation corresponds to that of a refrigerator, but the other way around.	*Thermal Management*
Heat Rate	A measure of generating station thermal efficiency and generally expressed as Btu per net k/Wh. The heat rate is computed by dividing the total Btu content of the fuel burned (or of heat released from a nuclear reactor) by the resulting net kWh generated.	*Energy*
Heat Resistance	Ability of a substance to maintain physical and chemical identity and chemical identity and electrical integrity under specified temperature conditions.	*Electrical*
Heat Rise	The rise in temperature above ambient that results from operating an electric pinch valve at predetermined conditions.	*Mechanical*
Heat seal	To bond or weld a material to itself or to another material by heat alone.	*Material Process*
Heat Shock	A test to determine stability of a material by sudden exposure to a high temperature for a short period of time.	*Electrical*
Heat Sink	Mechanical device that is thermally-connected to a heat-producing electronic component, designed to conduct heat away from the device. Most heat sinks are aluminum and employ fins to increase surface area and encourage the transfer of heat to the ambient environment.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Heat Tightening	Heat tightening utilizes the thermal expansion characteristics of the bolt. The bolt is heated and expands: the nut is indexed (using the angle of turn method) and the system allowed to cool. As the bolt attempts to contract it is constrained longitudinally by the clamped material and a preload results. Methods of heating include direct flame, sheathed heating coil and carbon resistance elements. The process is slow, especially if the strain in the bolt is to be measured, since the system must return to ambient temperature for each measurement. This is not a widely used method and is generally used only on very large bolts.	*Maintenance*
Heat Transfer	The process of thermal energy flowing from a body of high energy to a body of low energy. Means of transfer are: conduction; the two bodies contact. Convection; a form of conduction where the two bodies in contact are of different phases, i.e. solid and gas. Radiation: all bodies emit infrared radiation.	*General Engineering*
Heat Transfer	The process of thermal energy flowing from a body of high energy to a body of low energy. Means of transfer are - conduction; the two bodies contact. Convection; a form of conduction where the two bodies in contact are of different phases, i.e. solid and gas. Radiation - all bodies emit infrared radiation.	*Electronic Process*
Heat Treating	A process for treating metals where heating to a specific temperature and cooling at a specific rate changes the properties of the metal.	*General Engineering*
Heat treatment	Describes any process or procedure by which the internal structure of steel is altered by heating to produce desired physical and mechanical characteristics.	*General Mechanical*
Heat treatment charts	Furnace charts providing a temperature vs. time record of the heating and cooling cycle, required by a specific heat treatment process for a particular furnace load of steel or steel parts.	*Mechanical*
Heat-Affected Zone	That portion of the base metal which has not been melted but whose mechanical properties or microstructure has been altered by the heat of welding or cutting.	*Maintenance and Repair*
Heated floorspace	The area within a building that is space heated.	*Energy*
Heating Coil	See Coil Heat Exchanger	*Industrial*
Heating Degree Days (HDD)	A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree days are summed to create a heating degree day measure for a specified reference period. Heating degree days are used in energy analysis as an indicator of space heating energy requirements or use.	*Energy*
Heating equipment	Any equipment designed and/or specifically used for heating ambient air in an enclosed space. Common types of heating equipment include: central warm air furnace, heat pump, plug-in or built-in room heater, boiler for steam or hot water heating system, heating stove, and fireplace. Note: A cooking stove in a housing unit is sometimes reported as heating equipment, even though it was built for preparing food.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Heating intensity	The ratio of space-heating consumption or expenditures to square footage of heated floor space and heating degree-days (base 65 degrees Fahrenheit). This ratio provides a way of comparing different types of housing units and households by controlling for differences in housing unit size and weather conditions. The square footage of heated floor space is based on the measurements of the floor space that is heated. The ratio is calculated on a weighted, aggregate basis according to the following formula Heating Intensity = Btu for Space Heating / (Heated Square Feet * Heating Degree-Days).	*Energy*
Heating stove burning wood, coal, or coke	Any free-standing box or controlled-draft stove; or a stove installed in a fireplace opening, using the chimney of the fireplace. Stoves are made of cast iron, sheet metal, or plate steel. Free-standing fireplaces that can be detached from their chimneys are considered heating stoves.	*Energy*
Heating value	The average number of British thermal units per cubic foot of natural gas as determined from tests of fuel samples.	*Energy*
Heatings	outbreaks of spontaneous combustion. Also fires in the waste or gob. (Mids.).	*Mining*
Heatronic	High frequency electric heating of plastics.	*Material Process*
Heat-treating	heating and cooling a solid metal or alloy in such a way as to obtain desired conditions or properties	*Materials Process*
Heave	when the floor of a roadway rises due to floor weight. Also called 'lift'.-see also Creep, Floor-weight and Floor lift.	*Mining*
Heaver	a coal cutter or hewer.	*Mining*
Heaving	Applied to the rising of the bottom after removal of the coal; a sharp rise in the floor is called a "hogsback".	*Mining*
Heavy	A molded piece thicker than the mold is designed to make, caused by overcharge or lack of pressure.	*Material Process*
Heavy Ends	The portions of a petroleum distillate fraction which are highest boiling, and therefore distill over last if the temperature is raised progressively.	*Lubrication*
Heavy gas oil	Petroleum distillates with an approximate boiling range from 651 degrees Fahrenheit to 1000 degrees Fahrenheit.	*Energy*
Heavy metals	Metallic elements, including those required for plant and animal nutrition, in trace concentration but which become toxic at higher concentrations. Examples are mercury, chromium, cadmium, and lead.	*Energy*
Heavy oils	Oils distilled over from coal-tar between 230 and 330 °C (446-626 °F), the exact range not at all definite.	*Material Process*
Heavy rail	An electric railway with the capacity for a "heavy volume" of traffic and characterized by exclusive rights-of-way, multi-car trains, high speed and rapid acceleration, sophisticated signaling, and high platform loading. Also known as "subway," elevated (railway), "metropolitan railway (metro)."	*Energy*
Heavy resin oil	Heavy coal tar oils, reddish brown liquid, nontoxic in normal usage.	*Material Process*
Heavy water	Water containing a significantly greater proportion of heavy hydrogen (deuterium) atoms to ordinary hydrogen atoms than is found in ordinary (light) water. Heavy water is used as a moderator in some reactors because it slows neutrons effectively and also has a low cross section for absorption of neutrons.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Heavy-water-moderated reactor	A reactor that uses heavy water as its moderator. Heavy water is an excellent moderator and thus permits the use of in expensive natural (unenriched) uranium as fuel.	*Energy*
hectare	The most commonly used measure of agricultural lands in the metric system. A hectare equals 10,000 square meters (or 2.471 acres). Hectare is the measure used in most of the world outside the United States. To convert hectares to acres, multiply times 2.471. (Example: 100 hectares × 2.471 = 247.10 acres.)	*Agriculture*
Hedeoma (pennyroyal, squaw mint)	Dried leaves and flowering tops of the annual plant Hedeoma pulegioide. It is volatile oil, tannin.	*Material Process*
Hedeoma oil (American pennyroyal oil, pulegium oil)	A pale yellowish limpid liquid, essential oil, characteristic, pungent, mint-like odor and taste. Sensitive to light. Soluble in two or more parts of 70% alcohol, ether and chloroform, slightly soluble in water. Chief constituents are pulegone and hedeomal. It is derivated distilled from the leaves and tops of Hedeoma pulegioides.	*Material Process*
Hedging	The buying and selling of futures contracts so as to protect energy traders from unexpected or adverse price fluctuations.	*Energy*
Hedging contracts	Contracts which establish future prices and quantities of electricity independent of the short-term market. Derivatives may be used for this purpose.	*Energy*
Hedging	Taking a buy or sell position in a futures market opposite to a position held in the cash market to minimize the risk of financial loss from an adverse price change.	*Mining*
Hedonal (CH3CH2CH2 CH(CH3) OCO NH 2) (methylpropylcarbinol urethane)	White crystalline powder, feeble aromatic odor and taste, soluble in alcohol, ether, organic solvents, sparingly soluble in cold water, more soluble in hot water. Fusing point 76 °C (168.8 °F), b.p. 215 °C (419 °F).	*Material Process*
HEFCAD	high energy, friction characteristics and durability	*Petro-Chemical Abbreviations*
Heft	another name for weight. (Som.).	*Mining*
Hehner number	The percent by weight of water-insoluble fatty acids in oils and fats.	*Material Process*
HEI	Health Effects Institute	*Petro-Chemical Abbreviations*
heifer	A young cow that has not yet given birth to a calf.	*Agriculture*
Height	Vertical measurement of a bar code.	*Gears*
height divided by section width	height divided by section width.	*Mechanical Engineering*
Heinz Case	a landmark decision of the U.S. Supreme Court upholding an order of the NLRB requiring the Heinz Company to sign a collective bargaining agreement with a union, where the wages, hours, and other terms and conditions were not in dispute.	*Industrial Relations*
Heirloom	a variety that has been conserved through years of cultivation and seed preservation. Varieties may be of specific significant to a particular era, location, or culture.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Held by production	A legal process that allows exploration and production companies to extend the terms of the original contract for lease and royalties for the life of a producing well, even if that term goes beyond the stipulated term of the original lease.	*Petroleum Drilling*
Helical Gear	A cylindrical gear wheel which has slanted teeth that follow the pitch surface in a helical manner.	*Reliability Engineering*
Helical Overlap	The effective face width of a helical gear divided by the gear axial pitch; also called the Face Overlap.	*Mechanical Engineering*
Helical Spring Washer	A split type of spring washer whose purpose is to prevent self loosening of the nut or the bolt. The idea or principle behind the helical spring washer is for one end of the tang of the washer to indent into the fastener (the nut or bolt head) and the other into the joint surface so that any loosening rotation is prevented. Junker in his paper in 1969 on the cause of self-loosening of fasteners (reference: Junker, G., New criteria for self-loosening of fasteners under vibration. SAE Paper 690055, 1969) concluded that this type of lock washer has no ability to lock. This type of washer is sometimes called a spring lock washer or sometimes a standard lock washer.	*Maintenance*
Heliogen	Trade mark for phthalocyanine dyestuffs. Used for paints, lacquers, printing inks, wallpaper, coated paper, rubber, and organic plastics. Characterized by outstanding fastness to light as well as brilliancy of shade.	*Material Process*
Heliophan	Brand name for a proprietary product. Oil-soluble and water-soluble organic compounds used as ultraviolet filters in cosmetics, suntan preparations and also in technical products.	*Material Process*
Heliostat	A mirror that reflects solar rays onto a central receiver. A heliostat automatically adjusts its position to track daily or seasonal changes in the sun's position. The arrangement of heliostats around a central receiver is also called a solar collector field.	*Energy*
Heliotropin (C6H3(CH2OO)CHO) (piperonal, piperonyl aldehyde)	White shining crystals, turns red-brown on exposure to light, sweet floral odor, typical of heliotrope, m.p. 35.5-37 °C (95.9 -98.6°F), b.p. 263 °C (505.4 °F). Soluble in alcohol and ether, insoluble in water and glycerol. It is used in medicine, perfumery, suntan preparations.	*Material Process*
Heliozone	Trade mark for a rubber a rubber chemical. Greenish, waxy material. It is used to retard sun-checking and cracking of rubber and synthetic rubber.	*Material Process*
Helium (He)	Monatomic noble gas, most inert element, atomic number 2. Used as a plasma gas in plasma spraying and to make your voice sound like a chipmunk when inhaled.	*Paint and Coatings*
Helium (He)	Element of atomic number 2. Colorless, tasteless inert gas, does not combine chemically with any other substance. Forms hydrates under certain special circumstances, b.p. −260.0°C (−500°F), freezing point −272.2°C (−521.96°F) the lowest of any substance. Very slightly soluble in water, insoluble in alcohol. It uses for inflation of balloons and dirigibles diluent for oxygen or anesthetic gases in medicine. Component of air supplied to man working in tunnels digging under pressure, also for filling luminescent electric-light tubes, low-temperature research, leak detection, inert shield for arc welding. Nonflammable gas, green gas label.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Helix	A spiral winding.	*Electrical*
Helix Angle	The angle that a helical gear tooth makes with the gear axis at the pitch circle unless otherwise specified.	*Mechanical Engineering*
Helix Rosin	Trade name of a specially processed pale wood rosin containing approximately 5.5% of chemically combined lime, a product containing very little free lime. It uses for linoleum print paint, varnish-air drying, varnish backing, varnish-gloss oil and printing ink.	*Material Process*
Helixin (C44 H64 O11) (alfa-hederin)	Solid insoluble in water, petroleum ether, soluble in alcohol, acetone, glacial acetic acid, dilute aqueous basic solutions. Antifungal antibiotic.	*Material Process*
Hellborein (C37 H56 O18)	Glucoside crystallizable in yellow prisms. Tastes both sweet and bitter. Poisonous, soluble in water, weak alcohol, less soluble in ether and absolute alcohol, m.p. 270 °C (518 °F).	*Material Process*
Heller Committee for Research in Social Economics	a committee which has done primary research in establishing standard budgets for family groups in California.	*Industrial Relations*
Hellindon	**Trade mark of vat dyestuffs. Used for the dyeing of wool. Characterized by excellent fastness properties.**	*Material Process*
Hellium 3	A stable isotopic form of helium, one-millionth as abundant in nature as ordinary helium. Useful in theoretical investigations of nuclear chemistry.	*Material Process*
Hello	Trade mark of organic pigment dyestuffs. Used for paints, lacquers, printing inks, wallpaper, coated paper, rubber and organic plastics. Characterized by very good general fastness properties.	*Material Process*
Helmerco Colors	A class of lakes which are but very slightly soluble in water and of exceptional brightness and light fastness. Recommended for use on paper stock by beater dyeing through the use of alum and rosin. Also, for coating and wall paper printing. Noted for their ability to produce brilliant, fast- to light shades, especially whites on bond, writing and other fine types of paper.	*Material Process*
Helvering v. Davis	decision of the U.S. Supreme Court upholding the constitutionality of various provisions of the Social Security Act and the authority of Congress to levy taxes in aid of the general welfare.	*Industrial Relations*
Helvite (Mn4Be3SiO4) 2 S)	A natural silicate of beryllium and manganese. Color red to brown.	*Material Process*
Hematein (C16H12O6)	An oxidation product of hematoxylin, the coloring principle of logwood. Not to be confused with hematin. Green to reddish brown crystals, m.p. 250°C (482 °F) with decomposition. Insoluble in water, slightly soluble in alcohol and ether. Soluble in dilute sodium hydroxide giving a bright red color, soluble in ammonia with brownish–violet color. It is used as an indicator.	*Material Process*
Hematin (C34H32N4O4FeOH)	The hydroxid of heme. Blue to brown black powder. Decomposes at 200 °C (392 °F) without melting. Soluble in alkalis, hot alcohol or ammonia. It is slightly soluble in hot pyridine, insoluble in water, ether and chloroform. It derivates by dissolving hemin in dilute potassium hydroxide, precipitating with acetic acid and recrystallizing from pyridine.	*Material Process*
Hematite red (red iron ore)	Iron oxide (Fe2O3)with impurities. Brilliant black to blacked red or brick red mineral with brown to cherry red streak and metallic to dull luster. The most important ore of iron. Also, certain varieties are used as paint pigments and for rouge.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hematite	An oxide of iron, and one of that metal's most common ore minerals.	*Mining*
Hematite, micaceous	Foliated or micaceous varieties of specular iron ore. See hematite red.	*Material Process*
Hematoporphyrin (C34H38O6N4)	Deep red crystals, soluble in alcohol, sparingly soluble in ether, insoluble in water. Obtained from hemin or hematin by the action of strong acids. It is non-toxic and is reported to be preferentially absorbed by cancerous tissues, making them fluoresce under ultraviolet light.	*Material Process*
Heme (C34H32FeN4O4)	The nonamino acid portion of hemoglobin consisting of reduced (ferrous) iron bound to protoporphyrin.	*Material Process*
Hemicellulose	One component of the matrix of the wood microstructure.	*Material Process*
Hemicellulose	A type of natural substance more complex than a sugar and less complex cellulose, and occurring in woody tissue along with cellulose. Obtained in pure form from corn grain hulls (corn fiber) by lime water extraction.	*Material Process*
Hemicolloids	Linear polymers of molecular weight from 2000 to 10,000 corresponding to an order of polymerization equal to 50 to 100 monomeric units.	*Material Process*
Hemin (C34H32N4O4FeCl)	The chloride of heme. Crystals which are brown by transmitted light and steel blue by reflected light. Sinters at 240 °C (464°F). It is derivated by heating hemoglobin with acetic acid and sodium chloride. Freely soluble in ammonia water, soluble in strong organic bases, insoluble in carbonate solutions, dilute acid solutions, insoluble but stable in water. The isolation of hemin is used for the identification of blood stains.	*Material Process*
Hemlock bark	Bark of hemlock fir Tsuga canadensis. It is using in tanning industry, boiler compounds, pharmaceutical preparations.	*Material Process*
Hemoglobin (Hb) Suggested empirical formula (C738H1166 FeN203O208S2)4	Hemoglobin (Hb) Suggested empirical formula (C738H1166 FeN203O208S2)4 The important respiratory protein of the red blood cells, it is necessary in the transfer of oxygen from the lungs to the tissues and of the carbon dioxide from the tissues to the lungs. Hemoglobin is a conjugated protein consisting of approximately 94% globin (protein portion) and 6% of heme. Each molecule can combine with one molecule of oxygen to form oxyhemoglobin (HbO2). The iron found in the heme portion must be in the reduced ferrous state to enable the hemoglobin to combine with oxygen. Oxyhemoglobin is available commercially as a brownish red powder or crystals, soluble in water. It is used in medicine, and is usually called hemoglobin.	*Material Process*
Hemp	A tall plant, Cannabis sativa, cultivated for its fiber, which is taken from the inner bark and used in making cordage.	*Material Process*
Hemp	Soft, white fibers, obtained from the stems of Cannabis sativa. It is coarser than flax but stronger, more glossy, and more durable than cotton. It is blended with cotton or flax in toweling and heavy fabrics, twine, cordage, packing.	*Material Process*
Hempseed oil (hemp oil)	Light green, fixed, nondrying liquid, becomes brownish-yellow on standing. Soluble in ether, benzene and carbon disulfide.	*Material Process*
Henderson v. Mayor of New York	a decision of the U.S. Supreme Court holding that immigration is an area exclusively within the jurisdiction of the Federal Government under the clause which gives Congree the "right to regulate commerce with foreign nations."	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Henning	Purifier Trademark for a preparation having a soda-ash base and other added materials for treating steel. Produced as walnut-sized briquettes, convenient for use in foundry, open hearth, or Bessemer practice. Used as a ladle addition to produce cleaner steel by aiding in removal of dissolved oxides and silicates and fluxing nonmetallic inclusions to slag.	*Material Process*
Henry Hub	A pipeline hub on the Louisiana Gulf coast. It is the delivery point for the natural gas futures contract on the New York Mercantile Exchange (NYMEX).	*Energy*
Henry's law	the relationship between the partial pressure of a compound and the equilibrium concentration in the liquid through a proportionality constant known as the Henry's law constant.	*Chemical*
Henry's law constant	the ratio of the concentration of a compound in air (or vapor) to the concentration of the compound in water under equilibrium conditions.	*Chemical*
Heparin sodium (heparin)	The sodium salt of a complex organic acid present in mammalian tissues and having the property of prolonging the clotting time of blood. White or pale colored, amorphous powder, nearly odorless, hygroscopic, soluble in water, insoluble in alcohol, benzene, acetone, chloroform, and ether. It is derivated from animal liver or lungs and used in medicine.	*Material Process*
Heptachlor (C10H7Cll7)	A fungicide similar to chlodan. White to light tan, waxy solid, m.p. 95-96 °C (203-204.8°F). Insoluble in water, soluble in xylene.	*Material Process*
Heptadecanol ($C_{27}H_{35}OH$)	Colorless liquid, slightly soluble in water. It is used in organic synthesis, plasticizer, intermediate, perfume fixatives. For soap and cosmetic preparations, base for manufacture of wetting agents and detergents.	*Material Process*
Heptafluorobutyric acid (C3F7COOH) (perfluorobutyric acid)	Colorless hydroscopic liquid with sharp odor. Miscible with water, acetone, ether, and petroleum ether, soluble in benzene and carbon tetrachloride, insoluble in carbon disulfide and mineral oil. It is used as intermediate, surfactant and acidulant.	*Material Process*
Heptagran 20	Brand name for a granular insecticide containing 20% heptachlor. It is used in preparation of insecticide-fertilizer combination.	*Material Process*
Heptaldehyde (C6H13CHO) (oenanthic aldehyde, Heptanal, oenanthal, aldehyde C-7)	Oily, colorless liquid, with a penetrating fruitly odor. Soluble in 3 volumes of 60% alcohol, slightly soluble in water, soluble in ether. It is used in manufacture of heptyl alcohol, organic synthesis, perfumery, pharmaceuticals, rubber products.	*Material Process*
Heptanal	See heptaaldehyde.	*Material Process*
Heptane (CH3(CH2)5CH3)	Volatile, colorless liquid, highly flammable, fire hazard, dangerous. Soluble in alcohol , ether, chloroform, and i9nsoluble in water. Standard for octane rating and determinations, anesthetic, solvent.	*Material Process*
Heptanol	See Heptyl alcohol.	*Material Process*
Heptanol ($CH_3CH_2CH(OH)C_4H_9$)	Liquid light soluble in water. It is used as flotation frothier, solvent and diluents in coatings, intermediate. **Hepteen Base Trade marks for a heptaldehyde-aniline reaction product. A dark brown, free flowing liquid. Soluble in acetone, benzene, and ethylene dichloride, moderately soluble in gasoline, insoluble in water. Accelerator for pure gum, inner tube, white tire sidewall, air-cured footwear.**	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hepteen Base	Trade mark for a heptaldehyde - aniline reaction product. A dark brown, free flowing liquid. Soluble in acetone, benzene, and ethylene dichloride, moderately soluble in gasoline, insoluble in water. Accelerator for pure gum, inner tube, white tire sidewall, air-cured footwear.	*Material Process*
Heptyl acetate	A liquid with fruity odor. Preparation of fruit essences.	*Material Process*
Heptyl alcohol (C7H15OH) (1-heptanol, C-7)	Colorless fragrant liquid. Organic intermediate, solvent, cosmetic formulations.	*Material Process*
Heptyl amine (C7H15NH2)	Colorless liquid slightly soluble in water, soluble in alcohol and ether.	*Material Process*
Heptyl formate (HCOOC7H15)	A colorless liquid with fruity odor. Uses in artificial fruit essences.	*Material Process*
Herbicide	a type of pesticide that kills weeds	*Agriculture*
Hercocel A	Trade mark for cellulose acetate molding powder pellets.	*Material Process*
Hercocel E	Trade mark for ethyl cellulose molding powder pellets.	*Material Process*
Hercoflex	Trade mark for liquid plasticizers for vinyl resins and other film formers.	*Material Process*
Hercolyn	A trade name for dihydro methyl abietate esters, b.p. 365-370 °C (689-698 °F). Used as a plasticizer for lacquers and plastics, softener and plasticizer in adhesives, floor tile, and other plastic and asphaltic compositions, wax modifier, low cost transparentizer of paper, pigment-grinding medium for inks.	*Material Process*
Hercose S	Trade mark for a cellulose acetate sorbate, colorless flakes, a cross linking cellulose acetate derivative, soluble in organic solvents, may be formed and cured to insolubility, available in low and medium viscosity grades.	*Material Process*
Hercoze C	A trade name .for cellulose acetate butyrate used in coatings.	*Material Process*
Herculoy	Silicon bronze with the corrosion resistance of copper and the strength of mild steel. Made in sheet, strip, plate, rod, wire, tube and forgings. Used for chemical equipment.	*Material Process*
Herecrol	Trade mark for synthetic rubber products-sheet lining, molded products, uncompounded synthetic rubber, synthetic rubber coating, self curing or baking.	*Material Process*
Hereford	A breed of hogs first developed by R. U. Webber, La Plata, Missouri, who made his first crosses in about 1902. He used Duroc, Chesters and Ohio Improved Chester breeds. The modern breed also includes Poland China genetics. To qualify for registration, Herefords must conform to a color pattern that includes a white face, at least two white feet and a red body.	*Agriculture*
Hereford	A breed of beef cattle bred near Hereford, England, nearly 300 years ago to efficiently convert native grass into beef needed for the expanding food market created by Britain 's industrial revolution. The breed is "trade-marked" with white faces and distinctive red bodies. Hereford breeding came to the U.S. in 1840, although statesman Henry Clay of Kentucky made the first importation (a bull and two females) in 1817. (Clay's imports were absorbed by the local cattle population and disappeared from permanent identity.) The registry is maintained by the American Hereford Association.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Herefords	a term used at Birch Coppice and Desford Collieries, S. Mids. for the men of the on-coming shift, a reference to their white faces.	*Mining*
Heresite	Trade marks for a series of pure phenol-formaldehyde resinous coatings and related products of the thermosetting type. Applied by spraying, dipping, or brushing, followed by baking or air drying. It is used in anticorrosive lining for machinery and equipment for chemical, food, drug, and petroleum industries, tank cars and containers.	*Material Process*
Herkolite	Trade mark for electrical insulation comprising sheet material united by an adhesive binder/	*Material Process*
Hermetically Sealed Switch	A switch completely sealed to provide constant operating characteristics. All junctures made with metal-to-metal or glass-to-metal fusion.	*Electrical Engineering*
Herndon Case	decision of the Supreme Court in 1937 involving an organizer in Atlanta who was convicted under an 1861 statute for "inciting to insurrection".	*Industrial Relations*
Herpoco	Trade mark for a fertilizer grade of ammonium nitrate, technical grade of ammonium nitrate.	*Material Process*
Herrin Massacre	outbreak of violence during a coal strike at Herrin, Illinois.	*Industrial Relations*
Herring-	bone timbering, two half height props with two additional props above set at an angle inclined inwards, connected to a central longitudinal bar in the roof; or the latter without the half height props, the inclined props or struts being notched into the strong sides of the roadway.	*Mining*
Herring oil	Pale yellow to dark red liquid .Soluble in ether, chloroform, solvent naphtha and carbon disulfide. It is used for soap, leather, dressing, curing and finishing, lubricating special machinery.	*Material Process*
Hertz	A measure of frequency. An older term is cycles per second, or cps.	*Electrical Engineering*
Hertz	(Abbrev. H) A term rapidly replacing cycles:per:second as an indication of frequency.	*Electrical*
Hertz (Hz)	(Hz): Units in which frequency is expressed. Synonymous with cycles per second.	*Electrical*
Hertz (Hz)	Units in which frequency is expressed. Synonymous with cycles per second.	*Electronic Process*
Hertz Stress	See Contact Stress.	*Mechanical Engineering*
hertz. (lower-case h, but abbreviated Hz)	The unit of frequency. Formerly cps for cycles per second.	*Reliability Engineering*
Hesperdin (C28H34O15)	A naturally occurring product, a bioflavonoid, related to ruin and the vitamin P group. Fine needles, soluble in dilute alkalis, pyridine, very slightly soluble in water, acetone, benzene, and chloroform. It obtains by extraction from orange peel or other citrus fruits, and using in medicine.	*Material Process*
Hess's law	The heat evolved or absorbed in a chemical process is the same whether the process takes place in one or in several steps. Also, known as the law of constant heat summation.	*Material Process*
Hessite (Ag2Te)	Natural silver telluride. Color steel to lead gray, streak black, and luster metallic.	*Material Process*
Het acid	Trade mark for chlorendic acid.	*Material Process*
Het Anhydride	**Trade mark for chlorendic anhydride.**	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hetero	A prefix meaning other or different. For example, heterocyclic refers to compounds in which more than one kind of atom is joined in a ring.	*Material Process*
Heteroecious	Requiring two taxonomically different hosts to be able to complete the entire life cycle, as in the rust fungi.	*Forestry*
Heteroepitaxy	Deposition of the thin film of a composition significantly different from the substrate	*Material Process*
Heterogeneity	1. Used in a general sense to describe the variation in, or diversity of, participants, interventions, and measurement of outcomes across a set of studies, or the variation in internal validity of those studies. 2. Used specifically, as statistical heterogeneity, to describe the degree of variation in the effect estimates from a set of studies. Also used to indicate the presence of variability among studies beyond the amount expected due solely to the play of chance. See also: Homogeneous, I2	*Quality Engineering*
Heterogeneous	Containing more than one phase.	*Chemical*
Heterogeneous nucleation	The precipitation of a new phase occurs at some structural imperfection	*Material Process*
Heterogeneous reaction	Reaction that takes place at the interface between two phases.	*Chemical*
Heterolysis	The unsymmetrical breakdown of a covalent electron bond. A:B=A+ +B-.	*Material Process*
heterotrophic	designating or typical of organisms that derive carbon for the manufacture of cell mass from organic matter.	*Chemical*
HETP	(1) Abbreviation for hexaethyl tetraphosphate. (2) Abbreviation for height equivalent to a theoretical plate. It is the height of a distillation or fractionating column which gives a separation equivalent to that of a theoretical plate in the physical separation process involved. A theoretical plate may be defined as the one which produces the same difference in composition as exists at equilibrium between two phases.	*Material Process*
Hetrazan (N3OC10H21O7C6H8) (1-diethylcarbamyl-4-methyl piperazine dihydrogencitrate)	Trade mark for diethylcarbamazine. White slightly hygroscopic powder, m.p. 135-138 °C (275-280.4 °F). Very soluble in aqueous solution, soluble in alcohol, insoluble in organic solvents, pH=4.0, indefinitely stable at room temperature. It is used in medicine.	*Material Process*
Hetron	Trade mark for a line of polyester resin products available in rigid, semirigid, and flexible types. Appears clear, color varies from light yellow to light amber. It does not support combustion. Used as skylight louvers, chemical; ductwork, pickup truck body parts boats.	*Material Process*
Heughs or Heuchs	an ancient Scottish term for coal seams or coal workings.	*Mining*
HEUI	hydraulically operated, electronically controlled unit injectors	*Petro-Chemical Abbreviations*
Heulandite (H4CaAl2(SiO3)6 3H2O)	A mineral, one of the zeolite. White to red, gray or brown, white streak, vitreous or pearly luster.	*Material Process*
Hewer	A hewer was a man, usually between the ages of 17 and 70, whose job it was to break down the coal, sometimes called 'ragging', ready for the filler to load the tubs. His job would include undercutting the coal by means of a hand held pick before the advent of mechanical coal cutters. Also known as a 'collier', 'coal face worker', 'getter', 'heaver' or 'pickman'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hewettite ($CaV_6O_{16}9H_2O$)	A natural hydrated calcium vanadate. Color deep red, powder brownish red. Metahewettite is a dimorphous form with similar properties.	*Material Process*
Hewing	the action of breaking down the coal using a hammer and wedges or a pick, to 'hew' the coal.	*Mining*
Hex / Hexagonal	Metal having six sides and six angles; six-sided.	*Metallurgy*
Hex Nut 2H, 2HM	ASTM specification for Hex nuts, material standard A194, used with API flange studs. '2H' nuts are used for standard service. When specifications (NACE) require B7M studs, use '2HM' nuts.	*Petroleum Engineering*
Hexabromoethane (C2Br6)	Yellowish-white, rhombic needles, m.p. 210-215 °C (410 - 419 °F). Slightly soluble in water, and alcohol.	*Material Process*
Hexachlorobenzene (C6Cl6)	White needles, m.p. 229°C (444.2 °F), soluble in benzene and boiling alcohol, insoluble in water. It derivates by heating hexyl iodide with iodine chloride.	*Material Process*
Hexachlorobutadiene (C4Cl6)	Clear colorless liquid with mild characteristic odor. Insoluble in water, compatible with numerous resins and plastics, soluble in alcohol and ether. Solvent for natural rubber, synthetic rubber and other polymeric substances. High boiling nonflammable solvent, nonflammable heat transfer liquid, transformer fluid and hydraulic fluid, clarifying mash before centrifuging, wash liquor for removing C4 and high hydrocarbons.	*Material Process*
Hexachlorocyclopentadiene (C5Cl6) (perchloro cyclopentadiene)	Pale yellow liquid having a pungent odor. Intermediate for nonflammable resins, dyes, pesticides, fungicides, pharmaceuticals.	*Material Process*
Hexachloromethyl ether O(CCl3)2	A liquid, phosgene like odor, very irritant!	*Material Process*
Hexachloromethyl carbonate (OCCl3)2 CO) (triphosgene)	A lachrymator. White crystals odor similar to that of phosgene. Decomposed by hot water and alkali hydroxides. Only slowly acted upon by cold water. Soluble in alcohol, benzene and ether.	*Material Process*
Hexachlorophene (C6HCl3OH)2CH2)	White, free flowing powder, essentially odorless. Freely soluble in acetone, alcohol and ether, soluble in chloroform, insoluble in water. It is used as bactericidal and bacteriostatic agent finds application in antiseptic soaps, deodorant products including soaps, various cosmetics, and dermatologicals. It is not hazard, except those associated with inhalation of fine powders.	*Material Process*
Hexachloropropene	See hexachloropropylene.	*Material Process*
Hexachloropropylene (CCl3CClCCl2) perchloropropylene, hexachloropropene)	Water white liquid, insoluble in water, miscible in alcohol, ether, and chlorinated compounds. A solvent, plasticizer, hydraulic fluid.	*Material Process*
hexadecane (Cetane) ($C_{16}H_{34}$)	A colorless liquid. Soluble in alcohol, acetone and ether. insoluble in water. Used as solvents, organic intermediates and standardized hydrocarbons.	*Material Process*
Hexadecane (Cetane) (C16H34)	n-hexadecane (Cetane) (C16H34) A colorless liquid. Soluble in alcohol, acetone and ether. insoluble in water. Used as solvents, organic intermediates and standardized hydrocarbons.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hexadecimal	Refers to a base sixteen number system using the characters 0 through 9 and A through F to represent the values. Machine language programs are often written in hexadecimal notation.	*General Engineering*
Hexagonal close packed	Common atomic arrangement for metals.	*Material Process*
Hexagonal Close-Packed (HCP)	A crystal structure found for some metals. The HCP unit cell is of hexagonal geometry and is generated by the stacking of close-packed planes of atoms.	*Engineering Physics*
Hexamethylenetetramine (CH2)6N4	Hexamethylenetetramine (CH2)6N4 White crystalline powder, or colorless, lustrous crystals, practically odorless. It has irritating action on the skin, soluble in water, alcohol and chloroform, insoluble in ether. Burns with smokeless flame. It derivates by the action of ammonia on formaldehyde. It is used in medicine, pharmaceuticals, rubber accelerator, as an absorbent for phosgene in military gas masks, synthetic resins, raw material for explosives.	*Material Process*
Hexane (CH3(CH2)4CH3)	A colorless liquid. A solvent used especially in the extraction of zein.	*Material Process*
Hexene	A comonomer (hexene-1 or 4-methyl pentene-1) used in the production of linear low-density and high-density polyethylene.	*Engineering Physics*
Hexyl acetate	A solvent ester.	*Material Process*
Hexyl alcohols	Solvents.	*Material Process*
HF	Friction losses in the suction piping. Piping and fittings act as a restriction, working against liquid as it flows towards the pump inlet.	*Heat Transfer Process*
HFC	See Hydrofluorocarbon	*Energy*
HF-O/1/2	hydraulic fluid specifications (Denison)	*Petro-Chemical Abbreviations*
HFRR	high frequency reciprocating rig test	*Petro-Chemical Abbreviations*
HHDV	heavy-heavy diesel vehicle	*Petro-Chemical Abbreviations*
HHO	home heating oil	*Petro-Chemical Abbreviations*
HIBCC	Health Industry Bar Code Council	*Gears*
HID	High-Intensity Discharge	*Energy*
Hidden Cost	All costs associated with either production or maintenance. When associated with maintenance, hidden costs represent the loss associated with unplanned downtime. Typically, hidden costs represent between 1- 3% of a company's revenues or, potentially between 30-40% of profits.	*Maintenance*
Hidden Failure	A Failure Which, On Its Own, Does Not Become Evident To The Operating Crew Under Normal Circumstances. Typically, Protective Devices Which Are Not Fail-Safe (Examples Could Include Standby Plant And Equipment, Emergency Systems Etc.)	*Plant Engineering*
Hierarchy	The ranking or precedence of the elements in a supervisory system. For example, a lower ranking element such as a local controller affects only one variable while a higher ranking element such as a computer might affect many variables.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Higgling of the Market	a phrase used to describe the interaction in the market between buyers and sellers.	*Industrial Relations*
High alloy steel	Ferrous alloy with more than 5 wt% noncarbon additions.	*Material Process*
High bit-rate Digital Subscriber Line	The oldest of the DSL technologies, it continues to be used by telephone companies deploying T1 lines at 1.5Mbps and requires two twisted pairs.	*Electrical Engineering*
High complexity tests	A CLIA category of tests that has the most demanding QC requirements. Includes any tests developed by the laboratory, modified by the laboratory, or manufacturer's tests that have been classified as high complexity.	*Quality*
High Contamination	Having heavy particle laden air, requiring extreme washdown environments.	*Electrical Engineering*
High Density Polyethylene	Tough and strong, with terrific chemical resistance, HDPE is used to make sheet and film products. Properties: HDPE is strong and puncture resistant, providing a good barrier to moisture, most chemicals (except ones with aromatic or chlorine content), and oils and grease. However, it is permeable to gas. Lusterless and translucent when uncolored, it is also available in pigmented forms. The resin can be easily processed and formed; it can be welded together, but may be difficult to glue. Because it's stiffer than some other films, it maintains its shape better. Use has grown in recent years because tough HDPE allows manufactures to thin wall packaging and "do more with less," thereby reducing the amount of material used. Applications: HDPE is used to make cereal box, cake mix and other carton liners, bakery bags, T-shirt bags, the "crinkly" kind of shopping and trash bags, industrial liners, agricultural and construction films, and envelopes.	*Engineering Physics*
High efficiency ballast	A lighting conservation feature consisting of an energy-efficient version of a conventional electromagnetic ballast. The ballast is the transformer for fluorescent and high-intensity discharge (HID) lamps, which provides the necessary current, voltage, and wave-form conditions to operate the lamp. A high-efficiency ballast requires lower power input than a conventional ballast to operate HID and fluorescent lamps.	*Energy*
High efficiency lighting	Lighting provided by high-intensity discharge (HID) lamps and/or fluorescent lamps.	*Energy*
High Flotation Sizing System For Light Trucks	A system using overall diameter in inches, section width in inches, type of tire construction, and rim diameter in inches. Example: 33x12.50R15LT	*Mechanical Engineering*
High Grade Ore	Ore which runs more silver than twenty ounces to the ton, with 50 or more per cent of lead.	*Mining*
High grade	Rich ore. As a verb, it refers to selective mining of the best ore in a deposit.	*Mining*
High Grading	A high-grader was a man who stole any big nuggets which he saw in the sluice boxes.	*Mining*
High Heat Value (HHV)	The high or gross heat content of the fuel with the heat of vaporization included; the water vapor is assumed to be in a liquid state.	*Energy*
High Level Data Link Control	An ITU-TSS link layer protocol standard for point-to-point and multi-point communications.	*Electrical Engineering*
High Load Melt Index	The ASTM condition of 190° C and a load of 21.6 Kg used for determining the flow rate of molten HDPE through a standard orifice. More often referred to as flow rate.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
High pressure	A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.	*Energy*
High Pressure Die Cast	A wheel manufacturing process using aluminum alloys in special high-pressure die casting machines.	*Mechanical Engineering*
High Recovery Valve	A valve design that dissipates relatively little flow stream energy due to streamlined internal contours and minimal flow turbulence. Therefore, pressure downstream of the valve vena contracta recovers to a high percentage of its inlet value. These types of valves are identifiable by their straight-through flow paths. Examples are most rotary control valves.	*Industrial Engineering*
High Strength Friction Grip Bolts	Sometimes abbreviated to HSFG bolts. Bolts which are of high tensile strength used in conjunction with high strength nuts and hardened steel washers in structural steelwork. The bolts are tightened to a specified minimum shank tension so that transverse loads are transferred across the joint by friction between the plates rather than by shear across the bolt shank.	*Maintenance*
High Strength Strand	Grade of galvanized or bright strand.	*Wire Rope & Cable*
High strength, low alloy steel	Steel with relatively high strength but significantly less than 5 wt% noncarbon additions.	*Material Process*
High Sulfur Diesel (HSD) fuel	Diesel fuel containing more than 500 parts per million (ppm) sulfur.	*Energy*
High Tc superconductor	Ceramic material such as YBa2Cu2O7, which is superconducting at a temperature higher than is possible with traditional metal superconductors, for example 30 K.	*Material Process*
High Velocity Oxy-fuel Spraying (HVOF)	A Thermal spray process. The spray powder particles are injected into a high velocity jet formed by the combustion of oxygen and fuel, heated and accelerated to the work piece.	*Paint and Coatings*
High Voltage Time Test	A high:voltage time test is an accelerated life test on a cable sample in which voltage is the factor increased.	*Electrical*
Highbanker	A mobile sluice box. Instead of being put right in the creek, it uses water to pump to transport the water and minerals to another location. It is also able to run more material in less time than the sluice.	*Mining*
High-Brightness LEDs	High-Brightness LEDs are any of a new generation of LEDs bright enough for illumination applications such as automotive interior, exterior, and display; room and architectural illumination; task and general lighting; projection display; display backlights; and signage.	*Electrical Engineering*
High-current transients	Short spikes of high electrical current in a grid, caused by lightning strikes, or rapid switching of electrical devices in the grid, especially capacitors. These transients, or surges, cause cables to overheat, potentially damaging insulation and leading to short circuits. Equipment can be protected from high-current transients by using a surge protector.	*Electrical*
High-definition television	An all-digital system for transmitting a TV signal with far greater resolution than the analog standards (PAL, NTSC, and SECAM). A high-definition television set can display several resolutions, (up to two million pixels versus a common television set's 360,000). HDTV offers other advantages such as greatly improved color encoding and the loss-free reproduction inherent in digital technologies.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
High-Density Polyethylene	This term is generally considered to include polyethylenes ranging in density from about 0.940 to 0.960 and over. Whereas the molecules in low-density polyethylene are branched in random fashion, those in the higher density polyethylenes have fewer side branches, resulting in more rigid material with greater strength, hardness, chemical resistance, and higher softening temperature.	*Engineering Physics*
Highest Point of Single Tooth Contact	The largest diameter on a spur gear at which a single tooth is in contact with the mating gear. Often referred to as HPSTC.	*Gears*
Highgrade	Rich ore. Selective mining of the best ore in a deposit.	*Mining*
Highgraded	One who steals rich ore, especially gold, from a mine.	*Mining*
High-grading	A harvesting technique that removes only the largest, most valuable trees from a stand and provides high returns at the expense of future growth potential.	*Forestry*
High-intensity discharge (HID) lamp	A lamp that produces light by passing electricity through gas, which causes the gas to glow. Examples of HID lamps are mercury vapor lamps, metal halide lamps, and high-pressure sodium lamps. HID lamps have extremely long life and emit far more lumens per fixture than do fluorescent lights.	*Energy*
Highland	A Scottish breed of beef cattle. Prized for its ability to survive rugged climate and poor grazing conditions. It has long hair, and long horns that curl upward. Registered by the American Highland Cattle Association.	*Agriculture*
Highlander Folk School	resident labor school located in Monteagle, Tennessee.	*Industrial Relations*
High-line or high-pressure gas	High-pressure (100 psi) gas from cracking unit distillate drums that is compressed and combined with low-line gas as gas absorption feedstock.	*Petroleum Engineering*
High-mileage households	Households with estimated aggregate annual vehicle mileage that exceeds 12,500 miles.	*Energy*
High-Side	An element connected between the supply and the load. High-side current sensing applications measure current by looking at the voltage drop across a resistor placed between the supply and the load.	*Electrical Engineering*
High-Speed Downlink Packet Access	HSDPA is a 3G radio interface standard in the HSPA family for wireless and cellular handsets or data cards that increase the data rate and improve the traffic handling of existing UMTS standards.	*Electrical Engineering*
High-Speed Packet Access	HSPA is a collection of radio interface standards for wireless and cellular handsets or data cards that increase the data rate and improve the traffic handling of existing UMTS standards.	*Electrical Engineering*
High-Speed Serial Interface	A short-distance communications standard for data rates from 2Mbps to 52Mbps.	*Electrical Engineering*
High-Speed Uplink Packet Access	Is a 3G radio interface standard in the HSPA family for wireless and cellular handsets or data cards that increase the data rate and improve the traffic handling of existing UMTS standards.	*Electrical Engineering*
High-strength low-alloy (HSLA) steel	steels with a high yield point and low percentages (<1.25%) of other alloying components	*Materials Process*
High-strength steel	steels that have a tensile strength over 150 ksi (1100 MPa)	*Materials Process*
High-temperature collector	A solar thermal collector designed to operate at a temperature of 180 degrees Fahrenheit or higher.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
High-voltage direct current (HVDC)	A technology developed by ABB in the 1950s to move large amounts of power over substantial distances - typically by overhead transmission lines, but also by way of submarine cables. Transmitting DC power over long distances is more efficient than AC transmission (see Direct current and Transmission and distribution) and is a cost-effective method of connecting two asynchronous grids (grids operating at different frequencies). An HVDC system takes electrical power from an AC network, converts it to DC at a converter station and transmits it to the receiving point by line or cable, where it is turned back into AC by using another converter. The conversion is carried out with high-power, high-voltage electronic semiconductor valves. These valves are controlled by a computer system, so the amount of transmitted power and also the direction of transmitted power can be precisely controlled, a feature unique to HVDC systems. Another important aspect of HVDC lines is that they can never be overloaded. Because HVDC transmits only active (real) power, no line capacity is wasted on transmitting reactive power. This means that the same power can be transmitted over fewer (or smaller) transmission lines than would be required using AC, and less land is needed to accommodate the lines. HVDC induces minimal magnetic fields, so the power lines may be built safely closer to human habitation. **In the 1990s ABB developed the HVDC Light technology which made it possible to have long underground transmission (see HVDC Light). In 2006 ABB carried out the first test circuit on +/- 800 kV ultrahigh-voltage DC (see Ultrahigh voltage). Typical power and voltage range are - Classical HVDC - 500 - 6,400 MW (± 150 - 660 kV) UHVDC - 6000-8000 MW (± 800 kV)HVDC Light - 100-1100 MW (± 150 - 320 kV). Hoist, friction hoist - In underground mining, a hoist or winder is used to raise and lower conveyances within the mine shaft. All hoists are powered using electric motors. Modern hoists are generally equipped with variable speed drives that minimize energy consumption and control the speed of the hoist.**	*Electrical*
Highwall	The unexcavated face of exposed over-burden and coal in a surface mine.	*Energy*
Highwall miner	A highwall mining system consists of a remotely controlled continuous miner which extracts coal and conveys it via augers, belt or chain conveyors to the outside. The cut is typically a rectangular, horizontal cut from a highwall bench, reaching depths of several hundred feet or deeper.	*Mining*
Hill	an inclined roadway in the mine. (Mids.), (N. East); or the surface area at a colliery. (Scot.).	*Mining*
Hill Claims	Minerals found in or under a hill.	*Mining*
Hill clerk	the person who weighed the coals for sale, either at the colliery or at a depot away from the colliery. (Scot.).	*Mining*
Hill sale	the sale of coal at the colliery from the coal hill. In carts, as opposed to coal being sent out by rail. (Scot.).	*Mining*
Hill system	a system of working coal where the seams lie close together and where three or more are worked simultaneously by longwall (S. Staffs.); or a system of working rearing coal seams.	*Mining*
hillside combine	A combine with a self-leveling mechanism that keeps the body of the vehicle level so internal parts can efficiently separate grain and chaff when operating on steep slopes.	*Agriculture*
Hillsman or Hillman	the pitheadsman, or a coal salesman. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hinges	a jointed or flexible device upon which a door, lid, or other swinging part turns	*Materials Process*
hinny	The offspring of a stallion (male horse) and a jenny (female ass).	*Agriculture*
Hinshaw pipeline	A pipeline or local distribution company that has received exemptions from regulations pursuant to the Natural Gas Act. These companies transport interstate natural gas not subject to regulations under NGA.	*Energy*
Hippanthrope	One who believes himself a horse	*Breakroom*
Hipped	another word to describe a 'stepped' face.	*Mining*
HIPPING	The high temperature/high pressure consolidation of a powder metallurgy component or thermally sprayed coating. Density is greatly increased and metallurgical changes provide enhanced corrosion and wear properties.	*Paint and Coatings*
Hiring	the act of taking on an employee for a designated or stated period of time.	*Industrial Relations*
Hiring Hall	sometimes known as the central hiring hall, or union hiring hall.	*Industrial Relations*
Hiring Policies	the guides established, usually by the employer, for the personnel office to follow in taking on new employees.	*Industrial Relations*
Histogram	"A graph of a frequency distribution in which the rectangles on the horizontal or x-axis are given widths proportional to the intervals of the quantities being displayed, and heights proportional to the frequency of occurrence of quantities within that interval." [CLSI]	*Quality*
Historical control	A control person or group for whom data were collected earlier than for the group being studied. There is a large risk of bias in studies that use historical controls due to systematic differences between the comparison groups, due to changes over time in risks, prognosis, health care, etc.	*Quality Engineering*
Historical Wage Differentials	those wage relationships in a particular industry between plants, occupations, or areas which have continued over a long period of time.	*Industrial Relations*
Hitch	a fault of equal or less throw or displacement than the thickness of the seam in which it occurs, also called a 'fault' or a 'trouble'; or to attach trams to a haulage rope with a short chain.	*Mining*
Hitcher	another name for the onsetter, also known as a 'hooker'.	*Mining*
Hitchman Coal and Coke Co. v. Mitchell	a decision of the U.S. Supreme Court limiting the right of a union to induce workers under a "yellow-dog contract" to join the union while still in the employ of the company.	*Industrial Relations*
Hitting the Bricks	workers who go on strike are said to "hit the bricks".	*Industrial Relations*
HMI	Human Machine Interface. Sometimes these are called Man Machine Interface. See MMI.	*Control Engineering*
HMW High-Density Polyethylene	High molecular weight high-density polyethylene is usually defined as a polyethylene with a density of 0.940 or greater and a flow rate of 1 to 20 (190° C/21.6 Kg). The weight average molecular weight ranges from 200,00 to 500,000.	*Engineering Physics*
HOA16./Pulsation	Repeated small fluctuation of pressure within a circuit,	*Mechanical, Process, and Operations*
Hob	A master steel form used to sink a desired mold shape into mild machine steel cavity blank.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hobbing	Forming a mold cavity by forcing a hardened steel master model into a soft steel cavity blank.	*Material Process*
Hobs	pillars of coal to support the roof. (Lancs.).	*Mining*
Hock	back leg of cattle	*Agriculture*
Hod	a cart or sled for transporting coal in thin seams. (F. of D.).	*Mining*
Hoe	a pick with which the breaker cuts the coal. - see also Mattock. (Som.).	*Mining*
hog	Domesticated or wild swine. In domestic swine, the term usually applies to those weighing more than 120 pounds.	*Agriculture*
Hog back	a sharp rise in the floor of a coal seam.	*Mining*
Hog Rings	Rings used to hold the shaft in a roller.	*Manufacturing*
Hogger piece	a branch pipe at the top of a 'pump tree' for delivering the water.	*Mining*
Hoggers	stockings without feet, chiefly used by the barrow-men or putters. (N. East).	*Mining*
Hogsback	A sharp rise in the floor of a seam.	*Mining*
Hoisery Workers; American Federation of (AFL-CIO)	the hoisery workers withdrew from the United Textile Workers in 1915 and remained independent until 1922 as the American Federation of Full Fashioned Hoisery Workers.	*Industrial Relations*
HOIST	The machine used for raising and lowering the cage or other conveyance in a shaft.	*Mining*
Hoisting	The vertical transport coal or material.	*Mining*
Hold	Meter HOLD is an external input which is used to stop the A/D process and freeze the display. BCD HOLD is an external input used to freeze the BCD output while allowing the A/D process to continue operation.	*General Engineering*
Hold And Drive Bolts	Special bolts that have a tang at the threaded end of the shank. This tang is gripped by the tightening tool during assembly so that the reaction torque is absorbed whilst the nut is tightened from the same side. Such bolts allow what used to have to be done by two men to become a one-man task.	*Maintenance*
Hold out	This was shouted by the banksman to the bottomer when a bant of men were about to descend the shaft to let him know that he was not to send up a load of coal against the bant, only the empty rope or chain, in order to avoid an accident by a collision known as a 'wedding'.	*Mining*
Hold-Back Pay	all moneys due an employee for services already performed but which have not yet been paid to him.	*Industrial Relations*
Hold-In Voltage	Refers to the power required to maintain a latched condition within a solenoid, keeping the plunger (or moving core) magnetically latched to the fixed pole. Power required for hold-in is approximately 10% of the pull-in power (4-7W). Operating solenoids at a low power hold level saves energy and heat.	*General Mechanical*
Hold-In Voltage	Refers to the power required to maintain a latched condition within a solenoid, keeping the plunger (or moving core) magnetically latched to the fixed pole. Power required for hold-in is approximately 10% of the pull-in power (4-7W). Operating solenoids at a low power hold level saves energy and heat.	*Mechanical*

Term	Definition	*Industry*
Holding company	A company that confines its activities to owning stock in and supervising management of other companies. The Securities and Exchange Commission, as administrator of the Public Utility Holding Company Act of 1935, defines a holding company as "a company which directly or indirectly owns, controls or holds 10 percent or more of the outstanding voting securities of a holding company" (15 USC 79b, par. a (7)).	*Energy*
Holding company	A corporation engaged principally in holding a controlling interest in one or more other companies.	*Mining*
Holding devices	fixtures used to connect fabrications/parts to be galvanized to handling equipment in the galvanizing facility	*Materials Process*
Holding Line	Wire rope on a clamshell or orange peel bucket that suspends the bucket while the closing line is released to dump its load.	*Wire Rope & Cable*
Holding pond	A structure built to contain large volumes of liquid waste to ensure that it meets environmental requirements prior to release.	*Energy*
Hold-the-Line-Order - an Executive Order (No. 9328)	issued by President Roosevelt in April 1943 designed to stabilize prices and wages.	*Industrial Relations*
Hold-Up Unionism	generally refers to corrupt unionism where employers pay tribute to the union in order to avoid violence.	*Industrial Relations*
Hole	To bore (a tunnel, passage, etc.)	*Civil Engineering*
Hole (electron)	For semi-conductors and insulators, a vacant electron state in the valence band that behaves as a positive charge carrier in an electric field.	*Engineering Physics*
Hole deviation log	a well log that conveys the directional well plan, and the associated geometric deviations between the actual well path and the planned well path.	*Petroleum Drilling*
Hole deviation	same as Technical Hole Deviation; not to be confused with general "hole deviation", which attempts to explain/model why a well bore can't economically be drilled in a continuously-straight direction.	*Petroleum Drilling*
Hole Stabilizer	A steel casing, a concrete tile, or an open hole in solid bedrock, which prevents the formation from collapsing into the well.	*Petroleum Engineering*
Hole-out	to under-cut the coal. (Leics).	*Mining*
HOLIDAY	An imperfection or "bare spot" in a coating or plating.	*Mechanical*
Holiday Pay	provisions in collective bargaining agreements which require the employer to pay workers for time not worked on a holiday.	*Industrial Relations*
Holing	the wedge-shaped section of a seam or floor removed from beneath the coal before it was broken down. Sometimes the holing was made in the top of the seam, other times in or about the middle.- see also Bannocking, Kirving and Binching; or when one working place met another, the opening was termed the holing and the one was said to have 'holed' into the other; or a short passage connecting two roads.	*Mining*
Holing about,	the first operation is to get an air current between the down-cast and up-cast shafts once the coal has been reached. (N. East).	*Mining*
Holing clod	bed of clod in which shotholes are drilled, (Yorks.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Holing dirt	A soft layer lying beneath, immediately above, or in the seam itself, which is worked out by the collier with his pick so that the coal itself can be more easily obtained.	*Mining*
Holing nog	a short length of timber used to support the coalface when undercutting. –see also Nog	*Mining*
Hollows	old abandoned workings.	*Mining*
Holstein-Friesian	A large, usually black and white breed of dairy cattle that accounts for 90 percent of all U.S. milk production. In common usage, the name usually is abbreviated to "Holstein." Holsteins may be a reddish color and white. The breed is prized for heavy production of low-fat milk. This Dutch breed was first imported to the United States in 1852.	*Agriculture*
Home RF	Trademarked name for Home Radio Frequency, a networking technology which uses antennae and transmitters to provide wireless home networking via transmitted radio signals.	*Electrical Engineering*
HomePlug	HomePlug (PowerLine) is an industry-standard method for transmitting data via the power lines. It can transmit audio, video, control signals, etc. HomePlug is a trademark of the HomePlug Powerline Alliance; Powerline is the generic term for the method.	*Electrical Engineering*
Homestead	the place where a family makes its home	*Agriculture*
Homestead Act	an act of congress (1861-62) which sought to provide for agrarian land reform by permitting citizens to obtain federal lands for the sum of $10 for registration, on condition that the land would be cultivated for five years.	*Industrial Relations*
Homestead Strike	a bitter strike in 1892 by workers of Carnegie Steel Company.	*Industrial Relations*
Homework, Industrial	an arrangement whereby partly processed goods are finished or made ready for further processing by persons, frequently women and children, working at home.	*Industrial Relations*
Homoepitaxy	Decomposition of a thin film of essentially the same material as the substrate.	*Material Process*
Homogeneous	Containing a single phase.	*Chemical*
Homogeneous nucleation	The precipitation of a new phase occurs within a completely homogeneous medium.	*Material Process*
Homogeneous reaction	Reaction that takes place in the bulk of a solution.	*Chemical*
Homogenization	The intimate mixing of a grease to produce a uniform dispersion of components.	*Lubrication*
Homologous series	A series of organic compounds belonging to the same fundamental group (alcohol, hydrocarbons, etc.) with molecular formulas differing by CH, or multiple of CH 2).	*Material Process*
Homopolymer	A polymer having a chain structure in which all mer units are of the same type.	*Engineering Physics*
Homopolymer	The result of the polymerization of a single monomer, a homopolymer consists of a single type of repeating unit.	*Engineering Physics*
Homotropal ventilation	ventilation by a current of air travelling in the same direction as the flow of coal out of the mine. The opposite is 'antitropal ventilation'.	*Mining*
Honeycomb structure	A structural configuration.	*Material Process*

Term	Definition	*Industry*
Honeydew	A sweetish excretion produced through the anus by certain insects, notably aphids and scale insects.	*Forestry*
Honeymoon Period	a phrase used rather loosely to describe the period immediately after a major agreement between a union and a company when both sides are anxious to please one another and try to overlook the small difficulties involved in labor-management relationships.	*Industrial Relations*
Hoo	inferior cannel coal.	*Mining*
Hooked Man	a worker who is engaged in espionage and surveillance, frequently without knowing that he is reporting to a detective agency or that the information he is passing along or that the reports that he is writing go along to the employer.	*Industrial Relations*
Hooker	a small length of chain with a spring loaded hook. The hooker was clipped to the chain on the end of the winding rope. A man would pass his leg through the hooker and hang onto the main chain. A number of men would ride the shaft in this way hanging on the end the rope (Som.)—see also Bant and Foaly bant. Also another name for 'onsetter'.	*Mining*
Hooker-on or lasher-on, a haulage hand	One who actually attaches the tubs to the haulage rope with a clip or a lashing on chain, or 'Hooker-on' was also an alternative name for the onsetter and probably comes from the days when his job was to hook the corves or hutches to the rope. (Scot.).	*Mining*
Hooke's Law	Defines the basis for the measurement of mechanical stresses via the strain measurement. The gradient of Hooke's line is defined by the ratio of which is equivalent to the Modulus of Elasticity E (Young's Modulus).	*General Engineering*
Hooking	the process of trapping a worker in order to have him spy on the union activities of his fellow workers.	*Industrial Relations*
Hook's low	The linear relationship between stress and strain during elastic deformation.	*Material Process*
hop or hops	There is much confusion over whether to use the singular hop or the plural hops when referring to this twining vine of the hemp family. Use the singular when referring to the vine or to varieties of hop. Use the plural when referring to the ripened and dried cones. Hops are grown primarily for use in the brewing industry to impart a mellow bitterness and delicate aroma to brewed beverages and to aid in their preservation. Its cone shaped pistillate catkins is used primarily to impart a bitter flavor to beer. Hops were first introduced to the United States from Europe, by the Massachusetts Company in 1629. Today the bulk of hops production is the dry valleys of the Pacific Northwest where Washington State produces 77 percent of the nation's hops.	*Agriculture*
Hopper	In polymer processing, the container holding a supply of molding material to be fed to the screw or ram. The hopper may be intermittently filled or continuously fed.	*Engineering Physics*
Hopper Blender	Mixes material such as virgin resin, regrind, blowing agents, fillers, and colorants in desired proportions. Materials to be blended are metered in ratio to a mixing chamber and then discharged into the hopper of the processing machine.	*Engineering Physics*
Hopper Loader	A device for automatically feeding resins to hoppers of extruders, injection molding machines and the like.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hoppit or Hoppet	see also Bowk, Bucket, Kibble (sinking bucket), used in shaft sinking.	*Mining*
Horizon	In geology, any given definite position or interval in the stratigraphic column or the scheme of stratigraphic classification; generally used in a relative sense.	*Mining*
Horizon mining	a system of working inclined seams from nearly level crosscuts and laterals, repeated at certain vertical intervals or horizons.	*Mining*
Horizontal axis wind turbine	The most common type of wind turbine where the axis of rotation is oriented horizontally. Also see Wind turbine.	*Energy*
horizontal deviation	defines how "left" or "right" the actual well path is relative to the planned well path location and orientation; is easily-visualized with a sketch, and matches directional driller common sense. Same as msHD.	*Petroleum Drilling*
Horizontal Drilling	A deviation of the borehole from vertical so that the borehole penetrates a productive formation in a manner parallel to the formation.	*Petroleum Drilling*
horizontal drilling	drilling directionally at a well bore inclination angle exceeding 85 degrees.	*Petroleum Drilling*
Horizontal Fixed Position	In pipe welding, the position of a pipe joint in which the axis of the pipe is approximately horizontal and the pipe is not rotated during the operation.	*Maintenance and Repair*
Horizontal Floor Space	Floor space required for a conveyor.	*Manufacturing*
Horizontal Movement of Labor	a phrase which seeks to describe the shift in employment by workers to other companies or employers where the worker continues to perform the same work or uses the dame general skills as those in his previous employment.	*Industrial Relations*
Horizontal Rolled Position	The position of a pipe joint in which welding is performed in the flat position by rotating the pipe.	*Maintenance and Repair*
Horizontal THD Log	a hole deviation log that includes the components of Technical Hole Deviation that address hole deviation in the horizontal sense, namely, msHD, RCHD, msAD, and RCAD.	*Petroleum Drilling*
Horizontal tie	A horizontal connection member in the tower framework. Also known as Girt.	*Facility Engineering*
Horizontal Unions	generally refers to craft unions whose organization includes all workers in a particular craft or skill across an industry, region, or country.	*Industrial Relations*
Horizontal well	A horizontal extension to the bottom hole well location to facilitate production.	*Petroleum Engineering*
Horizontal well	A technique in well drilling common to shale gas production that allows for fewer drill sites, while increasing the access to the reserves underground; used in combination with hydraulic fracturing. Injection wells: Deep wells used worldwide to dump contaminants, often suspended in water, so that they are more or less permanently sequestered below the aquifer. Injection wells are used by many industries. They are regulated by the Environmental Protection Agency, which also classifies them roughly by the type of liquid being put back into the ground.	*Petroleum Drilling*
Horizontal-Position Fillet Weld	Welding is performed on the upper side of an approximately horizontal surface and against an approximately vertical surface.	*Maintenance and Repair*
Horizontal-Position Groove Weld	The position of welding in which the weld axis lies in an approximately horizontal plane and the face of the weld lies in an approximately vertical plane.	*Maintenance and Repair*

Term	Definition	*Industry*
Horned danny	a tram or tub without solid sides or ends. Used to transport materials of any length such as rails, water pipes, long props etc. The upright iron bars that held the material on the tram constituted the horns. (Mids.). Also called a hornby tram—see also Danny.	*Mining*
Horner plot	A semi-log plot produced during pressure buildup analysis.[3]	*Petroleum Drilling*
Hornfels	A fine-grained contact metamorphic rock.	*Mining*
Horse	A mass of rock matter occurring in or between the branches of a vein.	*Mining*
horse breeds that American journalists may encounter	horse breeds that American journalists may encounter:	*Agriculture*
Horse engine, Horse whim or Horse gin	a winding apparatus powered by a horse.	*Mining*
Horse fettler	see Ostler.	*Mining*
Horse tree	a strong timber beam used to support pumps in a shaft.	*Mining*
Horse whim	a later development of the cog and rung gin, introduced at about the end of the 17th century and was constructed of a horizontal drum working on a vertical shaft or spindle, located away from the shaft. This drum was also rotated by a horse trotting around a circle. The ropes that coiled on the winding drum passed over pulleys mounted on a crude headgear over the winding shaft. This permitted the use of a larger drum and increased speed of winding.	*Mining*
Horseback	A mass of material with a slippery surface in the roof; shaped like a horse's back.	*Mining*
Horsehead	a box opened at one end attached to pipes or wooden tubbing at the surface, used for ventilating the mine. The horsehead shaped box would be kept facing into the wind; or a 'forepole', two steel girders suspended from previously set girders on hangers, they are pushed forward to provide temporary protection until permanent supports are set.	*Mining*
Horsepower	A unit for measuring the rate of work (or power) equivalent to 33,000 foot-pounds per minute or 746 watts.	*Energy*
Horsepower	A measure of an engine's maximum output in terms of torque over a period of time. Open wheel car engines produce around 900hp.	*NASCAR*
Horsepower, hp	hp = (amps × volts × 3 × Power Factor × Efficiency) / 746	*Facility Engineering*
Horst	An upfaulted block of rock.	*Mining*
Horticulturist	One who practices the science and art of cultivating fruits, vegetables or ornamental plants. Farmers and orchardists sometimes are called horticulturists, as are home gardeners. In agriculture the term usually is reserved for scientists.	*Agriculture*
Hose	A hose is a hollow tube designed to distribute fluids and steam. Hoses are usually flexible and cylindrical. Hose design is based on a combination of application and performance. Common factors are size, pressure rating, weight, length, straight hose or coilhose and chemical compatibility. Hoses are made from one or a combination of many different materials. Applications mostly use nylon, polyurethane, polyethylene, PVC, or synthetic or natural rubbers, based on the environment and pressure rating needed. Other hose materials include PTFE (Teflon), stainless steel and other metals. See also Pipe.	*Industrial*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hose	A flexible line or conduit	*Mechanical, Process, and Operations*
Hose barb	a twist-type connector used for connecting a small diameter hose to a valve or faucet.	*Chemical*
Hose, Wire braided	Hose consisting of a flexible material reinforced with woven wire braid. HYDRAULIC BALANCE - A condition of equal opposed hydraulic forces acting on a part in a hy-	*Mechanical, Process, and Operations*
Hospital Type Disinfectant	Kills most germs due to a special combination of disinfectant ingredients. More terminology than fact.	*Chemistry*
Host	A living organism serving as a food source for a parasite.	*Forestry*
Host	The primary or controlling computer in a multiple part system.	*Electrical*
Host government	The government (including any government-controlled firm engaged in the production, refining, or marketing of crude oil or petroleum products) of the foreign country in which the crude oil is produced.	*Energy*
Host rock	The rock containing an ore deposit.	*Mining*
Host rock	The rock surrounding an ore deposit.	*Mining*
Hot Bending	Bending of piping to a predetermined radius after heating to a suitably high temperature for hot working. On many pipe sizes, the pipe is firmly packed with sand to avoid wrinkling and excessive out-of-roundness.	*Maintenance and Repair*
Hot Working	The plastic deformation of metal at such a temperature and rate that strain hardening does not occur. Extruding or swaging of chrome-moly piping at temperatures between 2000 and 1600°F (1093 and 871°C) would be considered hot-forming or hot-working operations.	*Maintenance and Repair*
Hot Bolting	This term is used for the completion of maintenance work on a bolted joint when the joint is under loading. This can involve the replacement of individual bolts. There are risks both to the joint itself and to health and safety associated with this technique.	*Maintenance*
Hot Cargo Provisions	as used by labor unions, the term "hot cargo" refers to goods produced or shipped by an "unfair" employer.	*Industrial Relations*
Hot Dip Coating	A metallic coating obtained by dipping the substrate metal into a molten metal.	*Paint and Coatings*
Hot dry rock	Heat energy residing in impermeable, crystalline rock. Hydraulic fracturing may be used to create permeability to enable circulation of water and removal of the heat.	*Energy*
Hot Goods Clause	provision of the Fair Labor Standards Act which prohibits the shipment of interstate commerce of goods produced in violation of the standards of the Act.	*Industrial Relations*
Hot Goods Injunction	an injunction obtained by the Administrator of the Fair Labor Standards Act which contains an order to prevent or stop the shipment or transportation of goods produced by employees with rates below those which are required by the Act.	*Industrial Relations*
Hot isostatic pressing (HIP)	Powder metallurgical technique combing high temperature and isostatic forming pressure.	*Material Process*

Term	Definition	*Industry*
Hot Runner Mold	A mold in which the runners and secondary sprues are kept hot and fluid during the entire cycle and are not ejected in the molded part. This avoids the need for handling and reprocessing scrap normally generated from runners sprues.	*Engineering Physics*
Hot tap	A connection made to a pipeline while the line is under pressure or in service. A special procedure is required to make an opening in the pipe without leaking any of the line contents.	*General Mechanical*
Hot Taps	Branch piping connections made to operating pipelines, mains, or other facilities while they are in operation.	*Maintenance and Repair*
Hot tears	A defect occurring in castings caused where partially solidified or weak, newly solidified sections are subjected to a pull resulting from the contraction of thinner parts that have solidified earlier. A hot tear is an intergranular failure.	*Mechanical*
Hot tub	Water-filled wood, plastic, or ceramic container in which up to 12 people can lounge. Normally equipped with a heater that heats the water from 80 degrees to 106 degrees Fahrenheit. It may also have jets to bubble the water. The water is not drained after each use. An average-size hot tub holds 200 to 400 gallons of water. All reported hot tubs are assumed to include an electric pump. These are also called spas or jacuzzis.	*Energy*
Hot Water	In an industrial steam application, the hot water system includes the condensate returned from the heat exchange, which returns to the boiler to be returned into steam.	*Industrial*
Hot water temperature (HWT)	Temperature of circulating water entering the distribution system.	*Facility Engineering*
Hot Working	Any metal forming operation that is performed above a metal recrystallization temperature.	*Engineering Physics*
Hot-rolled steel	steel deformed plastically at such a temperature and strain-rate that re-crystallization takes place simultaneously with the deformation, thus avoiding strain-hardening; this is the most common type of steel galvanized	*Materials Process*
Hot-Rolling, Hot-Rolled Steel (HR)	Rolling steel slabs into flat-rolled steel after it has been reheated.	*Metallurgy*
Hotshot	Hotshot services or Hot Shot drivers deliver important items to the rig in a timely manner. Oil companies use Hotshot drivers to deliver items such as directional drilling equipment, critical parts and other items when they are needed ASAP. Hotshot trucks typically consist of a 1 ton pickup, a long trailer and gin pole setup for offloading items such as pipe.	*Petroleum Drilling*
Hot-Swap	A power supply line controller which allows circuit boards or other devices to be removed and replaced while the system remains powered up. Hotswap devices typically protect against overvoltage, undervoltage, and inrush current that can cause faults, errors, and hardware damage.	*Electrical Engineering*
Houde Engineering Case	a decision by the NLRB in 1934 (under the NRA, not under the Wagner Act) setting out the principle of majority rule.	*Industrial Relations*
Hourly Metering	Tracking or recording a customer's consumption during specific periods of time that can be tied to the price of energy.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hourly Metering or Time of Use Metering	Tracking or recording your consumption during a specific time period.	*Energy*
Hourly Non-Firm Transmission Service	Transmission scheduled and paid for on an as-available basis and subject to interruption.	*Energy*
Hourly Wage Rate	the contract or legal rate paid to time workers under a collective bargaining or other agreement.	*Industrial Relations*
Hours of Work	a general phrase which applies to the many problems relating to the time that a person spends at work.	*Industrial Relations*
Hours under load	The hours the boiler is operating to drive the generator producing electricity.	*Energy*
Hours, Ceiling	generally refers to the maximum number of hours employees may work at regular rates.	*Industrial Relations*
Hours, Nominal	the number of hours planned or scheduled for work during the day or week.	*Industrial Relations*
Hours, Standard	the hours specified in a collective bargaining agreement which constitute the work day and work week.	*Industrial Relations*
House Organ	a magazine, newspaper, or other publication issued periodically by a company to its employees in order to keep them informed about the company.	*Industrial Relations*
Household	A family, an individual, or a group of up to nine unrelated persons occupying the same housing unit. "Occupy" means that the housing unit is the person's usual or permanent place of residence.	*Energy*
Household energy expenditures	The total amount of funds spent for energy consumed in, or delivered to, a housing unit during a given period of time.	*Energy*
Housing	The framework or structure on which an instrument (radio, scales, adding machine) is built.	*Material Process*
Housing unit	A house, an apartment, a group of rooms, or a single room if it is either occupied or intended for occupancy as separate living quarters by a family, an individual, or a group of one to nine unrelated persons. Separate living quarters means the occupants (1) live and eat separately from other persons in the house or apartment and (2) have direct access from the outside of the buildings or through a common hall--that is, they can get to it without going through someone else's living quarters. Housing units do not include group quarters such as prisons or nursing homes where ten or more unrelated persons live. A common dining area used by residents is an indication of group quarters. Hotel and motel rooms are considered housing units if occupied as the usual or permanent place of residence.	*Energy*
Housters	the heavy, stony residue, after shale has been burnt (N. Staffs.).	*Mining*
Hovel	a cabin at the surface for the use of the banksman (S. Staffs.).	*Mining*
Howdie horse	a pit horse kept on the pit top for use in an emergency. (N. East).	*Mining*
Howk	to hew, to break down coal with a pick. (Scot.).	*Mining*
Howway	call to lower the cage down the shaft. (N. East).	*Mining*
hp	horsepower	*Mechanical, Process, and Operations*

Term	Definition	Industry
HPR	High Phosphorous Retention - a property of engine oils measured by the Sequence IIIG engine test.	*Mechanical, Process, and Operations*
hr	Hour	*General*
HRB	(Also often abbreviated as RB) Abbreviation for Rockwell Hardness. Refer to Rockwell B Hardness.	*Petroleum Engineering*
HRC	(Also often abbreviated as RC) Abbreviation for Rockwell Hardness. Refer to Rockwell C Hardness.	*Petroleum Engineering*
Hrottling	Modulating control as opposed to on/off control.	*Industrial Engineering*
hrough	the center of each lug hole.	*Mechanical Engineering*
HSE	Health, Safety & Environment - generally referring to relevant standards. Specifically in the UK, the abbreviation HSE also stands for "Health and Safety Executive" – a UK Government Department that has an impact upon maintenance (along with all other areas of a business).	*Maintenance*
HTA Database	A database within The Cochrane Library, containing structured records describing health technology assessment projects. Compiled by the NHS Centre for Reviews and Dissemination.	*Quality Engineering*
HTGR	High Temperature Gas-cooled Reactor	*Energy*
HTHSRV	high temperature high shear rate viscosity	*Petro-Chemical Abbreviations*
Hub	Sometimes used for hob, which see.	*Material Process*
Hub Centric	A situation where the center bore hole of a wheel is made to match up with the hub diameter of the vehicle; the wheel is then centered by the center hole, rather than the lug nuts.	*Mechanical Engineering*
Hub height	In a horizontal-axis wind turbine, the distance from the turbine platform to the rotor shaft.	*Energy*
Hubbs	mixed blacks, inferior coal and cannel, with shells, in the Adwalton Stone Coal, (Yorks.).	*Mining*
Hubs	The end connection tubes on a gate valve.	*Mechanical*
Hudge	a small box or tram without wheels running on timber slides which was drawn by a boy in thin and steep seams. (Som.); or a large iron barrel with a semi-circular iron bow on top which hooked onto the winding rope. The hudge held between 10 and 20cwt. - see Bowk.	*Mining*
Huey test	A corrosion resistance test for stainless steels, most useful for predicting resistance to intergranular corrosion.	*Mechanical*
Huey test	A corrosion resistance test for stainless steel, most useful for predicting resistance to intergranular corrosion.	*General Mechanical*
Huffing	floor weight. (Lancs.).	*Mining*
Human Body Model	An ESD test method where the ESD generator consists of a 100pF capacitor and a 1.5kohm series resistor.	*Electrical Engineering*
Human Engineering	the broad area of human relations insofar as it applies to labor-management relations.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hume Rothery rules	Four criteria for complete miscibility in metallic solid solutions.	*Material Process*
Humidification	The process of increasing the water vapor content of a gas. A humidifier is a device for dispersing water vapor into the air for the purpose of raising the humidity in a given space.	*Industrial*
Humidifier	A humidifier adds moisture to the air(often needed in winter when indoor air is very dry). It may be a portable unit or attached to the heating system.	*Energy*
Humidity	The moisture content of air. Relative humidity is the ratio of the amount of water vapor actually present in the air to the greatest amount possible at the same temperature.	*Energy*
Humus	sticky, brown part of the soil that comes from dead plants and animals and contains many nutrients	*Agriculture*
hundredweight	Abbreviated as cwt. A weight equal to 100 pounds in the United States and 112 pounds in Great Britain. Many crops are reported in hundredweight, including beans, potatoes and most vegetables.	*Agriculture*
Hund's rule	in a given orbital tends to be delayed until all levels of a given energy have a single electron.	*Material Process*
Hunger Marches	demonstrations of unemployed workers who marched to state and federal capitals to focus attention on their economic plight and to point out the need for assistance during eh depression of 1929 and succeeding years.	*Industrial Relations*
Hunky	a derogatory slang term for an unskilled foreign worker of Hungarian or Slavic Origin.	*Industrial Relations*
Hunting coal	the ribs and posts of coal left to be worked at a later date. (Yorks.).	*Mining*
Hurdle sheet or Screen	a brattice with a space left at the top, hung across a roadway to divert the air current upwards to clear gas from a hole in the roof. Also called a 'jump sheet'.	*Mining*
Hurley	a hutch or tram. (Scot.).	*Mining*
Hurrier/s	a boy employed to push loaded tubs along the gate roads; or children in general who drew corves with belt and chain on their heads from the headings to the main gates.	*Mining*
Hurry	to haul, pull or push trams of coal etc. –see Hurrier, (Yorks.); or a riddle or screen. (Scot.).	*Mining*
Hussel, Hussle or Hustle	a highly slickensided carbonaceous shale containing coal-pipes, or veins and pyrites.	*Mining*
Hutch	Originally adapted from the hutch measure, i.e. a chest or coffer with a capacity of 2 cwt. It was at first mounted on runners like a sled and then wheels were added to make it into a small tub for transporting coal in the mine. (Scot).	*Mining*
Hutch pin	a check, tally or chalk mark on the side of a hutch, which carried the collier's number.	*Mining*
Hutcheson Case	a decision by the U.S. Supreme Court affirming the dismissal of a criminal indictment charging officers of th Carpenters Union with violation of the Sherman Antitrust Act.	*Industrial Relations*
HV	Velocity head at the pump suction port. Often not included as it's normally quite small.	*Heat Transfer Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
HVAC	Heating, Ventilation, and Air Conditioning: Industry term for the systems and technology responsible for the heating, ventilation, and air conditioning in buildings. HVAC systems regulate comfort (temperature and humidity), energy efficiency, and air quality.	*Electrical Engineering*
HVAC	An acronym for heating, ventilation and air conditioning; these are among the key systems managed by facilities maintenance professionals.	*Reliability Engineering*
HVAC conservation feature	A building feature designed to reduce the amount of energy consumed by the heating, cooling, and ventilating equipment.	*Energy*
HVAC DSM program	A DSM (demand-side management)program designed to promote the efficiency of the heating or cooling delivery system, including replacement. Includes ventilation (economizers; heat recovery from exhaust air), cooling (evaporative cooling, cool storage; heat recovery from chillers; high-efficiency air conditioning), heating, and automatic energy management systems.	*Energy*
HVDC	Light is environmentally friendly, featuring oil-free cables, compact converter stations and cables that can be laid underground (thereby avoiding local planning difficulties associated with overhead lines) as well as underwater. It is the only technology available that allows long-distance underground high-voltage transmission. It is rarely used for power transmissions using overhead lines. Because of its smaller footprint, underground cable technology and superior controllability, HVDC Light has many more potential applications than classical HVDC, for example - feeding power into cities and offshore oil and gas platforms; strengthening power networks in areas where there is opposition to new overhead lines; and delivering power to islands that would otherwise need local generating plants.	*Electrical*
HVDC Light	**HVDC Light -** An adaptation of classic HVDC, developed by ABB in the 1990s. It can be used to transmit electricity in lower power ranges (tens of megawatts) to an upper range of 1,100 megawatt (MW) (±320 kilovolts). By comparison, classic HVDC (see High-voltage direct current) systems typically transmit electricity in the 500 to 8,000 MW power range. Offering both HVDC and HVDC Light systems extends the economical power range of HVDC transmission. **The superior controllability is achieved by using IGBTs (i.e., transistors) as the power electronic device used for the conversion (see Direct current).**	*Electrical*
HVI	High Viscosity Index, typically from 80 to 110 VI units.	*Oil Analysis*
HVOF	See High Velocity Oxygen fuel spraying	*Paint and Coatings*
HVP	Absolute vapor pressure of the liquid at the pumping temperature - must be subtracted in the end to make sure that the inlet pressure stays above the vapor pressure. Remember, as temperature goes up, so does the vapor pressure.	*Heat Transfer Process*
HVSC	High-voltage shore connections enable ships to draw electricity from onshore power grids while in port to operate onboard equipment such as lighting, cooling and heating systems, instead of burning fuel oil to run onboard generators. For a large cruise ship on a 10-hour stay in port, a shore connection can cut fuel consumption by up to 20 tons and reduce carbon dioxide emissions by 60 tons.	*Electrical*
HWBF	High water-based fluid	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
HWO	Handwheel Operated - A valve on which the handwheel drives the stem directly to operate the valve	*Mechanical*
HWT	Hot water temperature*	*General*
Hybrid	an offspring of two animals or plants that are of different breeds, varieties or species	*Agriculture*
Hybrid Bearing	A bearing that consists of metal rings and ceramic balls.	*Lubrication*
Hybrid transmission line	A double-circuit line that has one alternating current and one direct circuit. The AC circuit usually serves local loads along the line.	*Energy*
hybrid	Offspring produced by combining genetically different parents. Hybrid corn is the classic example, in which two varieties are cross pollinated to produce a third, which has more favored qualities. Do not confuse hybridization with biotechnology, genetic engineering, etc. Hybridization has created plants that are higher yielding, more resistant to disease and that produce more desirable food or fiber.	*Agriculture*
Hybridization	Formation of four equivalent electron energy levels (sp3 type) from initially different levels (s-type and p-type).	*Material Process*
Hydration	The act by which a substance takes up water by absorption and/or adsorption.	*Petroleum Engineering*
Hydration unit	This unit mixes the water and chemical additives to make the frac fluid. Usually the blending process takes a few minutes for the water to gel to the right consistency.	*Petroleum Drilling*
Hydraulic	Pertaining to, or using, water, oil, or other liquids.	*Mechanical*
Hydraulic Radius	The ratio of area of flowing fluid to the wetted perimeter.	*Maintenance and Repair*
Hydraulic "Giant" or Monitor	The firehose-type nozzles that sprayed huge amounts of water on hillsides to recover gold out of them.	*Mining*
Hydraulic burster	a water operated device for breaking down coal on the coal face. It consisted of a stainless steel bar bored radially at intervals to accommodate small telescopic pistons which are actuated by water pressure forcing them to extend outwards from the bar. The device was inserted in suitable holes drilled along the face.	*Mining*
Hydraulic chock	-see Chock.	*Mining*
Hydraulic Claims	Claims worked by hydraulic power.	*Mining*
Hydraulic Clamp	Used in variety of molding and forming machines, a hydraulic clamp consists basically of a high speed, variable hydraulic pump, valving, a fast acting cylinder, and a high pressure cylinder. Cylinders can be single or combination units. The clamp closes the mold halves to form the part.	*Engineering Physics*
Hydraulic Conductivity	The capability of subsurface materials (sand, rock, etc.) to allow a fluid (usually water) to flow through it.	*Petroleum Engineering*
Hydraulic conductivity	a coefficient of proportionality describing the rate at which water can move through a permeable medium. Hydraulic conductivity is a function of both the intrinsic permeability of the porous medium and the kinematic viscosity of the water which flows through it. Also referred to as the coefficient of permeability.	*Chemical*

Term	Definition	*Industry*
HYDRAULIC CONTROL	A control which is actuated by hydraulically induced forces. HYDRAULIC HORSEPOWER - Horsepower computed from flow rate and pressure differential.	*Mechanical, Process, and Operations*
Hydraulic decking plant	see Balanced platforms.	*Mining*
Hydraulic Fluid	Fluid serving as the power transmission medium in a hydraulic system. The most commonly used fluids are petroleum oils, synthetic lubricants, oil-water emulsions, and water-glycol mixtures. The principal requirements of a premium hydraulic fluid are proper viscosity, high viscosity index, anti-wear protection (if needed), good oxidation stability, adequate pour point, good demulsibility, rust inhibition, resistance to foaming, and compatibility with seal materials. Anti-wear oils are frequently used in compact, high-pressure, and capacity pumps that require extra lubrication protection.	*Lubrication*
Hydraulic fracturing	Fracturing of rock at depth with fluid pressure. Hydraulic fracturing at depth may be accomplished by pumping water into a well at very high pressures. Under natural conditions, vapor pressure may rise high enough to cause fracturing in a process known as hydrothermal brecciation.	*Energy*
Hydraulic Fracturing ("Fracking")	The process in which a specially blended liquid is pumped into a well and into a formation under high pressure, which causes the formation to break open.	*Petroleum Drilling*
Hydraulic fracturing (or "fracing")	Commonly referred to as "fracing", is the process of creating small cracks, or fractures, in deeply buried geological formations to allow natural gas to flow into the wellbore. The natural gas can then flow to the surface under controlled conditions through the wellhead and be collected for processing and distribution.	*Petroleum Engineering*
Hydraulic fracturing water lifecycle	The lifecycle of water in the hydraulic fracturing process, encompassing the acquisition of water, chemical mixing of the fracturing fluid, injection of the fluid into the formation, the production and management of flowback and produced water, and the ultimate treatment and disposal of hydraulic fracturing wastewaters.	*Petroleum Drilling*
Hydraulic fracturing ("fracking," "hyrdofracking")	The process of creating fractures in non-porous rock, such as Marcellus shale, using specially formulated water-based solutions forced into wells at extremely high pressure; the cracks in the rock allow for the release and collection of the natural gas.	*Petroleum Drilling*
Hydraulic Gradient	Slope of the water surface. It is the driving force of fluid flow in a porous material. The hydraulic gradient indicates which direction groundwater will flow and how rapidly.	*Petroleum Engineering*
hydraulic gradient	the change in total potentiometric (or piezometric) head between two points divided by the horizontal distance separating the two points.	*Chemical*
Hydraulic head	The distance between the respective elevations of the upstream water surface (headwater) above and the downstream surface water (tailwater) below a hydroelectric power plant.	*Energy*
Hydraulic mining	a method of winning the coal by washing it out with high pressure jets of water.	*Mining*
HYDRAULIC MOTOR	A device which converts hydraulic fluid power into mechanical force and motion by transfer of flow under pressure. It usually provides rotary mechanical motion.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydraulic Motor	A device which converts hydraulic fluid power into mechanical force and motion by transfer of flow under pressure. It usually provided rotary mechanical motion.	*Lubrication*
Hydraulic motor actuator (Operator)	A device by which rotation of a hydraulically powered motor is converted into mechanical motion.	*Mechanical*
Hydraulic Oil	An oil specially suited for use as either the specific gravity or the API gravity of a liquid.	*Lubrication*
Hydraulic prop	a metal hydraulic hand-operated prop, often used on the face for roof support in conjunction with steel bars. These had an initial setting of 5 tons pressure and would yield when the roof strata weight exceeded 20 tons.	*Mining*
Hydraulic pump	A device which converts mechanical force and motion into hydraulic fluid power by means of producing flow.	*Mechanical, Process, and Operations*
Hydraulic pump, positive displacement	A pump that for each cycle or revolution, positively displaces (usually by mechanical means) a specific amount.	*Mechanical, Process, and Operations*
Hydraulic seats	The movement of the seats in a valve that are controlled by using water, oil, or other liquids under pressure.	*Mechanical*
Hydraulic Set Cement	A cement that sets through reaction with water.	*Engineering Physics*
hydraulic shovel	excavates and loads by means of a bucket attached to a rigid arm that is hinged to a broom.	*Energy*
Hydraulic stowing, a method of stowing (filling or packing)	the waste where the packing material is crushed, mixed with water and injected through pipes into the waste.	*Mining*
Hydraulic System	A system designed to transmit power through a liquid medium, permitting multiplication of force in accordance with Pascal's law, which stated that "a pressure exerted on a confined liquid is transmitted undiminished in all directions and acts with equal force on all equal areas." Hydraulic systems have six basic components: (1) a reservoir to hold the fluid supply; (2) a fluid to transmit the power; (3) a pump to move the fluid; (4) a valve to regulate pressure; (5) a directional valve to control the flow, and (6) a working component – such as a cylinder and piston or a shaft rotated by pressurized fluid – to turn hydraulic power into mechanical motion. Hydraulic systems offer several advantages over mechanical systems: They eliminate complicated mechanisms such as cams, gears, and levers; are less subject to wear; are usually more easily adjusted for control of speed and force; are easily adaptable to both rotary and liner transmission of power; and can transmit power over long distances and in any direction with small losses.	*Lubrication*
Hydraulic Tensioner	A hydraulic tool used to tighten a fastener by stretching it rather than applying a large torque to the nut. After the fastener has been stretched, the nut is run down the thread to snug up with the joint, the hydraulically applied load is then removed resulting in tension being induced into the fastener.	*Maintenance*
Hydraulic Valve	A valve for controlling liquid flow or pressure.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydraulic	Of or pertaining to fluids in motion. Hydraulic cement has a composition which permits it to set quickly under water. Hydraulic jacks lift through the force transmitted to the movable part of the jack by a liquid. Hydraulic control refers to the mechanical control of various parts of machines, such as coal cutters, loaders, etc., through the operation or action of hydraulic cylinders.	*Mining*
Hydraulics	Engineering science pertaining to liquid pressure and flow.	*Oil Analysis*
Hydraulics	The engineering science of liquid pressure and flow. (In this manual, our main interest is in oil hydraulics as applied to produce work in linear and rotary planes.)	*Mechanical, Process, and Operations*
Hydro Turbine	A rotary engine whose energy is generated from moving water.	*Reliability Engineering*
Hydrocarbon	An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, a constituent of natural gas) to the very heavy and very complex.	*Energy*
hydrocarbon	chemical compounds composed only of carbon and hydrogen.	*Chemical*
Hydrocarbon gas liquids (HGL)	A group of hydrocarbons including ethane, propane, normal butane, isobutane, and natural gasoline, and their associated olefins, including ethylene, propylene, butylene, and isobutylene. As marketed products, HGL represents all natural gas liquids (NGL) and olefins. EIA reports production of HGL from refineries (liquefied refinery gas, or LRG) and natural gas plants (natural gas plant liquids, or NGPL). Excludes liquefied natural gas (LNG).	*Energy*
Hydrocarbon	A family of chemical compounds containing carbon and hydrogen atoms in various combinations, found especially in fossil fuels.	*Mining*
Hydrocarbon	A compound containing only the elements hydrogen and carbon. May exist as a solid, a liquid or a gas. The term is mainly used in a catch-all sense for oil, gas and condensate.	*Petroleum Drilling*
Hydrocarbons	Compounds containing only carbon and hydrogen. Petroleum consists chiefly of hydrocarbons.	*Oil Analysis*
Hydrochloric acid	solution used in the cleaning stages of the galvanizing process and consisting of one hydrogen ion and one chloride ion (chemical formula: HCl) in mixture with water	*Materials Process*
Hydrochloric Acid (HCL)	Also known as muriatic acid. Used in toilet bowl cleaners in varying dilutions. Hydrogen Chloride.	*Chemistry*
Hydrochloric acid (HCl) (muriatic acid, chlorohydric acid, hydrogen chloride)	A colorless gas or colorless poisonous fuming liquid. Hydrochloric acid is a strong, highly corrosive acid. The commercial concentrated or fuming acid contains 38% hydrogen chloride. Soluble in water, alcohol and ether. This acid used as a catalyst and in the production of such compounds as vinyl chloride, ethyl chloride, etc.. It derivates 1) by-product from the chlorination of benzene and other hydrocarbons, 2) by the action of sulfuric acid on common salt, and 3) by burning of hydrogen, methane, or water gas in an atmosphere of chlorine. It uses as chemical intermediates, ore reduction (manganese, tantalum, tin, tungsten), food processing (corn syrup, sodium glutamate), pickling and metal cleaning, industrial acidizing and general cleaning. Corrosive liquid. Causes burns, avoid contact with skin or eyes.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydrochlorofluorocarbons (HCFCs)	Chemicals composed of one or more carbon atoms and varying numbers of hydrogen, chlorine, and fluorine atoms.	*Energy*
Hydrocracking	See Catalytic hydrocracking.	*Energy*
Hydrodesulfurization	A catalytic process in which the principal purpose is to remove sulfur from petroleum fractions in the presence of hydrogen.	*Petroleum Engineering*
Hydrodynamic Lubrication	The formation of a continuous lubricating fluid film between mating surfaces of sufficient pressure to prevent contact. Film formation depends on shape of the surfaces and their relative motion.	*Lubrication*
Hydrodynamic Lubrication	A system of lubrication in which the shape and relative motion of the sliding surfaces causes the formation of a fluid film having sufficient pressure to separate the surfaces.	*Lubrication*
Hydrodynamics	The engineering science of the energy of liquid pressure and flow.	*Mechanical, Process, and Operations*
Hydroelectric	An electric generating station in which a water wheel is driven by falling water, thus generating electricity.	*Energy*
Hydroelectric Plant	A plant in which the turbine generators are driven by falling water.	*Energy*
Hydroelectric power	The use of flowing water to produce electrical energy.	*Energy*
Hydrofinishing	A catalytic treating process carried out in the presence of hydrogen to improve the properties of low viscosity-index naphthenic and medium viscosity-index naphthenic oils. It is also applied to paraffin waxes and microcrystalline waxes for the removal of undesirable components. This process consumes hydrogen and is used in lieu of acid treating.	*Petroleum Engineering*
Hydrofinishing	A process for treating raw extracted base stocks with hydrogen to saturate them for improved stability.	*Lubrication*
Hydrofluorocarbons (HFCs)	A group of man-made chemicals composed of one or two carbon atoms and varying numbers of hydrogen and fluorine atoms. Most HFCs have 100-year Global Warming Potentials in the thousands.	*Energy*
Hydroforming	Catalytic reforming of naphtha at elevated temperatures and moderate pressures in the presence of hydrogen to form high-octane BTX aromatics for motor fuel or chemical manufacture. This process results in a net production of hydrogen and has rendered thermal reforming somewhat obsolete. It represents the total effect of numerous simultaneous reactions such as cracking, polymerization, dehydrogenation, and isomerization.	*Petroleum Engineering*
Hydrogen	hydrogen	*Energy*
Hydrogen (H2)	Diatomic gas, atomic number 1, The lightest element, very reactive and powerful reducing agent. Used as a secondary plasma gas in the plasma spraying process and as a fuel gas in combustion thermal spray processes (CWS, CPS and HVOF)	*Paint and Coatings*
Hydrogen Bond	A strong secondary interatomic bond which exists between a bound hydrogen atom (its unscreened proton) and the electrons of adjacent atoms.	*Engineering Physics*
Hydrogen Bonds	strongest dipole interactions resulting between a hydrogen atom and a highly electronegative atom (F, O, or N)	*Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydrogen bridge	Secondary bond formed between two permanent dipoles in adjacent water molecules.	*Material Process*
Hydrogen Embrittlement	Steel fasteners exposed to hydrogen can fail prematurely at a stress level well below the materials yield strength. Hydrogen embrittlement occurs in fasteners usually as a result of the part being exposed to hydrogen at some time during its manufacturing process but it can also occur through in-service corrosion. Electroplating is generally considered to be a major cause of hydrogen absorption in steel fasteners due to the release of hydrogen during this process. Higher strength steels are more susceptible to hydrogen embrittlement than lower strength steels, however it is considered that there is no lower strength limit. As a rule of thumb, steels below Rockwell C 35 are considered to be far less susceptible. Tests such as the incremental load hydrogen embrittlement test can be completed to assess if hydrogen embrittlement is present in a batch of fasteners.	*Maintenance*
Hydrogen embrittlement	a condition of low ductility in metals resulting from the absorption of hydrogen	*Materials Process*
Hydrogen Ion Activity (aH+)	Activity of the hydrogen ion in solution. Related to hydrogen ion concentration (CH+) by the activity coefficient for hydrogen (f H+).	*General Engineering*
Hydrogen ion concentration (pH)	A scale for expressing acidity or alkalinity of the circulating or make-up water. A pH below 7.0 indicates acidity and above 7.0 indicates alkalinity. A pH of 7.0 is neutral.	*Facility Engineering*
hydrogen peroxide - H(2) O(2)	Hydrogen peroxide is used to increase the dissolved oxygen content of groundwater to stimulate aerobic biodegradation of organic contaminants. Hydrogen peroxide is infinitely soluble in water, but rapidly dissociates to form a molecule of water [H(2)O] and one-half molecule of oxygen [O]. Dissolved oxygen concentrations of greater than 1,000 mg/L are possible using hydrogen peroxide, but high levels of D.O. can be toxic to microorganisms.	*Chemical*
Hydrogen peroxide (H2O2)	Colorless liquid, an oxidizing polymerization catalyst for numerous synthetic resins.	*Material Process*
Hydrogen Sulfide	(H2S) a deadly poison that also has a destructive effect on high strength low alloy steels when the hardness of these steels exceeds a hardness of 22 Rockwell C.	*Petroleum Engineering*
Hydrogen sulfide (H2S)	Commonly known as sour gas. H2S is colorless and smells like rotten eggs at low concentrations and is not detectable by odor at high concentrations. It is heavier than air and is flammable and may pose a public safety hazard if released at higher concentrations.	*Petroleum Engineering*
Hydrogenation	Chemical process whereby hydrogen gas is introduced into a compound.	*Material Process*
Hydrogenation	In refining, the chemical addition of hydrogen to a hydrocarbon in the presence of a catalyst; a severe form of hydrogen treating. Hydrogenation may be either destructive or non-destructive. In the former case, hydrocarbon chains are ruptured (cracked) and hydrogen is added where the breaks have occurred. In the latter, hydrogen is added to a molecule that is unsaturated with respect to hydrogen. In either case, the resulting products are highly stable. Temperatures and pressures in the hydrogenation process are usually greater than in hydrofining.	*Lubrication*
Hydrogeologic	Those factors that deal with subsurface waters and related geologic aspects of surface waters.	*Petroleum Engineering*
Hydrokinetics	The engineering science pertaining to the energy of liquids in motion.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydrolysis	Breakdown process that occurs in anhydrous hydraulic fluids as a result of heat, water, and metal catalysts (iron, steel, copper, etc.)	*Oil Analysis*
Hydrolysis	Decomposition of a substance by reaction with water.	*Engineering Physics*
Hydrolytic stability	Ability of additives and certain synthetic lubricants to resist chemical decomposition (hydrolysis) in the presence of water.	*Oil Analysis*
Hydrometallurgy	The treatment of ore by wet processes, such as leaching, resulting in the solution of a metal and its subsequent recovery.	*Mining*
Hydrometer	An instrument for determining either the specific gravity of a liquid or the API gravity.	*Oil Analysis*
Hydrophilic	Characterized by an affinity for water and capable of uniting with or dissolving in water.	*Lubrication*
Hydrophilic	having an affinity for water, or capable of dissolving in water; soluble or miscible in water.	*Chemical*
Hydrophobic	tending not to combine with water, or incapable of dissolving in water; insoluble or immiscible in water. A property exhibited by non-polar organic compounds, including the petroleum hydrocarbons.	*Chemical*
Hydrophobic	Lacking affinity for water.	*Engineering Physics*
Hydroplaning	Loss of traction at high speeds caused by a wedge of water, which lifts a tire off the road surface.	*Mechanical Engineering*
Hydropneumatics	Pertaining to the combination of hydraulic and pneumatic fluid power.	*Mechanical, Process, and Operations*
Hydroponic	grown in water without the use of soil	*Agriculture*
Hydrostatic lubrication	A system of lubrication in which the lubricant is supplied under sufficient external pressure to separate the opposing surfaces by a fluid film.	*Oil Analysis*
Hydrostatic Test	Pressure tests that are carried out on every valve when built to test the integrity of the pressure-containing parts.	*Industrial Engineering*
Hydrostatic test	A pressure test in which a valve is tested with water to detect leaks - may be a shell test or a seat closure test.	*General Mechanical*
Hydrostatic test (Shell Test)	A test in which a valve is completely filled with water and pressure tested. Used for conducting proof pressure testing. See "Proof Pressure."	*Mechanical*
Hydrostatics	The engineering science of the energy of liquids at rest.	*Mechanical, Process, and Operations*
Hydrothermal	Relating to hot fluids circulating in the earth's crust.	*Mining*
Hydrotreating	See Catalytic hydrotreating.	*Energy*
Hydrox	a blasting method used in gassy mines, similar to Cardox, but using a charge of Hydrox powder, a mixture of sodium nitrite and ammonium chloride. Firing results in a chemical reaction producing nitrogen and steam.	*Mining*
Hydroxy-carboxylic resins	Synthetic resins prepared from polyhydric alcohol and polybasic acids.	*Material Process*
Hydroxyethyl ethyl aniline	A solvent-amine.	*Material Process*
Hydroxyethyl ethylene diamine	A solvent-amine.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hydroxyl radical (OH)	An important chemical scavenger of many trace gases in the atmosphere that are greenhouse gases. Atmospheric concentrations of OH affect the atmospheric lifetimes of greenhouse gases, their abundance, and, ultimately, the effect they have on climate.	*Energy*
Hyel	whole or solid coal, a harder place to work. (N. East).	*Mining*
Hygrometer	Any properly calibrated instrument which indicates directly or indirectly the humidity of the air. Absorption hygrometer: Any of several types of hygrometers containing a hygroscopic substance the length, thickness, or weight of which is a measurable index of the humidity of the atmosphere. Usually such devices are graduated directly either in per cent relative humidity or in regain of stock in process, and are continuously indicating.	*Material Process*
Hygroscopic	Capacity to absorb water.	*Chemical*
Hygroscopic	Attracting or absorbing moisture from the ambient atmosphere.	*Electrical*
Hygroscopic	Readily absorbing and retaining moisture from the air.	*Material Process*
Hypalon	Du Pont trademark for chlorosulfonated polyethylene (CSPE) synthetic rubber.	*Electrical*
Hyperbolic tower	A cooling tower of hyperbolic shape, which depends on natural draft for air movement through the tower. Can be either crossflow or counterflow tower. (See Natural Draft Tower.)	*Facility Engineering*
Hypereutectic	Composition greater than that of the eutectic.	*Material Process*
Hypereutectoid	Composition greater than that of the eutectoid.	*Material Process*
Hypoeutectic	Composition less than that of the eutectic.	*Material Process*
Hypoeutectoid	Composition less than that of the eutectoid.	*Material Process*
Hypoeutectoid Alloy	For an alloy system displaying a eutectoid, an alloy for which the concentration of solute is less than the eutectoid composition	*Engineering Physics*
Hypoid Gear Lubricant	A gear lubricant having extreme pressure characteristics for use with a hypoid type of gear as in the differential of an automobile.	*Lubrication*
Hypoid Gears	Gears in which the pinion axis intersects the plane of the ring gear at a point below the ring-gear axle and above the outer edge of the ring gear, or above the ring-gear axle and below the outer edge of the ring gear.	*Lubrication*
Hypothesis	An unproved theory that can be tested through research. To properly test a hypothesis, it should be pre-specified and clearly articulated, and the study to test it should be designed appropriately. See also: Null hypothesis	*Quality Engineering*
Hypothesis test	A statistical procedure to determine whether to reject a null hypothesis on the basis of the observed data.	*Quality Engineering*
Hypothetical resources (coal)	Undiscovered coal resources in beds that may reasonably be expected to exist in known mining districts under known geologic conditions. In general, hypothetical resources are in broad areas of coal fields where points of observation are absent and evidence is from distant outcrops, drill holes, or wells. Exploration that confirms their existence and better defines their quantity and quality would permit their reclassification as identified resources. Quantitative estimates are based on a broad knowledge of the geologic character of coalbed or region. Measurements of coal thickness are more than 6 miles apart. The assumption of continuity of coalbed is supported only by geologic evidence.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Hypoxic	a condition of low oxygen concentration, below that considered aerobic.	*Chemical*
Hysteresis	Difference between upscale and downscale out-put in instrument response when subjected to the same input approached from opposite directions.	*Electrical Engineering*
Hysteresis (Electrode Memory)	When an electrode system is returned to a solution, equilibrium is usually not immediate. This phenomenon is often observed in electrodes that have been exposed to the other influences such as temperature, light, or polarization.	*General Engineering*
Hysteresis (magnetic)	The irreversible magnetic flux density-versus-magnetic field strength (B-versus-H) behavior found for ferromagnetic and ferrimagnetic materials.	*Engineering Physics*
Hysteresis loop	Graph in which a plot of a material property (such as induction) does not retrace itself upon the reversal of an independent variable (such as magnetic field strength).	*Material Process*
Hysteresis, Switching	The principle associated with sensors, such that the operate point is not at the same level as the release point. In solid state sensors, it is accomplished electrically. In mechanical switches, it results from the storing of potential energy before the transition occurs. Also known as differential, and is usually expressed as a percentage of the operate point (e.g. 3: 15%).	*Electrical Engineering*
Hysteresis	Also called deadband. That portion of a measuring system's response where a change in input does not produce a change in output.	*Reliability Engineering*
Hysterothecium	A sexual fruiting structure of the Ascomycete fungi, usually football-shaped or elongate in appearance and occurring on infected needles.	*Forestry*
Hz	HERTZ - a unit of frequency equal to one cycle per second. Most common cycle time is 60 Hertz.	*Electrical Engineering*
I	I	*Forestry*
--I--	--I--	*Petroleum Drilling*
I.D.	Inside Diameter.	*Petroleum Engineering*
I.D.	inside diameter	*Mechanical, Process, and Operations*
I/M	inspection and maintenance	*Petro-Chemical Abbreviations*
I/O	Input/Output. Refers to the electronic hardware where the field devices are wired. Discrete I/O would have switches for inputs and relay outputs to fire solenoid valves or pump motors. Analog I/O would have process variable inputs, and variable controller outputs.	*Process Control Engineering*
I/O Devices	Input/output devices used to enter data into and receive data from a computer or control system. Examples are analog and digital input and output devices for handling process measurements and conditions as well as "business" type devices such as terminals, printers, plotters, etc.	*Electrical Engineering*
I/O Module	An Input/Output module, which usually contains several I/O points.	*Control Engineering*
I/O point	An Input/Output point, used as a connection point.	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
I/O (Input/output)	A device that enables communication between electronic equipment and external devices, including human operators. Examples of I/O devices include computer keyboards, printers, sensors and all type of interface cards.	*Electrical*
I/P	An abbreviation for current-to-pneumatic signal conversion. This term is commonly used to describe a type of transducer that converts an electric (4-20m.a) input signal to a pneumatic (3-15 psig.) output signal.	*Industrial Engineering*
I/P Transducer	(Current-to-pneumatic). A device which con-	*Electrical Engineering*
I2	A measure used to quantify heterogeneity. It describes the percentage of the variability in effect estimates that is due to heterogeneity rather than sampling error (chance). A value greater than 50% may be considered to represent substantial heterogeneity. See also: Heterogeneity	*Quality Engineering*
I²C	I²C (pronounced "I-squared-C" and typeset as I²C but often typed as I2C) is short for "inter-IC bus." I²C is a two-wire, low-speed, serial data connection IC bus used to run signals between integrated circuits, generally on the same board.	*Electrical Engineering*
I²C	I²C (pronounced "I-squared-C" and typeset as I²C but often typed as I2C) is short for "inter-IC bus." I²C is a two-wire, low-speed, serial data connection IC bus used to run signals between integrated circuits, generally on the same board.	*Electrical Engineering*
IAOGP	International Association of Oil and Gas Producers	*Petro-Chemical Abbreviations*
Iatrogenic	Failures that are caused by your own service person(s).	*Maintenance*
IBBM	Iron body, bronze mounted - common term for valves with cast iron body and bonnet and bronze trim (seating surfaces, stem, bushings).	*General Mechanical*
IBBM	Iron body, bronze mounted - common term for valves with cast iron body and bonnet and bronze trim (seating surfaces, stem, bushings).	*Mechanical*
Ibit (bismuth oxyodotannate)	Greenish gray, odorless tasteless powder. Becomes brownish on exposure. Insoluble in alcohol, water or ether. It is used in medicine.	*Material Process*
IBP	initial boiling point	*Petro-Chemical Abbreviations*
IC	internal combustion	*Petro-Chemical Abbreviations*
Ice apron	A structure built in a river upstream from a bridge pier or the like for protection against drifting ice.	*Civil Engineering*
Ice apron	A structure built in a river upstream from a bridge pier or the like for protection against drifting ice.	*Civil Engineering*
Ice wall	a barrier of frozen ground formed by the 'freezing method' of shaft sinking.	*Mining*
ICEA	Insulated Cable Engineers Association (Formerly lPCEA). An Association of Engineers of most cable manufacturers.	*Electrical*
IChemE	Institute of Chemical Engineers (UK)	*Petro-Chemical Abbreviations*
Icon	A graphic functional symbol display. A graphic representation of a function or functions to be performed by the computer.	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Icosahedral phases	Materials with fivefold, threefold, and twofold symmetries corresponding to the structure of the icosahedron.	*Material Process*
Icosahedron	Polyhedron composed of 20 identical equilateral triangular faces.	*Material Process*
ICP	Integrated Circuit Piezoelectric; term sometimes used to describe an accelerometer with built-in electronics.	*Electronic Process*
ICS	An Information and Command Station is used by operators to control and monitor the plant's processes.	*Control Engineering*
Icyl	Brand name of proprietary line of	*Material Process*
ID	The measurement of the inside diameter of a circular part.	*Mechanical*
Ideal solution	A solution which shows no change of internal energy on mixing, no attractive force between components, and follows Raoult's law over all ranges of temperature and concentration.	*Material Process*
Ideality Factor	A constant adjustment factor used to correct for discrepancies between an ideal PN junction equation and a measured device.	*Electrical Engineering*
Identification	marking/labeling steel so that different customer products can be distinguished from one another after galvanizing	*Materials Process*
Identification Badge	a button, badge, or other identification worn a person in the plant in order to identify him and also prevent individuals who are not authorized on the premises from entering the plant or special areas.	*Industrial Relations*
Identification stain AH	A mixture of dyes of various classes that dye each fiber, natural and synthetic, a different shade.	*Material Process*
Identified resources	Coal deposits whose location, rank, quality, and quantity are known from geologic evidence supported by engineering measurements. Included are beds of bituminous coal and anthracite (14 or more inches thick) and beds of subbituminous coal and lignite (30 or more inches thick) that occur at depths to 6,000 feet. The existence and quantity of these beds have been delineated within specified degrees of geologic assurance as measured, indicated, or inferred. Also included are thinner and/or deeper beds that presently are being mined or for which there is evidence that they could be mined commercially.	*Energy*
IDI	indirect injection	*Petro-Chemical Abbreviations*
Idle capacity	The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.	*Energy*
Idle Mode	A method for improving the efficiency of switching regulators by skipping pulses when the circuit is lightly loaded.	*Electrical Engineering*
Idle rope	the return rope on an endless rope haulage. The rope that does not bear a load. (Scot.).	*Mining*
Idle Time	payment for time during which a worker is unable to work at his machine because of delay in receiving material, breakdown of equipment, a power shortage, or some other factor that is out of the control of the employee.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Idler	A pulley, sheave, sprocket, or wheel around which a belt, cable, or chain passes in changing direction of travel.	*Equipment*
Idler Arm	A device attached to the frame of the car, which duplicates the movement of the Pitman arm and keeps the center link aligned.	*Mechanical Engineering*
Idler Arm	A device attached to the frame of the car, which duplicates the movement of the Pitman arm and keeps the center link aligned.	*Mechanical Engineering*
Idler Roller	Any carrying roller of a live roller conveyor not driven.	*Equipment*
Idlers	see 'Rollers'.	*Mining*
Idochlorol	**Trade mark for a chloriodized oil containing 26.5-28.5% iodine and 7.5% chlorine organically combined with highly refined peanut oil.**	*Material Process*
IDR Interval Data Recorder	IDR: Interval Data Recorder	*Energy*
IDS (INSTRUMENT DATA SHEET)	A table summarizing data such as service, valve size, supply pressure, etc., necessary for actuator sizing.	*Mechanical*
IEA	International Energy Agency	*Petro-Chemical Abbreviations*
IEC	International Electrotechnical Commission.	*Control Engineering*
IEC 61850	The International Electrotechnical Commission IEC standard for substation automation replaces a great many communication protocols that require the use of use protocol converters, which are basically "translators" that help electronic devices using different machine languages transmit information to each other. The problem is that protocol converters can cause messaging errors and delays. A single communication standard for substation automation removes the need for "translators," helps customers lower maintenance and operating costs, and makes installations easier to expand or modify.	*Electrical*
IFC	International Fieldbus Consortium. An hybrid body formed from the IFG and the OFC in 1990. It voted to stop work after the FF was created in 1994.	*Control Engineering*
IFG	International Fieldbus Group	*Control Engineering*
IFP	Institut Français du Pétrole	*Petro-Chemical Abbreviations*
Igenal	Trade mark of a line of dyestuffs for the coloring of chrome-tanned leather. Characterized by unusual tinctorial power on chrome leather.	*Material Process*
Igepal	Trade mark for a series of nonionic surfactants which are used as detergents, dispersants, emulsifiers, and wetting agents.	*Material Process*
Igepon	Trade mark for a series of anionic surfactants used as detergents, wetting agents, emulsifiers, dispersants, and foaming agents. The Igepon T and C types are sulfo-amides derived from N-methyltaurine or N-cyclohexyltaurine and fatty acids. Igepon A types are sulfo-esters derived from isethionic acid and a fatty acid.	*Material Process*
Igneous Rocks	Rocks that solidified from molten or partly molten material from magma (molten rock within the earth).	*Petroleum Engineering*
Igneous rocks	Rocks formed by the solidification of molten material from far below the earth's surface.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ignition temperature	The lowest temperature to which a substance must be heated to cause it to take fire.	*Material Process*
III-IV Compound	Chemical compound between a metallic element in group III and nonmetallic element in group V of the periodic table. Many of these compound are semiconducting.	*Material Process*
II-VI compound	Chemical compound between a metallic element in group II and a nonmetallic element in group VI of the periodic table. Many of these compounds are semiconducting.	*Material Process*
ILD	Instrument Loop Diagram. A drawing showing the connections from the field device all the way through to the system terminations.	*Control Engineering*
ILEV	inherently low-emission vehicle	*Petro-Chemical Abbreviations*
Ill air	a stagnant atmosphere underground due to lack of ventilation. Noxious gas from an underground fire or chokedamp. (Scot.).	*Mining*
Illegal Purpose Doctrine	a principle adopted by some courts to decide whether some union activities which were not in themselves unlawful, but whose purpose or objective could be held unlawful, should be prohibited.	*Industrial Relations*
Illegal Strike	any strike which has been held unlawful under existing law.	*Industrial Relations*
Illinois Basin	Consists of Illinois, Indiana, and Western Kentucky.	*Energy*
Illness Frequency Rate	a statistical measure generally computed on a monthly basis, designed to show the total number of illnesses per one thousand employees.	*Industrial Relations*
ILMA	Independent Lubricant Manufacturers Association	*Petro-Chemical Abbreviations*
ILMA	The Independent Lubricant Manufacturers Association (ILMA) is a trade association of businesses engaged in compounding, blending, formulating, packaging, marketing, and distributing lubricants.	*Lubrication*
Ilmenite (FeOTiO2) (menaccanite, titanic iron ore)	Sometimes with some replacement of iron by magnesium or manganese. Iron black mineral, black to brownish–red-streak, submetallic luster. Resembles magnetite in appearance but is readily distinguished by feeble magnetic character. It is used for titanium paints and enamel, source of titanium metal, welding rods, titanium alloys, and ceramics.	*Material Process*
Ilmenite	An ore mineral of titanium, being an iron-titanium oxide.	*Mining*
ILSAC	International Lubricant Standardization and Approval Committee	*Petro-Chemical Abbreviations*
ILSAC	The International Lubricant Standardization and Approval Committee (ILSAC) is a joint committee of AAMA and JAMA members that assists in the development of new minimum oil performance standards.	*Lubrication*
ILSAC/OIL	An entity of ILSAC, responsible for development and introduction of lubricant specification requirements. ILSAC/OIL includes representatives from ILSAC, the Alliance of Automobile Manufacturers (AAM), the Japanese Automobile Manufacturers Association (JAMA) and oil industry organizations including, the American Petroleum Institute (API), and the American Chemistry Council (ACC).	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Image analyzer	A sophisticated microscopic system involving a microscope, a television camera, a dedicated computer, and a viewing monitor similar to a television screen.	*Oil Analysis*
Image Frequency	Receivers typically convert RF signals to a lower Intermediate Frequency (IF) for demodulation. In addition to the IF, a second signal, called the "image frequency" is often generated and filtered out.	*Electrical Engineering*
Image Rejection	The measure of a receiver's ability to reject signals at its image frequency. It is normally expressed as the ratio, in dB, of the receiver's sensitivity at the desired frequency versus the sensitivity at the image frequency.	*Electrical Engineering*
Image Rejection	The measure of a receiver's ability to reject signals at its image frequency. It is normally expressed as the ratio, in dB, of the receiver's sensitivity at the desired frequency versus the sensitivity at the image frequency.	*Electrical Engineering*
Imbalance	A non-uniform distribution of mass in a tire and wheel assembly about its axis of rotation causing bounce (static imbalance) or shake (dynamic imbalance).	*Mechanical Engineering*
IMC	Institute of Measurement and Control. InstMC.	*Control Engineering*
Immedial	Brand name of a line of sulfur dyestuffs. Used for dyeing of cotton and rayon. Characterized by very good fastness to light and good fastness to washing and perspiration.	*Material Process*
Immediate Response	Control transfers On/Off state immediately when target enters the detection range, and reverses state immediately when target leaves detection range.	*Electrical Engineering*
Immediate roof	The roof strata immediately above the coalbed, requiring support during the excavation of coal.	*Mining*
Immediate roof,	the strata immediately above a coal seam. -see Nether roof.	*Mining*
Immersion	Sinking something until completely covered with water. See also Electric Water Heating	*Industrial*
Immigration	the movement of persons to a country.	*Industrial Relations*
Immiscible	Two liquids are said to be immiscible, if when added together they do not mix but form two separate liquid phases.	*Chemical*
Immiscible	Two liquids are said to be immiscible, if when added together they do not mix but form two separate liquid phases.	*Chemical Engineering*
IMO	International Maritime Organization	*Petro-Chemical Abbreviations*
Impact	A collision between masses.	*Reliability Engineering*
Impact Test	A test to determine the behavior of materials when subjected to high rates of loading, usually in bending, tension, or torsion. The quantity measured is the energy absorbed in breaking the specimen by a single blow, as in Charpy or Izod tests.	*Maintenance and Repair*
Impact Energy	A measure of the energy absorbed during the fracture of a specimen of standard dimensions and geometry when subjected to very rapid (impact) loading. Charpy and Izod impact tests are used to measure this parameter, which is important in assessing the ductile-to-brittle transition behavior of a material.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Impact energy	Energy necessary to fracture a standard test piece with an impact load.	*Material Process*
Impact resistance	the ability to avoid damage due to contact with a forceful motion or object; galvanized coatings' uppermost, pure zinc Eta layer is relatively soft and absorbs impact shock, protecting the underlying alloy layers	*Materials Process*
Impact ripper	a ripping machine using a boom mounted impact unit to deliver repeated high energy blows at the rip by means of a reciprocating pick.	*Mining*
Impact strength	The mechanical energy absorbed by a standard test piece during fracture by a blow from a pendulum hammer. Energy absorbed by a standard test piece when the action of a pendulum hammer blow is just sufficient to cause fracture.	*Material Process*
Impact Strength	Ability to withstand shock loading.	*Engineering Physics*
Impact test (bump test)	A broad frequency range of structural responses is caused by a deliberate impact.	*Reliability Engineering*
Impact Wrench	A wrench, usually powered by electricity or air, in which repeated blows from little hammers are used to generate torque to tighten fasteners. The torque applied to the fastener depends upon the time and the air pressure applied to the tool (for pneumatic wrenches). The torque applied by an impact wrench to a fastener is influenced by the joint stiffness.	*Maintenance*
Impartial Chairman	the term is synonymous with impartial arbitrator or impartial umpire.	*Industrial Relations*
Impassible	A variant of impassive - incapable of suffering	*Breakroom*
Impedance	The total opposition to electrical flow (resistive plus reactive).	*Electrical*
Impedance, Input	The impedance presented by a device to the source.	*Process Control*
Impedance, Load	The impedance presented to the output of a device by the load.	*Process Control*
Impedance, Output	The impedance presented by a device to the load.	*Process Control*
Impedance, Source	The impedance presented to the input of a device by the source.	*Process Control*
Imperfection	A condition of being imperfect; a departure of a quality characteristic from its intended condition.5	*Maintenance and Repair*
Impermeable	Watertight, or not capable of being penetrated, as in rock and soil not allowing the passage of water.	*Petroleum Engineering*
Impermeable Layer	Layer of solid material, such as rock or clay, which does not allow the passage of water.	*Petroleum Engineering*
Impermex	Brand name for a proprietary product. A water dispersible organic colloid, developed for the purpose of decreasing the water loss of drilling muds, even in muds highly contaminated with salt, salt water, cement, or any other water soluble electrolyte	*Material Process*
IMPINGEMENT	The direct impact of fluid flow upon or against a surface.	*Mechanical, Process, and Operations*
Impingement Corrosion	A form of erosion-corrosion generally associated with the impingement of a high velocity, flowing liquid containing air bubbles against a solid surface.	*Paint and Coatings*
Implenal	Brand name of a product used as a leather-tanning assistant.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Implied heat rate	A calculation of the day-ahead electric price divided by the day-ahead natural gas price. Implied heat rate is also known as the 'break-even natural gas market heat rate,' because only a natural gas generator with an operating heat rate (measure of unit efficiency) below the implied heat rate value can make money by burning natural gas to generate power. Natural gas plants with a higher operating heat rate cannot make money at the prevailing electricity and natural gas prices.	*Energy*
Implied Warranty Of Fitness For A Particular Purpose	One of the warranty protections granted by law under the Uniform Commercial Code (UCC) (See Uniform Commercial Code). If the seller knows the buyer's intended use for the goods, and if the buyer has relied on the seller's expertise in choosing these goods, then the seller warrants that these goods will be fit for the buyer's intended use. Frequently sellers attempt to limit or exclude fitness for a particular purpose in their warranty terms.	*Procurement*
Importance measure	A measure of the relative contribution of a component's contribution to the overall system's reliability. The importance measure of a component is equivalent to the first partial derivative of the component reliability with respect to the system reliability.	*Reliability Engineering*
Imported crude oil burned as fuel	The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.	*Energy*
Imported Refiners' Acquisition Cost (IRAC)	The average price for imported oil paid by U.S. refiners.	*Energy*
Imports	Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.	*Energy*
Imposnite	A variety of asphaltic pyrobitumen, similar to albertite, black in color, with black streak, and fixed carbon 50-90%.	*Material Process*
Impoundment	A body of water or sludge confined by a dam, dike, floodgate, or other barrier.	*Petroleum Drilling*
Imprecision	"The random dispersion of a set of replicate measurements and/or values expressed quantitatively by a statistic, such as standard deviation or coefficient of variation." [CLSI] IFCC has recommended that the mean value and number of replicates should also be stated, and the experimental design described in such a way that other workers can repeat it. This is particularly important whenever a specific term is used to denote a particular type of imprecision, such as within-run, within-day, day-to-day, total, or between-laboratories.	*Quality*
Impregnation	A process of filling the pores of a coating with resin, wax or oil. (See sealer, vacuum impregnation)	*Paint and Coatings*
Impregnole	Proprietary products, aqueous dispersion of waxes and metalic salts. Milk white emulsions. Disperse readily in water over 50 °C (122 °F). It is used for water repellent and spot proofing for textile fabrics.	*Material Process*
Impressed voltage	A method of corrosion protection in which an external voltage is used to oppose the one due to an electrochemical reaction.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Impression	A mold cavity.	*Material Process*
Impression resins	The contact resins.	*Material Process*
Improved Plow Steel Rope	A specific grade of wire rope.	*Wire Rope & Cable*
Improved recovery	Extraction of crude oil or natural gas by any method other than those that rely primarily on natural reservoir pressure, gas lift, or a system of pumps.	*Energy*
Improvement	Combination of all technical, administrative, and managerial actions intended to decrease the dependency of an asset without changing its required function.	*Maintenance*
Improvement cut	An intermediate cut made to improve the form, quality, heath, or wildlife potential of the remaining stand.	*Forestry*
Impruvol	Trade mark for fuel and oil antioxidants.	*Material Process*
Impulse	The integral of force over a time interval.	*Reliability Engineering*
Impurities	Any substance that contaminates another.	*Chemical Engineering*
Impurities	elements or compounds in which their presence is undesired	*Materials Process*
Impurity	A substance unintentionally contained in a product other than the desired substance.	*Chemical*
IMSG	See Information Management System Group (IMSG)	*Quality Engineering*
in	Inch	*General*
In a longwall mining system	long sections of coal, up to about 700 feet, are removed and no pillars are left to support the mined-out areas. The working area is protected by a movable, powered roof support system. The caved area (gob) compacts and, after initial subsidence, supports the overlying strata. Longwall mining is used where the coalbed is thick and generally flat, where surface subsidence is acceptable.	*Energy*
In a room-and-pillar mining system	the most common method, the mine roof, is supported mainly by coal pillars left at regular intervals. Rooms are places where the coal is mined; pillars are areas of coal left between the rooms. Room-and-pillar mining is done either by 1) conventional mining, which involves a series of operations that require cutting the working face of the coalbed so that it breaks easily when blasted with explosives or high-pressure air, and then loading the broken coal or 2) continuous mining, in which a continuous mining machine extracts and removes coal from the working face in one operation. When a section of a mine has been fully developed, additional coal is extracted by mining the supportive pillars until the roof caves in; the procedure is called room-and-pillar retreat mining.	*Energy*
In an ideal differential amp	the common-mode element is cancelled out, since the differential (+ and -) inputs should subtract out the identical components. A measurement of the actual ability to do this is called the Common Mode Rejection Ratio, or CMRR.	*Electrical Engineering*
In digital broadcast satellite applications	In digital broadcast satellite applications.	*Electrical Engineering*

Term	Definition	*Industry*
In other cases,	wood is bought or cut in unusual units (for example, pickup-truck load, or trunk load). Finally, volume estimates are difficult to make when the wood is left in a pile instead of being stacked. Other factors that make it difficult to estimate the Btu value of the wood burned is that the amount of empty space between the stacked logs may vary from 12 to 40 percent of the volume. Moisture content may vary from 20 percent in dried wood to 50 percent in green wood. (Moisture reduces the useful Btu output because energy is used in driving off the moisture). Finally, some tree species contain twice the Btu content of species with the lowest Btu value. Generally, hard woods have greater Btu value than soft woods. Wood is converted to Btu at the rate of 20 million Btu per cord, which is a rough average that takes all these factors into account. Also see Btu conversion factors.	*Energy*
In real life,	sampling rate must be higher than that (because filters are not perfect). As an example, the bandwidth of a standard audio CD is a bit shy of the theoretical maximum of 22.05kHz (based on the sample rate of 44.1kHz).	*Electrical Engineering*
In situ	in its original place; unmoved; unexcavated; remaining in the subsurface.	*Chemical*
In situ leach mining (ISL)	The recovery, by chemical leaching, of the valuable components of a mineral deposit without physical extraction of the mineralized rock from the ground. Also referred to as "solution mining."	*Energy*
In situ	In the natural or original position. Applied to a rock, soil, or fossil when occurring in the situation in which it was originally formed or deposited.	*Mining*
In the case of a processing agreement	delivered to another refinery for processing for the respondent's own account.	*Energy*
Inaccuracy	"Numerical difference between the mean of a set of replicate measurements and the true value. This difference (positive or negative) may be expressed in the units in which the quantity is measured, or as a percentage of the true value" [IFCC]. We use the term biasmeas to describe the average systematic difference between a measurement procedure and a comparative method and express it in percent on OPSpecs charts.	*Quality*
Inadvertent power exchange	An unintended power exchange among utilities that is either not previously agreed upon or in an amount different from the amount agreed upon.	*Energy*
Inby	In the direction of the working face.	*Mining*
In-bye or Inbye	To travel into a mine is to go 'in-bye', i.e. in a direction away from the shaft. The opposite is 'out-bye'.	*Mining*
Inc*	planned well bore inclination at MD*. (degrees)	*Petroleum Drilling*
Incandescent lamp	A glass enclosure in which light is produced when a tungsten filament is electrically heated so that it glows. Much of the energy is converted into heat; therefore, this class of lamp is a relatively inefficient source of light. Included in this category are the familiar screw-in light bulbs, as well as somewhat more efficient lamps, such as tungsten halogen lamps, reflector or r-lamps, parabolic aluminized reflector (PAR) lamps, and ellipsoidal reflector (ER) lamps.	*Energy*
Incandescent light bulbs, including regular or energy-efficient light bulbs	An incandescent bulb is a type of electric light in which light is produced by a filament heated by electric current. The most common example is the type you find in most table and floor lamps. In commercial buildings, incandescent lights are used for display lights in retail stores, hotels and motels. This includes	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	the very small, high-intensity track lights used to display merchandise or provide spot illumination in restaurants. Energy efficient light bulbs, known as "watt-savers," use less energy than a standard incandescent bulb. "Long-life" bulbs, bulbs that last longer than standard incandescent but produce considerably less light, are not considered energy-efficient bulbs. This category also includes halogen lamps. Halogen lamps are a special type of incandescent lamp containing halogen gas to produce a brighter, whiter light than standard incandescent. Halogen lamps come in three styles bulbs, models with reflectors, and infrared models with reflectors. Halogen lamps are especially suited to recessed or "canned fixtures," track lights, and outdoor lights.	
Incapacity for Work	relates primarily to the inability of a person to perform work and the provisions for insurance to cover that incapacity.	*Industrial Relations*
Inceloid Solution and Sheeting	Brand name for a line of transparent plastic products as well as special adhesives and lacquers. Solution available in clear and in transparent colors, pigmented, metallics, and pearl effects. Solutions for coating, impregnating and sealing. Sheeting is made from cellulose acetate and also ethyl cellulose. Water white, and in all colors both transparent and pigmented, as well as the metallic bronzes and pearl essence, nonflammable, no fire hazard, sheeting is completely waterproof, certain types are moisture impervious. It is used for general transparent wrapping for all types of food products, pharmaceuticals, tobacco, wearing apparel, etc.	*Material Process*
Incendiary gels	1) Mixtures of thermite (aluminum powder and iron oxide) suspended in oil set to a jelly with a small amount of soap, which undergoes spontaneous ignition on contact with air. Another type may contain magnesium in jellied oil. 2) Jellied gasoline combined with thickening agents such as Napalm or finely divided magnesium.	*Material Process*
Incentive Contracts	clauses in collective bargaining agreements which establish systems of incentive wage payments and specify how such systems are to be extended to new groups which may come within the bargaining unit.	*Industrial Relations*
Incentive Rate	generally applies to any type of wage rate for production above a fixed or agreed upon standard of output.	*Industrial Relations*
Incentive Wage	refers to any system of wage payment in which payment to the employee rises with increased production.	*Industrial Relations*
Incentive	A rebate or some form of payment used to encourage people to implement a given demand-side management (DSM) technology. The incentive is calculated as the amount of the technology costs that must be paid by the utility for the participant test to equal one and achieve the desired benefit/cost ratio to drive the market.	*Energy*
Incentives Demand-Side Management (DSM) program assistance	This DSM program assistance offers monetary or non-monetary awards to encourage consumers to buy energy-efficient equipment and to participate in programs designed to reduce energy usage. Examples of incentives are zero or low-interest loans, rebates, and direct installation of low cost measures, such as water heater wraps or duct work for distributing the cool air; the units condition air only in the room or areas where they are located.	*Energy*
Inch of Water	About two and a half cubic feet per minute; the water that will run out of an opening one inch square.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Incidence	The number of new cases of illness commencing, or of persons falling ill, during a specified time period in a given population. See also Prevalence.	*Analysis*
Incident	An undesired event which under slightly different circumstances, could have resulted in harm to people, damage to property, or loss of process.	*Reliability Engineering*
Incident	Incident usually occur through the coincident failure of two or more items, failure of equipment, control systems and instruments, and miss operation.	*Material Process*
Incipient Cavitation	A term used to describe the early stages of cavitation. At this point the bubbles are small and the noise is more of a hiss, like the sound of frying bacon. There is normally no mechanical damage associated with incipient cavitation although it could have an effect on the corrosive properties of some fluids.	*Industrial Engineering*
Inclination	the angle of the well bore defined by a tangent line and a vertical line. The vertical line is always parallel to the direction of earth's gravity. By industry standard, 0 degree inclination is vertical (downward pointing) and 90 degrees inclination is horizontal. An inclination (angle) greater than 90 degrees coincides with the term "drilling up".	*Petroleum Drilling*
Inclination and Azimuth	Inclination and Azimuth	*Petroleum Drilling*
inclinational deviation	the difference in inclination between actual and planned well paths, typically at a specific measured depth. Same as msID.	*Petroleum Drilling*
Incline	A slanting shaft.	*Mining*
Incline Conveyor Length	Determined by the elevation change from infeed to discharge versus the degree of incline.	*Manufacturing*
Inclined Conveyor	A conveyor transporting up a slope (to a mezzanine, second level storage area, an overhead line, or other elevated surface).	*Manufacturing*
Inclusion complexes	Crystalline mixtures, not true compounds, in which the molecules of one of the components are contained within the crystal lattice framework of the other component. The framework may be in the form of channels, cages or layers. The two compounds are present in constant but not stoichiometric proportions. Inclusion complexes are also called adducts, or occlusion complexes.	*Material Process*
Inclusion Shape Control	Heats calcium silicon injected at the LMF through a refractory lance (using argon as the carrier gas) into the molten steel bath, reducing sulfur levels to below 0.004 per cent. This also modifies the morphology of inclusions so that they remain globular after rolling. This technique produces steels of superior ductility and hydrogen-induced cracking resistance.	*Steel*
Incoherent	Light source in which the light waves are out of phase.	*Material Process*
Income	a gain in money usually as a result of business or labor	*Agriculture*
Income in Kind	most income received by workers is in the form of money wages.	*Industrial Relations*
Incompatibility	When a mixture of two greases shows physical properties or service performance which are markedly inferior to those of either of the greases before mixing, they are incompatible. Performance or properties inferior to one of the products and superior to the other may not be due to incompatibility.	*Lubrication*
Incompatible fluids	Fluids which when mixed in a system, will have a deleterious effect on that system, its components or its operation.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Incompetent	Applied to strata, a formation, a rock, or a rock structure not combining sufficient firmness and flexibility to transmit a thrust and to lift a load by bending.	*Mining*
Incomplete	Engineering noting a truss the panel points of which are not entirely connected so as to form a system of triangles.	*Civil Engineering*
Incomplete Fusion.	Fusion which is less than complete and which does not result in melting completely through the thickness of the joint.	*Maintenance and Repair*
Incompressible Flow	A fluid such as water, which has no significant change in volume and density as the pressure increases.	*Industrial Engineering*
Incondite	Crudely or poorly constructed or composed	*Breakroom*
Incongruent melting	The case in which the liquid formed upon melting has a different composition than the solid from which it was formed.	*Material Process*
Incorporation of Unions	during the open shop drive of the early twentieth century there was a demand by anti-union forces that workers' organizations be required to incorporate.	*Industrial Relations*
Incremental Cost	An increase in cost between two alternatives. Also see Differential cost.	*Procurement*
Incremental Effects	Annual effects in energy use and peak load caused by new participants in existing DSM programs and all participants in new DSM programs during a given year.	*Energy*
Incremental energy costs	The additional cost of producing and/or transmitting electric energy above some previously determined base cost.	*Energy*
Incremental seat test	The leakage testing of valve seats in an assembled valve by increasing the applied pressure in prescribed pressure steps.	*Mechanical*
Incrustation	The process by which a crust or coating is formed.	*Petroleum Engineering*
Indene	A colorless liquid. A product of the fractional distillation of coal tar, which polymerizes itself or with cumarone to form light colored thermoplastic binding materials.	*Material Process*
Indentation	An indentation (dent) is a plastic depression caused by debris being pressed into a contact surface. Indentations can go hand in hand with (abrasive) wear. Depending on the hardness of the particle, sharp (often with raised edges) or smooth indentations result.	*Maintenance*
Indentured Apprenticeship	a procedure whereby a worker and an employer by means of written instrument agree on a special training program in a particular skill or occupation.	*Industrial Relations*
Indentured Servant	a person who agrees or is required to work for another as a servant.	*Industrial Relations*
Independent	A description of two events, where knowing the outcome or value of one does not inform us about the outcome or value of the other. Formally, two events 'A and B' are independent if the probability that A and B occur together is equal to the probability of A occurring multiplied by the probability of B occurring.	*Quality Engineering*
Independent American Shop	Independent American Shop-American Plan, it was designed to call the attention of workers to their right to work in a trade or business under conditions satisfactory to them without interference on the part of any union.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Independent Consultant	An independent consultant relationship exists when the University does not control either the manner of performance or the result of the service. Independent consultants are individuals not employed by the University, or organizations not a part of the University, with proven professional or technical competence who provide primarily professional or technical advice.	*Procurement*
Independent Contractor	An independent contractor relationship exists when the University has the right to control only the result of the service, not the manner of performance. The following elements are essential to establish the relationship of an independent contractor to its client, as contrasted with the relationship of an agent to its principal. An independent contractor must: (1) exercise independent judgment as to the means used to accomplish the result; (2) be free from control or orders from any other person; and (3) be responsible only under the contract with the client for the result obtained.	*Procurement*
Independent group design	See Parallel group trial	*Quality Engineering*
Independent Labor Federation of America	an organization of employee associations and independent unions which organized in Hershey, Pennsylvania, following a strike by th eCIO in 1937.	*Industrial Relations*
Independent National Union	a labor organization which is not affiliated with the AFL-CIO and is not a company dominated union.	*Industrial Relations*
Independent power producer	A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an electric utility.	*Energy*
Independent Power Producer (IPP)	Wholesale electricity producers (other than qualifying facilities under the Public Utilities Regulatory Policies Act of 1978) that are unaffiliated with franchised utilities in the area in which the independent power producers are selling power and that lack significant marketing power. Unlike traditional electric utilities, independent power producers do not possess transmission facilities that are essential to their customers and do not sell power in any retail service territory where they have a franchise. An entity not regulated by the government as a public utility that owns or operates an electricity generating facility and offers wholesale electric power for sale to utilities.	*Energy*
Independent Power Producers (IPPs)	These are private entrepreneurs who develop, own or operate electric power plants fueled by alternative energy sources such as biomass, cogeneration, small hydro, waste-energy and wind facilities.	*Energy*
Independent Suspension	A suspension system in which the front or rear pair of wheels of a car are independently connected to the frame or underbody. In this system, deflection of the wheel on one side has a minimal affect on the wheel on the other side.	*Mechanical Engineering*
Independent Suspension	A suspension system in which the front or rear pair of wheels of a car are independently connected to the frame or underbody. In this system, deflection of the wheel on one side has a minimal affect on the wheel on the other side.	*Mechanical Engineering*
Independent System Operator (ISO)	An ISO is the entity charged with reliable operation of the grid and provision of open transmission access to all market participants on a non-discriminatory basis.	*Energy*
Independent Unions	these are organizations of workers, usually in a single plant or company, which are not affiliated with any national or international union.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Independent Unions; Allied (Ind)	affiliated with the National Independent Union Council.	*Industrial Relations*
Independent Unions; Congress of (Ind)	affiliated with the National Independent Union Council.	*Industrial Relations*
Independent variable	An exposure, risk factor, or other characteristic that is hypothesized to influence the dependent variable. In a clinical trial, the outcome (over which the investigator has no direct control) is the dependent variable, and the treatment arm is the independent variable. In an adjusted analysis, patient characteristics are included as additional independent variables. Also called: Explanatory variable	*Quality Engineering*
Independent Wire Rope Core (IWRC)	A wire rope used as the axial member of a larger wire rope.	*Wire Rope & Cable*
Independent	A company involved only in the exploration and production of oil and gas and possibly in the transportation. An independent will not be involved in the refining of oil.	*Petroleum Drilling*
Index Medicus	Catalogue of the United States National Library of Medicine (NLM), and a periodical index to the medical literature. Available in printed form, or electronically as MEDLINE.	*Quality Engineering*
Index Number	a statistical measure for determining differences in the magnitude of a group of related variables.	*Industrial Relations*
Index of Refraction	See Refractive Index	*Engineering Physics*
Index to Labor Union Periodicals	a monthly subject index to materials from a selected list of newspapers and journals published by major labor unions.	*Industrial Relations*
Indexing	A method of control to obtain predetermined intermittent movements.	*Equipment*
Index-Number Wages	these are wages which vary in accordance with the cost-of-living or some other index agreed upon to provide adjustments either upward or downward with changes in the index number.	*Industrial Relations*
Indian coal lease	A lease granted to a mining company to produce coal from Indian lands in exchange for royalties and other revenues; obtained by direct negotiation with Indian tribal authorities, but subject to approval and administration by the U.S. Department of the Interior.	*Energy*
Indicated coal resources	Coal for which estimates of the rank, quality, and quantity have been computed partly from sample analyses and measurements and partly from reasonable geologic projections. The points of observation are ½ to 1 ½ miles apart. Indicated coal is projected to extend as an ½ mile wide belt that lies more than ¼ mile from the outcrop or points of observation or measurement.	*Mining*
Indicated reserves	See Probable energy reserves.	*Energy*
Indicated resources, coal	Coal for which estimates of the rank, quality, and quantity are based partly on sample analyses and measurements and partly on reasonable geologic projections. Indicated resources are computed partly from specified measurements and partly from projection of visible data for a reasonable distance on the basis of geologic evidence. The points of observation are 1/2 to 1-1/2miles apart. Indicated coal is projected to extend as a 1/2-mile-widebelt that lies more than 1/4 mile from the outcrop, points of observation, or measurement.	*Energy*

Term	Definition	*Industry*
Indication	The response or evidence from the application of a nondestructive examination.5	*Maintenance and Repair*
Indicator	Flow indicator. See Flowmeter.	*Industrial*
Indicator Travel	The length of the path described by the indicating means or the tip of the pointer in moving from one end of the scale to the other.	*Process Control*
Indicator, Differential pressure	An indicator which signals the difference in pressure between two points.	*Mechanical, Process, and Operations*
Indicator, pressure	An indicator that signals pressure conditions.	*Oil Analysis*
Indicolite	A dark blue gem stone variety of tourmaline.	*Material Process*
indigenous	living or occurring naturally in a specific area or environment; native.	*Chemical*
Indirect Cost	Costs not directly related to mining or milling operations, such as overhead, insurance, security, office expenses, property taxes, and similar administrative expenses.	*Energy*
Indirect Heating	Indirect heating typically involves a heat exchanger, in which steam passes across the surface area of the heat exchanger, and the heat is transferred to the substance being heated. The steam never comes into direct contact with the product being heated, and usually some Condensation occurs during the Heat Transfer. Liquid mediums including water and oil can also be used, however indirect heating with steam proves to be more efficient than using water or oil, as it provides even, rapid heating. See also Direct Heating	*Industrial*
Indirect Labor	Indirect Labor - indirect labor includes labor cost which is not specifically charged to any operation or department but is a cost of general plant operation.	*Industrial Relations*
Indirect Labor	The labor costs of janitors, supervisors, materials handlers, and other factory workers that cannot be conveniently traced directly to particular products.	*Procurement*
Indirect Materials	Small items of material such as glue and nails. These items may become an integral part of a finished product but are traceable to the product only at great cost or inconvenience.	*Procurement*
Indirect uses (end-use category)	The end-use category that handles boiler fuel. Fuel in boilers is transformed into another useful energy source, steam or hot water, which is in turn used in other end uses, such as process or space heating or electricity generation. Manufacturers find measuring quantities of steam as it passes through to various end uses especially difficult because variations in both temperature and pressure affect energy content. Thus, the MECS (an EIA survey) does not present end-use estimates of steam or hot water and shows only the amount of the fuel used in the boiler to produce those secondary energy sources.	*Energy*
Indirect Utility Cost	Any cost that is not identified with a specific DSM category such as Administration, Marketing, etc.	*Energy*
Indirect utility cost	A utility cost that may not be meaning fully identified with any particular DSM program category. Indirect costs could be attributable to one of several accounting cost categories (i.e., Administrative, Marketing, Monitoring evaluation, Utility-Earned Incentives, Other). Accounting costs that are known DSM program costs should not be reported under Indirect Utility Cost; those costs should be reported as Direct Utility Costs under the appropriate DSM program category.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Indium chloride (InCl3) (Indium trichloride)	White powder hygroscopic, soluble in alcohol and water.	*Material Process*
Indium gallium arsenide	Ingress Protection. An Ingress Protection (IP) rating indicates how well an enclosure is protected from penetration by contaminants such as dust or fluids (such as water). IP ratings are defined in the IEC standard 60529.	*Electrical Engineering*
Indium gallium arsenide	Ingress Protection. An Ingress Protection (IP) rating indicates how well an enclosure is protected from penetration by contaminants such as dust or fluids (such as water). IP ratings are defined in the IEC standard 60529.	*Electrical Engineering*
Indium sulfate (In2(SO4)3)	Grayish powder deliquescent, soluble in water, decomposed by heat.	*Material Process*
Indium trichloride	See Indium chloride.	*Material Process*
Individual Agreement	the term is similar to the individual contract.	*Industrial Relations*
Individual Bargaining	this term applies to negotiations which take place between a single employee and his employer.	*Industrial Relations*
Individual Employee Grievances	usually refer to the rights of an individual employee under the terms of the collective bargaining agreement.	*Industrial Relations*
Individual ionic activity coefficients	f+ for cation and f- for an anion, cannot be derived thermodynamically. They can be calculated only by using the Debye-Huckel law for low concentration solutions in which the interionic forces depend primarily on charge, radius, and distribution of the ions and on the dielectric constant of the medium rather than on the chemical properties of the ions.	*Electronic Process*
Individual patient data	[In meta-analysis:] The availability of raw data for each study participant in each included study, as opposed to aggregate data (summary data for the comparison groups in each study). Reviews using individual patient data require collaboration of the investigators who conducted the original studies, who must provide the necessary data.	*Quality Engineering*
Individual Rate	the wage rate actually paid to the individual employee as contrasted with the rate for the job set up in the employer's wage or rate structure.	*Industrial Relations*
Indocarbon	Trade mark for sulfur dyestuffs. Used for the dyeing and printing of cotton and rayon. Characterized by very good fastness to light, washing, chlorine, etc.. It does not cause tendering of the fibber.	*Material Process*
Indoil Detergent Alkylate	Trade name for dodecyl-benzene, containing relatively small amounts of higher and lower alkylates. It used for sulfonation to make active ingredient for synthetic detergents.	*Material Process*
Indole (C6H4(CHNH)CH)	White to yellowish scales, turning red on exposure to light and air, odor unpleasant in high concentration but should not show a fecal quality. It is carcinogenic. Soluble in alcohol, ether, hot water, and fixed oils, insoluble in mineral oil and glycerol. It is used in perfumery, medicine and as chemical reagent.	*Material Process*
Indonesia (1962-2008)	Indonesia (1962-2008)	*Energy*
Indonex	Trade mark for heavy process oils and aromatic petroleum derivatives used in rubber processing or plastics and resin in manufacture.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Indopol Polybutenes	Trade mark for synthetic mono-olefins of high molecular weight used in electric insulation, adhesives, caulking compounds, surgical tape, and coating and laminating compositions for paper and other films.	*Material Process*
Induced dipole	A separation of positive and negative centers of charge in an atom due to the coulombic attraction of an adjacent atom.	*Material Process*
Induced draft water cooling tower	Type of mechanical draft tower in which one or more fans are located in the air outlet to induce air flow through the air inlets.	*Facility Engineering*
Induced environments	Conditions generated by operating some equipment, as opposed to natural environments.	*Reliability Engineering*
Induced polarization	A method of ground geophysical surveying employing an electrical current to determine indications of mineralization.	*Mining*
Induction	following an interview and the actual selection of a worker for a job, he is assigned to the actual work place, department, or operation in which he is to perform his regular functions.	*Industrial Relations*
Induction Heating	Heat treatment of completed welds in piping by means of placing induction coils around the piping. This type of heating is usually performed during field erection in those cases where stress relief of carbon- and alloy-steel field welds is required by the applicable code.	*Maintenance and Repair*
Induction Hardening	The localized surface heating of a medium carbon steel by an induction coil so that the temperature is raised above 900oC. The part is quenched (or self-quenches by virtue of the remaining cool bulk of the component) and tempered to produce a hard martensitic structure at the surface.	*Paint and Coatings*
Induction Heating	The heating of a electrically conductive material by an induction coil producing alternating magnetic fields which induce alternating electric currents to flow in the material and cause heating by resistance. Used in many heating process (induction fusing, induction plasma, induction hardening etc..)	*Paint and Coatings*
Induction Period	In an oxidation test, the time period during which oxidation proceeds at a constant and relatively low rate. It ends at the point where oxidation rate increases sharply.	*Lubrication*
Induction Period (Grease Oxidation)	The time during which grease oxidation proceeds at a relatively slow rate (see ASTM D-942).	*Lubrication*
Inductive Kickback	The very rapid change in voltage across an inductor when current flow is interrupted. Snubber diodes are often used to channel this energy in relays, and other inductive loads. Kickback can be a problem (causing EMI and component failure); or it can be used in power supply circuits to develop higher or opposite-polarity voltages from a single supply.	*Electrical Engineering*
Inductive Technology	The technology based on inductance, the property of an electric circuit by which an electromotive force is induced in it by a variation of current, either 1) in the circuit itself, or 2) in a neighboring circuit.	*Electrical Engineering*
Indulin	A Trade mark for an alkali lignin from the manufacture of paper by the sulfate process. Brown, free-flowing powder, insoluble in water and acids, soluble in aqueous alkali. Emulsion stabilization, storage battery plates, foam stabilization, protein precipitation, dyeing, electroplating, rubber reinforcing, rubber masterbatch production, ceramics deflocculating, ceramics binding, dispersing, drilling mud, and others.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Indur	A trade name for phenol-formaldehyde molding plastic.	*Material Process*
Indusoil	Trade mark for distilled or fractionated tall oils and tall oil products. Sufix used for further describe products.	*Material Process*
Industrial Accident	a sudden, unforeseen, or unexpected occurrence which results in injury, disability, or death to a person while working at his job.	*Industrial Relations*
Industrial Action	generally refers to the economic strategy used by unions through such devices at picketing, boycotts, or strikes.	*Industrial Relations*
Industrial Agreement	the same as collective bargaining agreement.	*Industrial Relations*
Industrial and Labor Relations Review	a quarterly publication of the New York State School of Industrial and Labor Relations.	*Industrial Relations*
Industrial Assembly of North America	an organization established in 1864, designed to bring together on an national basis various craft unions and groups of lacal trade associations.	*Industrial Relations*
Industrial Classification	categories of industrial groups set up to provide a simple and workable arrangement for separating or classifying groups for statistical analysis.	*Industrial Relations*
Industrial Conflict	a general term designed to describe the broad areas of disagreement and difficulty between labor and management.	*Industrial Relations*
Industrial Democracy	the term is designed to describe the relationship in a plant or industry between representatives of management and labor to provide a procedure for handling basic problems in the plant.	*Industrial Relations*
Industrial Disease	those incapacities which develop on the job due to unhealthy working conditions or the handling of materials which lead to incapacity.	*Industrial Relations*
Industrial Disputes	conflicts in the field of labor-management relations which arise from inability of the parties to resolve their differences.	*Industrial Relations*
Industrial Education	sometimes used as synonymous with industrial training.	*Industrial Relations*
Industrial Effort	the term has reference generally to an employee's motivation and desire to operate at peak or maximum efficiency.	*Industrial Relations*
Industrial Employment	generally refers to employment in productive industries such as processing and manufacturing.	*Industrial Relations*
Industrial Engineering	a term designed to describe the application of engineering techniques and processes to the industrial plant.	*Industrial Relations*
Industrial IT	A series of interoperable software and hardware products and systems from ABB and/or third parties that are designed to communicate with each other and work together as part of a larger system for a specific application.	*Electrical*
Industrial Journalism	the term generally is used to describe plant publications issued by a company dealing with general conditions in the plant and reporting basic operations and activities of the company and its employees.	*Industrial Relations*
Industrial Lubricant	Any petroleum or synthetic-base fluid or grease commonly used in lubricating industrial equipment, such as gears, turbines, and compressors.	*Lubrication*
Industrial Medicine	the extension of medical techniques to the industrial scene designed to prevent and treat illness, and rehabilitate individuals who, because of sickness or injury, are unable to continue their productive employment.	*Industrial vRelations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Industrial minerals	Non-metallic, non-fuel minerals used in the chemical and manufacturing industries. Examples are asbestos, gypsum, salt, graphite, mica, gravel, building stone and talc.	*Mining*
Industrial Mobility	the ability of workers to move from one job to another.	*Industrial Relations*
Industrial Peace	the term is used to describe the relationship between labor and management in which relatively little conflict exists.	*Industrial Relations*
Industrial Physician	the doctor hired by a company to handle the problems relating to the health and care of its employees.	*Industrial Relations*
Industrial production	The Federal Reserve Board calculates this index by compiling indices of physical output from a variety of agencies and trade groups, weighting each index by the Census' value added, and adding it to the cost of materials. When physical measures are not available, the Federal Reserve Board uses the number of production workers or amount of electricity consumed as the basis for the index. To convert industrial production into dollars, multiply by the "real value added" estimate used by the Federal Reserve Board.	*Energy*
Industrial productivity	Raising industrial productivity means lowering costs for each unit (e.g., car, ton of paper, etc.) produced. Manufacturers are under intense pressure to improve productivity and performance to remain competitive, and avoid losing business to more efficient rivals. New technologies and business models are allowing companies to restructure their business processes - things like procurement, manufacturing, research, sales, distribution, and so on - establishing new combinations and locations that enable them to work more closely with partners, suppliers, and customers. Productivity improvements can be achieved by automating operations, improving the asset management, optimizing factories operations, outsourcing, and improving the supply chain management.	*Electrical*
Industrial Psychology	a relatively new and expanding field in the labor-management area.	*Industrial Relations*
Industrial Recreation	one phase of the indutrail environment of the worker.	*Industrial Relations*
Industrial Relations	the term has been defined broadly as dealing with everything that affects the relationship of the individual worker or groups or workers of the employer.	*Industrial Relations*
Industrial Relations Center	organizations, variously known as Centers, Institutes, Labor and Management Programs, which have indicated a major financial interest in the field of industrial relations.	*Industrial Relations*
Industrial Relations Manager	a term commonly used to describe the management official responsible for conduct of his company's relations with unions representing employees.	*Industrial Relations*
Industrial Relations Research Association	a private organization, formed in 1947, to encourage and disseminate research to industrial relations.	*Industrial Relations*
Industrial restrictions (coal)	Land-use restrictions that constrain, postpone, or prohibit mining in order to meet other industrial needs or goals; for example, resources not mined due to safety concerns or due to industrial or societal priorities, such as to preserve oil or gas wells that penetrate the coal reserves; to protect surface features such as pipelines, power lines, or company facilities; or to preserve public or private assets, such as highways, railroads, parks, or buildings.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Industrial Revolution	a term generally applied to the changes which occurred in England roughly between the middle of the 18th century and the first 40 years if the 19th century.	*Industrial Relations*
Industrial sector	An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity manufacturing (NAICS codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities. Various EIA programs differ in sectoral coverage.	*Energy*
Industrial Standards	the term is used to describe the actual criteria set up in the plant which are used as measures of performance.	*Industrial Relations*
Industrial Union	a term used to describe the structure of a particular union in relation to company operation.	*Industrial Relations*
Industrial Union Council	CIO counterpart of the AFL central labor council; an organization of former CIO unions in a locality or city.	*Industrial Relations*
Industrial Union Department (AFL-CIO)	one of the subordinate departments of AFL-CIO, concerned with the interests of "industrial" as opposed to "craft" unions.	*Industrial Relations*
Industrial Welfare	those programs which affect the conditions of employment of the individual.	*Industrial Relations*
Industrial Workers	the general term designed to apply to employees engaged in modern industrial operations and to distinguish them from agricultural workers and other groups not engaged primarily in industrial operations.	*Industrial Relations*
Industrial Workers of the World	sometimes known as the IWW or "Wobblies".	*Industrial Relations*
Industrial, Scientific and Medical	Radio frequency bands made available for use by communication equipment without license, within certain maximum emitted power limits. Equipment which uses the ISM band must tolerate interference from other such equipment. Common uses include WiFi (802.11a, b, and g) and cordless phones.	*Electrical Engineering*
Industrial, Scientific and Medical	Radio frequency bands made available for use by communication equipment without license, within certain maximum emitted power limits. Equipment which uses the ISM band must tolerate interference from other such equipment. Common uses include WiFi (802.11a, b, and g) and cordless phones.	*Electrical Engineering*
Industrialization	refers to the changes from agricultural and domestic stages or economic development to the factory or industrial system.	*Industrial Relations*
Inelastic	Not surprisingly, the opposite of elastic. A deformation of a structure or material under load is described as inelastic when the deformation remains after the load is removed. The term plastic is often used with the same meaning.	*Engineering Physics*
Inequities	working conditions, including wages and hours, which are so out of line with those prevailing elsewhere as to warrant adjustment.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Inert No chemically reactive	Inert No chemically reactive.	*Material Process*
Inertance (or *accelerance*.)	The ratio of acceleration to force.	*Reliability Engineering*
Inertia	The tendency of an object at rest to remain at rest, and of an object in motion to remain in motion.	*Engineering Physics*
Inertial Force	A fictitious force used for convenience in visualizing the effects of forces on bodies in motion. For an accelerating body, the inertial force is considered as a body force whose resultant acts at the object's center of gravity in a direction opposite the acceleration. The magnitude of the force is the mass of the object times the magnitude of the acceleration.	*Engineering Physics*
Inertially-referenced	Motion that is referenced to free space or to a fixed point in space. A sensor (such as an accelerometer) which measures such motion.	*Reliability Engineering*
Infant	Mortality conditional probability of failure during the period immediately after an item returns to service. It is relatively high.	*Reliability Engineering*
Infant Mortality	The Relatively High Conditional Probability Of Failure During The Period Immediately After An Item Returns To Service.	*Plant Engineering*
Infeed End	The end of a conveyor nearest the loading point.	*Manufacturing*
Inferred coal resources	Coal in unexplored extensions of the demonstrated resources for which estimates of the quality and size are based on geologic evidence and projection. Quantitative estimates are based largely on broad knowledge of the geologic character of the deposit and for which there are few, if any, samples or measurements. The estimates are based on an assumed continuity or repletion of which there is geologic evidence; this evidence may include comparison with deposits of similar type. Bodies that are completely concealed may be included if there is specific geologic evidence of their presence. The points of observation are 1 ½ to 6 miles apart.	*Mining*
Inferred reserve base (coal)	the resources in the inferred reliability category that meet the same criteria of bed thickness and depth from surface as the demonstrated reserve base.	*Energy*
Inferred resources	Coal in unexplored extensions of demonstrated resources for which estimates of the quality and size are based on geologic evidence and projection. Quantitative estimates are based largely on broad knowledge of the geologic character of the bed or region and where few measurements of bed thickness are available. The estimates are based primarily on an assumed continuation from demonstrated coal for which there is geologic evidence. The points of observation are 1-1/2 to 6 miles apart. Inferred coal is projected to extend as a 2-1/4-mile wide belt that lies more than 3/4 mile from the outcrop, points of observation, or measurement.	*Energy*
Infield	The area inside the boundary of the track.	*NASCAR*
Infiltration	Flow of water from the land surface into the subsurface.	*Petroleum Engineering*
Infiltration	the downward movement of water through a soil in response to gravity and capillary suction.	*Chemical*
Infiltration gallery	an engineered structure that facilitates infiltration of water into the subsurface. Infiltration galleries may consist of one or more horizontal or vertical perforated pipes, a single gravel-filled trench or a network of such trenches, or a combination of these.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
InfiniBand	InfiniBand architecture is an industry standard, channel-based, switched-fabric, interconnect architecture for servers. InfiniBand architecture changes the way servers are built, deployed, and managed.	*Electrical Engineering*
Inflation	a continuous or persistent upward movement of prices which may develop from such causes as a limited supply of goods and services or an increasing supply of money or credit.	*Industrial Relations*
Influent	The fluid entering a component.	*Oil Analysis*
Informal Complaint	A dispute or disagreement about a utility problem filed by a consumer with the PUC's Customer Protection Division. A Customer Assistance investigator reviews the informal complaint and tries to resolve the dispute. Most responses are in the form of a decision that the customer or company can appeal. If an informal complaint is appealed, it becomes a formal complaint.	*Energy*
Information Management System Group (IMSG)	The Information Management System Group (IMSG) is an advisory group to the CCSG. It is responsible for overseeing the development of any software within the Collaboration that is mandatory to use (for instance, by the editorial bases of all Cochrane Review Groups), and for advising on Collaboration-wide use of other software. Also called: IMSG	*Quality Engineering*
Infrared	Light that has a frequency below the visible light spectrum, used for remote controls, line-of-sight wireless data, and night vision applications, among others.	*Electrical Engineering*
Infrared	Zone of invisible radiations below the red end of the spectrum of visible radiations. Waves are longer and more penetrating than those of light, zone is characterized by heat.	*Material Process*
Infrared (IR)	The invisible radiation (as opposed to visible light) that certain LEDs emit. Standard MICRO SWITCH modulated LED controls have infrared emitting LEDs.	*Electrical Engineering*
Infrared Analysis	A form of absorption spectroscopy that identifies organic functional groups present in a used oil sample by measuring their light absorption at specific infrared wavelengths; absorbance is proportional to concentration. The test can indicate additive depletion, the presence of water, hydrocarbon contamination of a synthetic lubricant, oxidation, nitration, and glycol contamination from coolant. Fourier Transform Infrared (FTIR) permits the generation of complex curves from digitally represented data.	*Lubrication*
Infrared Data Association	A group of device manufacturers that developed a standard for transmitting data via infrared light waves.	*Electrical Engineering*
Infrared spectra	A graph of infrared energy absorbed at various frequencies in the additive region of the infrared spectrum. The current sample, the reference oil and the previous samples are usually compared.	*Oil Analysis*
Infrared Spectroscopy	An analytical method using infrared absorption for assessing the properties of used oil and certain contaminants suspended therein. See FTIR.	*Lubrication*
Infrared thermography	A method used to measure the status of equipment by analyzing the amount of heat it radiates.	*Electrical*
Infrared Thermography	A predictive maintenance technology that involves the estimation of surface temperatures by analyzing the emitted infrared radiation. Thermographic cameras detect radiation in the infrared range of the electromagnetic spectrum (around 900 to 14,000 nanometers or 0.9 to 14 μm) and produce images of that radiation.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Infusorial earth	A fine powder composed of siliceous skeletons of diatoms, apparent density 0.24 to 0.34 g/cm3 used as a filler for plastics.	*Material Process*
ing oil are mixed with 90 ml. of ASTM preparation naptha and centrifuged under prescribed conditions (ASTM Designation D91-61).	ing oil are mixed with 90 ml. of ASTM preparation naptha and centrifuged under prescribed conditions (ASTM Designation D91-61).	*Mechanical, Process, and Operations*
Ingaunee, i.e., 'ingoing eye',	the mouth of a drift mine; or a coal seam that outcrops at the surface. Also called a 'Day Level'. (Scot.).	*Mining*
Ingested contaminants	Environmental contaminant that ingresses due to the action of the system or machine.	*Oil Analysis*
Ingot	Steel cast in a metal mold ready for rolling or forging. It is distinct from a casting, which is not rolled or forged. Ingots are usually rectangular, called slabs; square, called blooms; polygonal, eight- or 12-sided for forging. Squares and polygonal ingots can be fluted or corrugated to increase the surface area and reduce the tendency to crack while cooling.	*Metallurgy*
Ingression level	Particles added per unit of circulating fluid volume.	*Oil Analysis*
Inherent Diaphragm Pressure	The high and low values of pressure applied to the diaphragm to produce rated valve plug travel with atmospheric pressure in the valve body.	*Industrial Engineering*
Inherent Flow Characteristic	The relationship between valve capacity and valve travel – usually expressed graphically. It is derived from testing a valve with water as the fluid and with a constant pressure drop across the valve. The most common types of inherent flow characteristics are linear, equal percentage, modified parabolic, and quick opening.	*Industrial Engineering*
Inherent imprecision, inherent random error	The standard deviation or coefficient of variation of the results in a set of replicate measurements obtained when the measurement procedure is operating under stable conditions.	*Quality*
Inherent Reliability	A measure of the reliability of an item, in its present operating context, assuming adherence to ideal equipment maintenance strategies.	*Reliability Engineering*
Inherent Safety	A concept particularly used in the chemical and process industries. An inherently safe process has a low level of danger even if things go wrong. It is used in contrast to safe systems where a high degree of hazard is controlled by protective systems	*Reliability Engineering*
Inhibitor	A substance which is added to another substance to prevent an unwanted chemical reaction from occurring.	*Chemical*
Inhibitor	Inhibitors are substances that reduce or eliminate the aggressiveness of a corrosive medium and are either already contained in the corrosive medium or are specifically added to it. A substance, used in small concentrations, that decreases the rate of corrosion in a given environment. Checks or stops a chemical reaction. Used in monomers and resins to prolong storage life.	*Material Process*
INHIBITOR	Additive used to prevent or retard undesirable changes in the quality of the product, or in the condition of the equipment in which the product is used.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
In-house Demand-Side Management (DSM) program sponsor	The building's owner or management encourages consumers in the building to improve energy efficiency, reduce energy costs, change timing or energy usage, or promote the use of a different energy source by sponsoring its own DSM programs.	*Energy*
Initial enrichment	Average enrichment for a fresh fuel assembly as specified and ordered in fuel cycle planning. This average should include axial blankets and axially and radially zoned enrichments.	*Energy*
Initial operation	First availability of a newly constructed unit to provide power to the grid. For a nuclear unit, this time is when the Full Power Operating License for the unit is received.	*Energy*
Initial public offering	The first sale of shares to the public, usually by subscription from a group of investment dealers.	*Mining*
Initial Spurt	the amount of effort expended at the beginning of a work period.	*Industrial Relations*
Initial Unbalance	Initial unbalance is that unbalance of any kind that exists in the rotor before balancing.	*General Engineering*
Initial Unbalance	Initial unbalance is that unbalance of any kind that exists in the rotor before balancing.	*Electronic Process*
Initiation Fee	a fee charged by a union as a condition to acquiring membership in the union.	*Industrial Relations*
Initiator	Peroxide used as initiator of free radicals by abstracting hydrogen from polymer backbone. They are used in free-radical polymerizations, curing thermosetting resins, as crosslinking agents for elastomers and polyethylenes, and for polymer modification.	*Engineering Physics*
Injection Blow Molding	Plastic melt is injected as a parison into a preform cavity forming the preform around a core rod. A completely finished injection molded neck is formed at this station. The preform is then transferred to a blow station where it is blown through an opening in the core rod and into the final shape.	*Engineering Physics*
Injection Mold	A mold used in the process of injection molding. The mold usually comprises two sections held together by a clamping device with sufficient strength to withstand the pressure of the molten plastic when injected, and is provided with channels for heating, cooling, and venting.	*Engineering Physics*
Injection Molding	Injection molding is a repetitive process in which plastic is melted or plasticated, and injected into a mold. With thermoplastics the mold is kept at a temperature below the solidifying point of the plastic, causing the injected polymer to freeze, thus forming the article. After cooling, the mold opens and the article is ejected.	*Engineering Physics*
Injection molding	Processing technique for thermoplastic polymers. A molding procedure whereby a heat softened plastics material is forced into a relatively cool mold which gives the desired shape to the finished article.	*Material Process*
Injection Pressure	Pressure applied to the injection ram to force the plastic from the barrel and into the mold (measured in psi or Mpa).	*Engineering Physics*
injection well	a well used to inject under pressure a fluid (liquid or gas) into the subsurface.	*Chemical*
Injection well	A well employed for the introduction into an underground stratum of water or gas under pressure. Injection wells are employed for the disposal of produced water from oil and gas wells.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Injection well	A well used for pumping water or gas into the reservoir.	*Petroleum Drilling*
Injunction	a prohibitory writ issued by a court to restrain an individual or a group from committing an act that is regarded as inequitable so far as the rights of some other person are concerned.	*Industrial Relations*
Ink Jet Printers	Controlled jets of ink spray from nozzles to form image.	*Gears*
Inland Steel Co. v. NLRB	decision upholding the NLRB ruling that inland steel company was required to bargain with the Steelworkers Union with respect to retirement and pension matters.	*Industrial Relations*
Inlay	A form of weld metal deposit, where the weld deposit fills a ring groove or other cavity. A Corrosion Resistant Alloy weld metal is deposited in oversize ring grooves then machined to accept Ring Gaskets.	*Petroleum Engineering*
Inlet	Allows groundwater to enter the well, and may be a slotted well screen in overburden aquifers, or an open hole in bedrock.	*Petroleum Engineering*
Inlet air	(See Entering Air).	*Facility Engineering*
Inlet connection	Fitting to which the circulating water supply piping is connected to serve the tower distribution system. Also known as Inlet Flange.	*Facility Engineering*
INLET PORT	That end of a valve which is connected to the upstream pressure zone of a fluid system.	*Mechanical*
Inlet well	a well through which a fluid (liquid or gas) is allowed to enter the subsurface under natural pressure.	*Chemical*
Inlet wet-bulb temperature	The average of the wet-bulb temperature obtained from several stations located on both the windward and leeward sides of the tower.	*Facility Engineering*
In-line filter	A filter assembly in which the inlet, outlet and filter element axes are in a straight line.	*Oil Analysis*
In-line Inspection	A task carried out to determine the condition of a pipeline while still in use/operation.	*Reliability Engineering*
in-line rotameter	a flow measurement device for liquids and gases that uses a flow tube and specialized float. The float device is supported by the flowing fluid in the clear glass or plastic flow tube. The vertical scaled flow tube is calibrated for the desired flow volumes/time.	*Chemical*
Inner seat ring	The inner part of a two-piece valve seat assembly.	*Mechanical*
Inner Wires	All wires of a strand except the outer or cover wires.	*Wire Rope & Cable*
Inner liner	The layers of low permeability rubber, which are laminated to the inside of a tubeless tire to insure that air retention quality of the tire body.	*Mechanical Engineering*
Inner liner	The layers of low permeability rubber, which are laminated to the inside of a tubeless tire to insure that air retention quality of the tire body.	*Mechanical Engineering*
inoculate	to implant microorganisms onto or into a culture medium.	*Chemical*
Inomer	Thermoplastic that combines transparency with toughness, particularly at low temperatures. The polymer's main component is ethylene but it contains both inorganic and organic materials linked by both covalent and ionic bonds. Film is used in skin packaging.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Inoperable capacity	Generating capacity that is totally or partially out of service at the time of system peak load, either for scheduled outages (see GADS definition of "scheduled outages." These include both maintenance outages and planned outages.) or for reasons such as environmental restrictions; extensive modifications or repair; or capacity specified as being in a mothballed state. This does not include derated portions of generating capacity.	*Energy*
Inorganic Chemicals	A category of chemicals that do not include carbon and its derivatives as principal elements.	*Chemical*
Inorganic Thickener	See Non-Soap Thickener	*Lubrication*
Inositol (C6H6(OH)62H2O) (hexahydroxycyclohexane)	A constituent of body tissue. There are 9 isomeric forms of inositol, which i-inositol (myo-inositol or meso-inositol) is the only one having vitamin activity. It appears to prevent alopecia, promote growth, have lipotropic activity, influence gastro-intestinal motility, and to prevent the deposit of cholesterol in the liver. White crystals, odorless, sweet taste, soluble in water, insoluble in absolute alcohol and ether.	*Material Process*
In-place resource (resource potential)	The quantity of oil or gas remaining in known accumulations plus those quantities already produced from known accumulations plus those quantities in accumulations yet to be discovered.	*Petroleum Engineering*
In-plant defect rate	The fallout rate, parts per million (ppm), of all components in manufacturing and assembly that fail quality tests at any point in the production process.	*Quality*
Input	The mechanical motion, force or energy applied to a mechanical system, *e.g.* the vibratory input from shaker to test item. Or an electrical signal, *e.g.* from a shaker controller to the power amplifier driving a shaker.	*Reliability Engineering*
Input	1) The device or collective set of devices used for bringing data into another device; 2) The signal or stimulus put into a circuit to make the output do something.	*Electrical Engineering*
Input Back-Off	In a power amplifier, a measure of how far you must reduce the input power in order to receive the desired output linearity and power. Stated differently, the ratio between the input power that delivers maximum power to the input power that delivers the desired linearity.	*Electrical Engineering*
Input control signal	Originates in a control sensor; sometimes selected between or averaged between several sensors. Used to regulate shaker intensity. (May originate in a force sensor for force-controlled testing.)	*Reliability Engineering*
Input Impedance	The resistance of a panel meter as seen from the source. In the case of a voltmeter, this resistance has to be taken into account when the source impedance is high; in the case of an ammeter, when the source impedance is low.	*Electrical*
Input Impedance	The impedance (presented to the excitation source) measured across the excitation terminals of a sensor.	*Electrical Engineering*
Input Impedance -	The resistance of a panel meter as seen from the source. In the case of a voltmeter, this resistance has to be taken into account when the source impedance is high; in the case of an ammeter, when the source impedance is low.	*Electronic Process*
Input Resistance (Impedance)	The input resistance of a pH meter is the resistance between the glass electrode terminal and the reference electrode terminal. The potential of a pH-measuring electrode chain is always subject to a voltage division between the total electrode resistance and the input resistance.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Input Resistance (Impendance)	The input resistance of a pH meter is the resistance between the glass electrode terminal and the reference electrode terminal. The potential of a pH-measuring electrode chain is always subject to a voltage division between the total electrode resistance and the input resistance.	*General Engineering*
Input Signal Duration	A length of time the light beam is blocked (in dark operated mode), or uninterrupted (in light operated mode). Or, the length of time a target is within the operating range.	*Electrical Engineering*
Inputs	the amount of energy and money put into a farm in order to make a product	*Agriculture*
Inrush	a sudden, unexpected large make of water or other flowing material, such as sand or peat, into the mine, very often of serious proportions, causing casualties and disruption to coal production.	*Mining*
Inrush Current	A momentary input current surge, measured during the initial turn-on of the power supply. This current reduces to a lower steady-state current once the input capacitors charge. Hotswap controllers or other forms of protection are often used to limit inrush current, because uncontrolled inrush can damage components, lower the available supply voltage to other circuits, and cause system errors.	*Electrical Engineering*
Inrush Current	A momentary input current surge, measured during the initial turn-on of the power supply. This current reduces to a lower steady-state current once the input capacitors charge. Hotswap controllers or other forms of protection are often used to limit inrush current, because uncontrolled inrush can damage components, lower the available supply voltage to other circuits, and cause system errors.	*Electrical Engineering*
Insecticide	a type of pesticide that kills insects	*Agriculture*
Insert	An article of metal or other material which is incorporated into a plastic molding either by pressing the insert into the finished molding or by placing the insert in the cavity so that it becomes an integral part of the molding.	*Engineering Physics*
Inserts	Integral parts, usually of metal, of a finished molded plastics article, set in position during the molding operation.	*Material Process*
Inset	the entrance to underground roadways at the bottom or part way down the shaft where the cages are loaded and there is access for men and materials. Also called a 'porch'.	*Mining*
Inside Organizer	the term refers generally to a union organizer who is an employee of the company whose workers he is seeking to organize.	*Industrial Relations*
Inside-mounted Seal	A mechanical seal located inside the seal chamber with the pumped product's pressure at its O.D.	*Lubrication*
Inside-out air seat test	A pressure test that can be performed only on independent seating trunnion mounted ball valves. By closing the valve and pressurizing the body cavity, all of the seals in an independent seating ball valve can then be pressure tested.	*Mechanical*
Insitu maintenance	To maintain or repair a product "in its original place," such as a top entry ball valve or regulator.	*Mechanical*
Insoluble	not soluble; in capable or difficult of being dissolved, as by liquid; as, chalk is insoluble in water	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Insolubles	Contaminants found in used oils due to dust, dirt, wear particles or oxidation products. Often measured as pentane or benzene insolubles to reflect insoluble character.	*Lubrication*
Inspection	Any task undertaken to determine the condition of equipment, and/or to determine the tools, labor, materials, and equipment required to repair the item.	*Maintenance*
Inspectors	In a maintenance sense the term refers to the nominated person(s) that has primary responsibility for maintenance tasks. Inspectors can be members of the maintenance department or any other department (machine operators, drivers, security officers, custodians, etc).	*Maintenance*
Installed capacity	The total generating units' capacities in a power plant or on a total utility system. The capacity can be based on the nameplate rating or the net dependable capacity.	*Energy*
Installed Flow Characteristic	The flow characteristic when the pressure drop across the valve varies with flow and related conditions in the system in which the valve is installed. The purpose of characterizing a control valve is to help compensate for nonlinearities in the control loop.	*Industrial Engineering*
Installed nameplate capacity	See Generator nameplate capacity (installed).	*Energy*
Instantaneous Centre Of Rotation	The point in space that an eccentrically shear loaded joint rotates about. The deformation and the load sustained by an individual bolt in a bolt group is dependent upon the distance that the bolt is from the instantaneous centre. The direction that the individual bolt force acts is perpendicular to a line joining that bolt to the instantaneous centre.	*Maintenance*
Instantaneous peak demand	The maximum demand at the instant of greatest load.	*Energy*
Instantaneous water heater	Also called a "tankless" or "point-of-use" water heater. The water is heated at the point of use as it is needed.	*Energy*
Instar	- The insect itself during the time between molts in the larva or nymph, numbered to designate the various periods; i.e., the first instar is the insect between the egg and first molt.[1]	*Forestry*
Institute of Radio Engineers	IREs are units of measurement dividing the area from the bottom of sync to peak white level into 140 equal units.	*Electrical Engineering*
Institute of Radio Engineers	- IREs are units of measurement dividing the area from the bottom of sync to peak white level into 140 equal units.	*Electrical Engineering*
Institutional investors	Pension funds and mutual funds, managing money for a large number of individual investors.	*Mining*
Institutional living quarters	Space provided by a business or organization for long-term housing of individuals whose reason for shared residence is their association with the business or organization. Such quarters commonly have both individual and group living spaces, and the business or organization is responsible for some aspects of resident life beyond the simple provision of living quarters. Examples include prisons; nursing homes and other long-term medical care facilities; military barracks; college dormitories; and convents and monasteries.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Instrinsic Semiconductor	A semiconductor material for which the electrical behavior is characteristic of the pure material.	*Engineering Physics*
Instrument Piping	All piping, valves, and fittings used to connect instruments to main piping, to other instruments and apparatus, or to measuring equipment.	*Maintenance and Repair*
Instrument transformer	In contrast to most transformers (which are used to convert power), instrument transformers are components of devices used for measurement or monitoring (e.g., to measure voltage or current in transmission lines). As they do not actually transform any significant quantities of energy they are usually small and lightweight.	*Electrical*
Instrumentation	Electronic or electromechanical devices, often referred to as meters, used to measure the flow, level, temperature and pressure of processes in different industrial applications. They monitor processes in power generation, manufacturing and refining plants. Information collected by various instruments is processed by analyzers and used to assess performance, sending alerts if readings are not as expected.	*Electrical*
Insulated Junction	See Ungrounded Junction	*Electrical*
Insulated Junction	See Ungrounded Junction	*Electronic Process*
Insulating oils (electrical oils)	Oils used as insulators and cooling medium in transformers, circuit-breakers, switches or other electric apparatus.	*Material Process*
Insulation	Any material or substance that provides a high resistance to the flow of heat from one surface to another. The different types include blanket or batt, foam, or loose fill, which are used to reduce heat transfer by conduction. Dead air space is an insulating medium in storm windows and storms as it reduces passage of heat through conduction and convection. Reflective materials are used to reduce heat transfer by radiation.	*Energy*
Insulation around heating and/or cooling ducts	Extra insulation around the heating and/or cooling ducts intended to reduce the loss of hot or cold air as it travels to different parts of the residence.	*Energy*
Insulation around hot-water pipes	Wrapping of insulating material around hot-water pipes to reduce the loss of heat through the pipes.	*Energy*
Insulation around water heater	Blanket insulation wrapped around the water heater to reduce loss of heat. To qualify under this definition, this wrapping must be in addition to any insulation provided by the manufacturer.	*Energy*
Insulation Resistance	The resistance measured between two insulated points on a transducer when a specific dc voltage is applied at room temperature.	*Electronic Process*
Insulation Resistance	The resistance measured between specified insulated points on a sensor when a specified DC potential is applied at room conditions.	*Electrical Engineering*
Insulator	A material that is a very poor conductor of electricity. The insulating material is usually a ceramic or fiberglass when used in the transmission line and is designed to support a conductor physically and to separate it electrically from other conductors and supporting material.	*Energy*
Insulator	A material that does not conduct electric current, such as plastic, some kinds of silicon or glass. The term can also refer to a material that does not conduct heat. For clarity, the terms thermal insulator and electrical insulator may be used. (See also Conductor.)	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Insulator (electrical)	A nonmetallic material that has filled valence band at 0 K and a relatively wide energy band gap.	*Engineering Physics*
Insulin (C45H69O14N11S 3H2O)	The pancreatic hormone which greatly increases the combustion of sugar and leads to a reduction of the amount of glucose in the blood, a systematic deficiency of which is the cause of diabetes. White powder, amorphous or crystalline, soluble in water.	*Material Process*
Insurance Plan	a contract generally agreed to between an insurance company and the employer which covers the employees of a company.	*Industrial Relations*
Insurance, Unemployment -	an insurance system whereby workers who are able and willing to work, and who are unemployed through no fault of their own are given a percentage of their earnings during the period they are out of work.	*Industrial Relations*
Insurance, Workmen's Compensation	insurance plans which are required by law whereby the employer insures his workers against industrial accidents and occupational diseases.	*Industrial Relations*
Insured Plan	generally a life or other medical or heath plan which is funded though an insurance company.	*Industrial Relations*
Insured Population	that part of the work force which is covered by unemployment insurance and is eligible for payments when they meet the requirements for unemployment benefits under existing law.	*Industrial Relations*
Insurok	A series of laminated and molding plastics characterized by durability, lightweight, resistance to many chemicals, and high dielectric strength. These plastics have use as a replacement for cast aluminum in airplane parts and for electric uses as switches, distributors, commutators, etc.	*Material Process*
Industrial Hygiene	those aspects of medicine which apply to the environment in the plant or factory and in any way affect the well-being, health, and medical safety of workers.	*Industrial Relations*
Intake	any roadway underground through which the fresh air from the downcast is conducted to the working faces.	*Mining*
Intake	The passage through which fresh air is drawn or forced into a mine or to a section of a mine.	*Mining*
Intake Section	The lower part of the well, which lets water in, while keeping aquifer materials out.	*Petroleum Engineering*
Intangible drilling and development costs (IDC)	Costs incurred in preparing well locations, drilling and deepening wells, and preparing wells for initial production up through the point of installing control valves. None of these functions, because of their nature, have salvage value. Such costs would include labor, transportation, consumable supplies, drilling tool rentals, site clearance, and similar costs.	*Energy*
Intangible Transition Charge	The amounts on all customer bills, collected by the electric utility to recover transition bond expenses.	*Energy*
Intarvin ((C16H33COO)3 C3H5)	White lumpy masses, odor and taste of tallow, insoluble in water, freely soluble in chloroform or ether.	*Material Process*
Integral	A form of temperature control. See Automatic Reset, #2	*General Engineering*
Integral	A form of temperature control. See Automatic Reset, #2	*Electronic Process*
Integral (Reset) Control	A control algorithm which at- tempts to eliminate the offset (caused by proportional control) between the measurement and setpoint of the controlled process variable. See also "Control Action, Integral (Reset)."	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Integral Windup/ Windown	Also called "controller windup/windown" or "reset windup." Saturation of the controller output at its maximum positive or negative value due to an error signal existing for an excessive period of time. Can be caused by the controller being left on "automatic" when the measurement transmitter is out of service.	*Electrical Engineering*
Integral (Reset) Time	The proportionality constant in the equation relating the controller output to the error for integral control CO = Ki (PV – SP) dt. Where - Ki = Kp/Ti. Kp is the integral gain of the controller. Ti is the time required to produce a change in controller output equal to the change in error input.	*Electrical Engineering*
Integral Action	The "I" part of the PID controller. With integral action, the controller output is proportional to the amount and duration of the error signal. If there is more integral action, the controller output will change more when error is present. If your units on integral are in "time/rep" or "time" then decreasing your integral setting will increase integral action. If your units on integral are in "rep/time" or "1/time" then increasing your integral setting increases integral action.	*Process Control Engineering*
Integral Action Rate (Reset Rate)	Of proportional plus integral or proportional plus integral plus derivative control action devices, for a step input, the ratio of the initial rate of change of output due to integral control action to the change in steady-state output due to proportional control action. Note: Integral action rate is often expressed as the number of repeats per minute because it is equal to the number of times per minute that the proportional response to a step input is repeated by the initial integral response.	*Process Control*
Integral collector storage (ICS)	A solar thermal collector in which incident solar radiation is absorbed directly by the storage medium.	*Energy*
Integral Fastener	A term used to describe types of fasteners which are highly resistant to vibration loosening and/or removal. Some types have special thread forms.	*Maintenance*
Integral Flange	A valve body whose flange connection is an integral or cast part of the body. Valves with integral flanges were traditionally known to have the ANSI short face-to-face dimension ANSI/ISA S75.03. However, many manufacturers now produce valve bodies with both integral and separable flanges that will meet both the ANSI short and long face-to-face dimensions.	*Industrial Engineering*
Integral nonlinearity	Input CMVR (V) Common-mode voltage range (CMVR) or Input Voltage Range (IVR): For signal processing devices with differential inputs, such as an op amp, CMVR is the range of common mode signal for which the amplifier's operation remains linear. If we let the voltage present on the "-" input equal V1, and the voltage on the "+" input equal V2, then the common mode voltage is VCM = (V1+V2)/2.	*Electrical Engineering*
Integral Nonlinearity	A measure of a data converter's ability to adhere to an ideal slope in its transfer function. It can be specified using end-point or best-straight-line fit. Each of these approaches can yield very different numbers for the same data converter.	*Electrical Engineering*
Integral Seat	The flow control orifice and seat that is an integral part of the valve body or cage. The seat is machined directly out of the valve body and is normally not replaceable without replacing the body itself – although some can be repaired by welding and re-machining.	*Industrial Engineering*
Integrated circuit	A semiconductor device that combines multiple transistors and other components and interconnects on a single piece of semiconductor material.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Integrated Circuit (IC)	An interconnected array of active and passive elements integrated within a single semiconductor substrate or other compatible material, and capable of performing one complete electronic function.	*Electrical Engineering*
Integrated circuit (IC)	A sophisticated electrical circuit produced by the application of precise patterns of diffusable n-type and p-type dopants to give numerous elements within a single crystal chip.	*Material Process*
Integrated Company	A company involved in virtually all aspects of the oil and gas industry including exploration, production, transportation, refining and marketing. These companies are also referred to as major oil companies.	*Petroleum Drilling*
Integrated demand	The summation of the continuously varying instantaneous demand averaged over a specified interval of time. The information is usually determined by examining a demand meter.	*Energy*
Integrated electronic component	IEEE From www.ieee.org: "The IEEE (Eye-triple-E) is a non-profit, technical professional association of more than 360,000 individual members in approximately 175 countries. The full name is the Institute of Electrical and Electronics Engineers, Inc., although the organization is most popularly known and referred to by the letters I-E-E-E." IEEE also sponsors many electrical and electronic standards.	*Electrical Engineering*
Integrated gasification-combined cycle technology	Coal, water, and oxygen are fed to gasifier, which produces syngas. This medium-Btu gas is cleaned (particulates and sulfur compounds removed) and is fed to a gas turbine. The hot exhaust of the gas turbine and heat recovered from the gasification process are routed through a heat-recovery routed through a heat-recovery generator to produce steam, which drives a steam turbine to produce electricity.	*Energy*
Integrated Heat Spreader	An Integrated Heat Spreader (IHS) is the surface used to make contact between a heatsink or other thermal solution and a CPU or GPU processor.	*Electrical Engineering*
Integrated Heat Spreader	An Integrated Heat Spreader (IHS) is the surface used to make contact between a heatsink or other thermal solution and a CPU or GPU processor.	*Electrical Engineering*
Integrated Maintenance SolutionsTM (IMS)	A long-term SKF contract (2 years +) that is generally performance-based. It includes key process actions known internally as the "8 Steps to Maintenance Heaven." An IMS contract brings together all areas of expertise offered by SKF, establishing a continuous process of maintenance monitoring, analysis and improvement. It provides a planned skills transfer program for maintenance and operations personnel, and technology upgrades where required. The services and support best suited to optimize asset efficiency and integrity (safety and environment) are all included under one fixed fee performance based agreement.	*Maintenance*
Integrated Resource Plan (IRP)	A comprehensive and systematic blueprint developed by a supplier, distributor, or end-user of energy who has evaluated demand-side and supply-side resource options and economic parameters and determined which options will best help them meet their energy goals at the lowest reasonable energy, environmental, and societal cost.	*Energy*
Integrated Pest Management, (IPM)	The USDA defines IPM as socially acceptable, environmentally responsible and economically practical crop protection from pests. Emphasis is on substituting biological controls such as natural predators for chemical controls of pests and diseases that attack plants grown for food or fiber. IPM doesn't necessarily eliminate the need for chemicals, but where it cannot eliminate them, it functions to reduce the amount of chemical required to control pests and diseases.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Integrating Process	With these loops, making a small change in the controller output, will cause the process variable to ramp until it hits a limit. The larger the change, the faster the ramp. Also the smaller the integral time the faster it will move. It is a common misconception that integral time in the controller is not required to hold setpoint with an integrating process. Most control loops are self-regulating. Self-regulating means that with a change in the controller output, the process variable will move and then settle. Integrating loops are also described as non-self-regulating. The most common example of an integrating processes is Tank Level.	*Process Control Engineering*
Integration of renewable energy	Feeding electricity from intermittent sources of energy such as wind and solar into the power network without causing any disturbance to the power supply.	*Electrical*
Integration	Representation inversely related to time rate of change. Example: integrating velocity yields displacement. In a computer, this is accomplished by dividing the velocity signal by jΩ, where Ω is frequency multiplied by 2Π.	*Reliability Engineering*
Integrator	Circuitry which converts an acceleration signal to a velocity signal or a velocity signal to a displacement signal.	*Reliability Engineering*
Intel Mobile Voltage Positioning	A technology in which the processor voltage (VCC) is dynamically adjusted, based on the processor activity, to reduce processor power. It allows higher processor clock speed at a given power consumption; or lower consumption at a given clock frequency.	*Electrical Engineering*
Intel Mobile Voltage Positioning	A technology in which the processor voltage (VCC) is dynamically adjusted, based on the processor activity, to reduce processor power. It allows higher processor clock speed at a given power consumption; or lower consumption at a given clock frequency.	*Electrical Engineering*
Intellectual Property	Intellectual Property Creations of the intellect such as trade knowledge, technical information, and literary or artistic work, including patents, copyrights, and trademarks.	*Electrical Engineering*
Intellectual Property	Intellectual Property Creations of the intellect such as trade knowledge, technical information, and literary or artistic work, including patents, copyrights, and trademarks.	*Electrical Engineering*
Intelligence Tests	examinations or batteries of tests which attempt to measure an individual's capacity or potential.	*Industrial Relations*
Intelligent well	An oil or gas well equipped with monitoring equipment and completion components that allow for automatic or remote optimization of production.	*Petroleum Drilling*
Intensifier	A device which converts low pressure fluid power into higher pressure fluid power.	*Oil Analysis*
Intensifier	A device which converts low pressure fluid power to higher pressure fluid power.	*Mechanical, Process, and Operations*
Intensity	The amount of a quantity per unit floor space. This method adjusts either the amount of energy consumed or expenditures spent, for the effects of various building characteristics, such as size of the building, number of workers, or number of operating hours, to facilitate comparisons of energy across time, fuels, and buildings.	*Energy*
Intensity per hour	Total consumption of a particular fuel(s) divided by the total floor space of buildings that use the fuel(s) divided by total annual hours of operation.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Intensive grazing	the practice of rotating livestock between pastures to reduce overgrazing	*Agriculture*
Intent	a rather commonly used term in labor-management relations particularly in the application of the provisions of the collective bargaining agreement.	*Industrial Relations*
Intention to treat analysis	A method for data analysis in a randomized clinical trial in which individual outcomes are analyzed according to the group to which they have been randomized, even if they never received the treatment they were assigned. By simulating practical experience it provides a better measure of effectiveness. (versus efficacy)	*Analysis*
Interaction	the effects on underground workings from old workings either above or below due to the re-distribution of stress in the ground.	*Mining*
Interburden	Material of any nature that lies between or separates coal seams. Term is primarily used in surface mining.	*Energy*
Intercept, y-intercept	The place at which a line on a graph intersects the axis. In regression analysis, this statistic refers specifically to the y-intercept, a.	*Quality*
Interchange (Electric utility)	**T**he agreement among interconnected utilities under which they buy, sell and exchange power among themselves. This can, for example, provide for economy energy and emergency power supplies.	*Energy*
Interchange (electric)	Energy transfers that cross Balancing Authority boundaries. NERC definition	*Energy*
Interchange authority (electric)	The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes. NERC definition	*Energy*
Interchange energy	Kilowatt hours delivered to or received by one electric utility or pooling system from another. Settlement may be payment, returned in kind at a later time, or accumulated as energy balances until the end of the stated period.	*Energy*
Interchange transaction (electric)	An agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries. NERC definition	*Energy*
Interchangeability	Interchangeability is the ability, in an open system, to swap instruments on a network without losing functionality.	*Control Engineering*
Interchangeability Error	A measurement error that can occur if two or more probes are used to make the same measurement. It is caused by a slight variation in characteristics of different probes.	*General Engineering*
Intercity bus	A bus designed for high speed, long distance travel; equipped with front doors only, high backed seats, and usually restroom facilities.	*Energy*
Intercity Differential	an existing or established wage differential between cities.	*Industrial Relations*
Interconnected Porosity	A network of pores in and extending to the surface of a coating.	*Paint and Coatings*
Interconnected system	A system consisting of two or more individual power systems normally operating with connecting tie lines.	*Energy*
Interconnection	Two or more electric systems having a common transmission line that permits a flow of energy between them. The physical connection of the electric power transmission facilities allows for the sale or exchange of energy.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Interconnection (Electric utility)	The linkage of transmission lines between two utility, enabling power to be moved in either direction. Interconnections allow the utilities to help contain costs while enhancing system reliability.	*Energy*
Intercooler	A device which cools a gas between the compressive steps of a multiple stage compressor.	*Lubrication*
Interdepartmental	the term is often used to apply to transfers or promotions between departments or units of a company.	*Industrial Relations*
Interdepartmental sales	Includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.	*Energy*
Interdepartmental Service (Electric)	Amounts charged by the electric department at specified rates for electricity supplied by other utility departments.	*Energy*
Interdepartmental service (electric)	Interdepartmental service includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.	*Energy*
Interdependence of Labor	the extent to which, in a mechanized society with a high degree of specialization, workers are dependent on each other not only for the completion of a particular job, but also for providing the basic services needed to maintain a city or community.	*Industrial Relations*
Interest coverage ratio	The number of times that fixed interest charges were earned. It indicates the margin of safety of interest on fixed debt. The times-interest-earned ratio is calculated using net income before and after income taxes; and the credits of interest charged to construction being treated as other income. The interest charges include interest on long-term debt, interest on debt of associated companies, and other interest expenses.	*Energy*
Interface	The means by which two systems or devices are connected and interact with each other.	*General Engineering*
Interface	a common boundary between electronic systems, or parts of a single system.	*Electrical Engineering*
Interface Circuit	A circuit that links one type of device with another. It's function is to produce the required current and voltage levels for the next stage of circuitry from the previous stage.	*Electrical Engineering*
Interfacial strength	Strength of the bonding between a composite matrix and its reinforcing phase.	*Material Process*
Interfacial tension (IFT)	The energy per unit area present at the boundary of two immiscible liquids. It is usually expressed in dynes/cm (ASTM Designation D 971.)	*Oil Analysis*
Interference	The condition occurring when the area of influence of a water well comes into contact with or overlaps that of a neighboring well.	*Petroleum Engineering*
Interference	an employer unfair labor practice under the Taft-Hartley Act.	*Industrial Relations*
Interference experiment	A method validation experiment which estimates the systematic error resulting from interference and lack of specificity. One test sample is prepared by adding the suspected interferer to a sample containing the analyte of interest. A second aliquot of the original sample is diluted by the same amount, then both samples are analyzed by the test method. The average difference of replicate measurements and the average difference for a group of interference samples provide an estimate of constant systematic error.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Interference, Common Mode	A form of interference which appears between measuring circuit terminals and ground. Note: May also be referred to as interference, longitudinal, however interference, common mode is the preferred term.	*Process Control*
Interference, Differential Mode	See interference, normal mode.	*Process Control*
Interference, Electrical	Any spurious voltage or current arising from external sources and appearing in the circuits of a device.	*Process Control*
Interference, Electrostatic Field	A form of interference induced in the circuits of a device due to the presence of an electrostatic field. Note: It may appear as common mode or normal mode interference in the measuring circuits.	*Process Control*
Interference, Longitudinal	See interference, common mode.	*Process Control*
Interference, Magnetic Field	A form of interference induced in the circuits of a device due to the presence of a magnetic field. Note: I may appear as common mode	*Process Control*
Interference, Normal Mode	A form of interference which appears between measuring circuit terminals. Note: May also be referred to as interference, differential mode or interference, transverse, however interference, normal mode is the preferred term.	*Process Control*
Intergovernmental Panel on Climate Change (IPCC)	A panel established jointly in 1988 by the World Meteorological Organization and the United Nations Environment Program to assess the scientific information relating to climate change and to formulate realistic response strategies.	*Energy*
Intergranular	between the individual grains in a rock or sediment.	*Chemical*
Intergranular corrosion	Intergranular corrosion is the attack concentrated at the grain boundaries without appreciable corrosion evident on the grains themselves. Localized attack at the grain boundaries of a metal or alloy is called intergranular corrosion.	*Material Process*
Interim Agreement	a collective bargaining agreement which is designed to maintain temporary truce or to maintain conditions of employment pending the settlement of a dispute or pending the signing of the final contract.	*Industrial Relations*
Interim analysis	Analysis comparing intervention groups at any time before the formal completion of a trial, usually before recruitment is complete. Often used with stopping rules so that a trial can be stopped if participants are being put at risk unnecessarily. Timing and frequency of interim analyses should be specified in the protocol.	*Quality Engineering*
Interim Grievance Procedure	a rather infrequent procedure set up prior to the negotiation of a first contract.	*Industrial Relations*
Interior Region (with Gulf Coast)	Consists of Arkansas, Illinois, Indiana, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas, and Western Kentucky.	*Energy*
Interleave	To organize the data sectors on a computer hard disk, so the read/write heads can access information faster.	*Electrical Engineering*
Interleave	To organize the data sectors on a computer hard disk, so the read/write heads can access information faster.	*Electrical Engineering*
Interlocking directorates	The holding of a significant position in management or a position on the corporate board of a utility while simultaneously holding a comparable position with another utility, or with a firm doing business with the utility.	*Energy*

Term	Definition	*Industry*
Intermediary outcomes	See Surrogate endpoints	*Quality Engineering*
Intermediate	1) An organic chemical produced because it is a necessary intermediate stage in the manufacture of one or usually more ultimate end-products such as dyes, drugs, etc. 2) An oxide whose structural role in a glass is between that of a network former and a network modifier.	*Material Process*
Intermediate compound	A chemical compound formed between two components in a binary system.	*Material Process*
Intermediate Bed	A middle section of conveyor not containing the drive or tail assemblies.	*Manufacturing*
Intermediate Frequency	Radio communications systems modulate a carrier frequency with a baseband signal in order to achieve radio transmission. In many cases, the carrier is not modulated directly. Instead, a lower IF signal is modulated and processed. At a later circuit stage, the IF signal is converted up to the transmission frequency band.	*Electrical Engineering*
Intermediate grade gasoline	A grade of unleaded gasoline with an octane rating intermediate between "regular" and "premium." Octane boosters are added to gasolines to control engine pre-ignition or "knocking" by slowing combustion rates.	*Energy*
Intermediate load (electric system)	The range from base load to a point between base load and peak. This point may be the midpoint, a percent of the peak load, or the load over a specified time period.	*Energy*
Intermediate Load (Electric Systems)	Range from base load to a point between that and peak load.	*Energy*
Intermediate Report	prior to September 3rd, 1963, this was the recommended order handed down by a trial examiner for the NLRB following hearings in a complaint case involving charges of unfair practices under the Taft-Hartley Act.	*Industrial Relations*
Intermediate rock	An igneous rock containing 52% to 66% quartz.	*Mining*
Intermediate section	A term used in belt and chain conveyor network to designate a section of the conveyor frame occupying a position between the head and foot sections.	*Mining*
Intermetallic	A compound of two metals that has a distinct chemical formula. The bonds in intermetallic compounds are often partly ionic.	*Engineering Physics*
Intermittent Affairs of Unions	those activities which involve the relationship of the union to its members and the local union to its international organization.	*Industrial Relations*
Intermittent electric generator or intermittent resource	An electric generating plant with output controlled by the natural variability of the energy resource rather than dispatched based on system requirements. Intermittent output usually results from the direct, non-stored conversion of naturally occurring energy fluxes such as solar energy, wind energy, or the energy of free-flowing rivers (that is, run-of-river hydroelectricity).	*Energy*
Intermittent Industry	sometimes referred to as a noncontinuous industry.	*Industrial Relations*
Intermittent Resources	Resources whose output depends on some other factory that cannot be controlled by the utility e.g. wind or sun. Thus, the capacity varies by day and by hour.	*Energy*
Intermittent Worker	a person who normally works only a small number of days during a work period or season.	*Industrial Relations*
Intermodal	Use of more than one mode of transportation to move product from shipper to receiver; e.g., placing truck trailers loaded with commodities on rail flatcars for cross country movement.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Intermodulation	A process whereby signals mix together in a circuit and nonlinearities in the circuit create undesired output frequencies that are not present at the input.	*Electrical Engineering*
Intermodulation Distortion	When two signals mix in non-linear circuits or devices, new frequency components are created that are not in the original signal. The resulting signal error is called intermodulation distortion, or IMD.	*Electrical Engineering*
Intermodulation Distortion	When two signals mix in non-linear circuits or devices, new frequency components are created that are not in the original signal. The resulting signal error is called intermodulation distortion, or IMD.	*Electrical Engineering*
Internal Collector Storage (ICS)	A solar thermal collector in which incident solar radiation is absorbed by the storage medium.	*Energy*
Internal combustion plant	A plant in which the prime mover is an internal combustion engine. An internal combustion engine has one or more cylinders in which the process of combustion takes place, converting energy released from the rapid burning of a fuel-air mixture into mechanical energy. Diesel or gas-fired engines are the principal types used in electric plants. The plant is usually operated during periods of high demand for electricity.	*Energy*
Internal Diameter	The diameter of a circle coinciding with the topes of the teeth of an internal gear.	*Mechanical Engineering*
Internal force	Forces which hold an object together when external forces or other loads are applied. Internal forces are sometimes called resisting forces since they resist the effects of external forces. Internal hinge: see pin connection.	*Engineering Physics*
Internal Gear	Gear: A gear with teeth on the inner cylindrical surface.	*Mechanical Engineering*
Internal House Organ	a company publications designed primarily for public relations purposes and directed to employees for stockholders of the company	*Industrial Relations*
Internal Oxidation	The formation of isolated particles of corrosion products beneath the surface of the metal or coating. (This occurs as a result of preferential oxidation of certain alloy constituents by inward diffusion of oxygen, nitrogen, sulfur, etc.)	*Paint and Coatings*
Internal pressure relief	A self relieving feature in non-independent seating valves that automatically relieves excessive internal body pressure caused by sudden changes in line pressures. By means of the piston effect principal the excessive body pressure will move the seat away from its seating surface and relieve it to the lower pressure side.	*Mechanical*
Internal Reference	An on-chip voltage reference.	*Electrical Engineering*
Internal Reference Electrode (Element)	The reference electrode placed internally in a glass electrode.	*General Engineering*
Internal stress	also known as residual stress, stress present in a steel member or fabrication that is free of external forces or thermal gradients	*Materials Process*
Internal Thread	A screw thread which is formed in holes, such as in nuts.	*Maintenance*
Internal validity	The extent to which the design and conduct of a study are likely to have prevented bias. Variation in quality can explain variation in the results of studies included in a systematic review. More rigorously designed (better quality) trials are more likely to yield results that are closer to the truth. (Also called methodological quality but better thought of as relating to bias prevention.) See also: Bias prevention, External validity, Validity Also called: Methodological quality	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Internal venting	holes on the inside of enclosed fabrications that allow cleaning solutions, zinc, and any gases to freely flow throughout the structure	*Materials Process*
Internally Lubricated	Wire rope or strand having all of its wire components coated with lubricants.	*Wire Rope & Cable*
International bunker fuels	See Bunker fuels.	*Energy*
International Confederation of Free Trade Unions	the Confederation is the largest international organization of free trade unions in the world.	*Industrial Relations*
International Labor Organization	an organization founded during the peace conference following World War I and established as part of the League of Nations.	*Industrial Relations*
International Labor Review	the official monthly Journal of the ILO it contains articles, reports, and statistical series on working conditions and standards of member countries.	*Industrial Relations*
International Standards Organisation	('ISO') this standards organization has formed a partnership with the American Petroleum Institute to establish equipment and quality standards and specifications. ISO and API have reciprocal cross-referenced and dual standards.	*Petroleum Engineering*
International Telecommunication Union	An international organization under the UN that is concerned with telecommunications.	*Electrical Engineering*
International Union	the term applied to most unions in the United States which have affiliated locals in the United States and some in other countries, mostly Canada.	*Industrial Relations*
International Workingman's Association	the international workingman's association sometimes known as the "first international" which had been formed in Europe in 1864 moved its headquarters to New York in 1872 and dissolved in 1875	*Industrial Relations*
Internationale	a revolutionary song adopted by a socialist movement and sometimes by labor organizations which had strong socialist leanings	*Industrial Relations*
Internet Protocol	Standard method for data transfer used on the Internet. Also known as IP or TCP/IP.	*Electrical Engineering*
Internet Service Provider	Company that offers connection to the Internet.	*Electrical Engineering*
Internet Service Provider	Company that offers connection to the Internet.	*Electrical Engineering*
internode	A section of stem between nodes.	*Agriculture*
Interoperability	Interoperability is the ability to plug instruments or other elements produced by more than one manufacturer into a fieldbus network and still have them able to communicate with each other and the control system(s). They may, however, have different levels of functionality.	*Control Engineering*
Interpass Temperature	In a multiple-pass weld, the minimum or maximum temperature of the deposited weld metal before the next pass is started.	*Maintenance and Repair*
Interplanar spacing	Distance between the centers of atoms in two adjacent crystal planes.	*Material Process*
Interplant	between plants	*Industrial Relations*
Interpolate	To compute intermediate values.	*Manufacturing*
Interpretative Bulletin	and explanatory publication setting out the official interpretations of a government agency about the meaning of the particular statue which is has the responsibility of enforcing.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Interpreter	A system program that converts and executes each instruction of a high-level language program into machine code as it runs, before going onto the next instruction.	*General Engineering*
Inter-rater reliability	The degree of stability exhibited when a measurement is repeated under identical conditions by different raters. Reliability refers to the degree to which the results obtained by a measurement procedure can be replicated. Lack of inter-rater reliability may arise from divergences between observers or instability of the attribute being measured. See also: Intra-rater reliability	*Quality Engineering*
Interrogate (Gate)	A function usually performed by gating light source-photoreceiver pair; asking (interrogating) whether a certain condition has been met (for example, proper fill level in boxes moving along a conveyor), and thereby enabling or disabling inspect light source-photoreceiver pair (which will count only full boxes).	*Electrical Engineering*
Interrupt	To stop a process in such a way that it can be resumed.	*General Engineering*
Interrupted Welding	Interruption of welding and preheat by allowing the weld area to cool to room temperature as generally permitted on carbon-steel and on chrome-moly alloy-steel piping after sufficient weld passes equal to at least one-third of the pipe wall thickness or two weld layers, whichever is greater, have been deposited.	*Maintenance and Repair*
Interrupted time series	A research design that collects observations at multiple time points before and after an intervention (interruption). The design attempts to detect whether the intervention has had an effect significantly greater than the underlying trend.	*Quality Engineering*
Interruptible gas	Gas sold to customers with a provision that permits curtailment or cessation of service at the discretion of the distributing company under certain circumstances, as specified in the service contract.	*Energy*
Interruptible load	This Demand-Side Management category represents the consumer load that, in accordance with contractual arrangements, can be interrupted at the time of annual peak load by the action of the consumer at the direct request of the system operator. This type of control usually involves large-volume commercial and industrial consumers. Interruptible Load does not include Direct Load Control.	*Energy*
Interruptible load or interruptible demand (electric)	Demand that the end-use customer makes available to its Load-Serving Entity via contract or agreement for curtailment NERC definition	*Energy*
Interruptible Loads	Loads that can be interrupted in the event of capacity or energy deficiencies on the supplying system.	*Energy*
Interruptible or curtailable rate	A special electricity or natural gas arrangement under which, in return for lower rates, the customer must either reduce energy demand on short notice or allow the electric or natural gas utility to temporarily cut off the energy supply for the utility to maintain service for higher priority users. This interruption or reduction in demand typically occurs during periods of high demand for the energy (summer for electricity and winter for natural gas).	Energy
Interruptible power	Power and usually the associated energy made available by one utility to another. This transaction is subject to curtailment or cessation of delivery by the supplier in accordance with a prior agreement with the other party or under specified conditions.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Interruptible Power	This refers to power whose delivery can be curtailed by the supplier, usually under some sort of agreement by the parties involved.	*Energy*
Interruptible Rate	A special utility rate given to certain industrial customer who agrees to have their service reduced or temporarily stopped as part of an agreement with their electric provider.	*Energy*
Interruptible Rates	These provide power at a lower rate to large industrial and commercial customers who agree to reduce their electricity use in times of peak demand.	*Energy*
Interstate Commerce	refers to trade or traffic between or among the states	*Industrial Relations*
Interstate companies	Natural gas pipeline companies subject to Federal Energy Regulatory Commission (FERC) jurisdiction.	*Energy*
Interstate pipeline	Any person engaged in natural gas transportation subject to the jurisdiction of Federal Energy Regulatory Commission (FERC) under the Natural Gas Act.	*Energy*
Interstate pipeline purchase	Any gas supply contracted from and volumes purchased from other interstate pipelines, overland natural gas import purchases, and LNG, SNG, or coal gas purchases from domestic or foreign sources. Purchases from intrastate pipelines to section 311 (b) of the NGPA of 1978 and from independent producers are not included with interstate pipelines purchase.	*Energy*
Interstitial solid solution	An atomic scale combination of more than one kind of atom, with a solute atom located in an interstice of the solvent crystal structure.	*Material Process*
Interstitialcy	Atom occupying an interstitial site not normally occupied by an atom in the perfect crystal structure or an extra atom inserted into the perfect crystal such as that two atoms occupy position close to a singly occupied atomic site in the perfect structure.	*Material Process*
Inter-Symbol Interference	A form of interference that occurs when echoes of a radio-signal interfere with the original signal. ISI can reduce the effective data rate of wireless LAN transceivers.	*Electrical Engineering*
Inter-Union Dispute	a conflict between two unions over membership of employees or over the work or job opportunities.	*Industrial Relations*
Interval Metering	The process by which power consumption is measured at regular intervals in order that specific load usage for a set period of time can be determined.	*Energy*
Interveinal	Between veins.	*Forestry*
Intervention	The process of intervening on people, groups, entities or objects in an experimental study. In controlled trials, the word is sometimes used to describe the regimens in all comparison groups, including placebo and no-treatment arms. See also: Control, Experimental intervention, Treatment	*Quality Engineering*
Intervention (scheduled/ planned)	Action taken systematically in a period of time independent of machine condition. The time period may be fixed (calendar based) or measured according to machine utilization (running hours based).	*Maintenance*
Intervention group	A group of participants in a study receiving a particular health care intervention. Parallel group trials include at least two intervention groups.	*Quality Engineering*
Intervention study	See Clinical trial	*Quality Engineering*
Interview (employment)	a technique used in the selection of employees usually after preliminary tests and other measures have been completed by the applicant.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Interviewer bias	Systematic error due to interviewer's subconscious or conscious gathering of selective data.	*Analysis*
Intimidation	efforts to interfere with the right of workers to self-organization by coercion or intimidation is prohibited under federal law.	*Industrial Relations*
Intracol	Trade mark for a series of long chain fatty acid amides and their acid salts, used as emulsifiers, dispersing agents and textile lubricants.	*Material Process*
Intramural	Within (the walls or boundaries of) a community or institution (e.g. a university). Used to distinguish from 'external' (extramural) sources of support (such as funding).	*Quality Engineering*
Intranet	A secure, internal, corporate Internet-based network.	*Quality*
Intransit deliveries	Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory, and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.	*Energy*
Intransit receipts	Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country, and redeliveries to the United States of U.S. gas transported across foreign territory.	*Energy*
Intra-rater reliability	The degree of stability exhibited when a measurement is repeated under identical conditions by the same rater. Reliability refers to the degree to which the results obtained by a measurement procedure can be replicated. Lack of intra-rater reliability may arise from divergences between instruments of measurement, or instability of the attribute being measured. See also: Inter-rater reliability	*Quality Engineering*
Intrastate Commerce	trade, traffic, or communication wholly within the state and subject to regulation by the state.	*Industrial Relations*
Intrastate companies	Companies not subject to Federal Energy Regulatory Commission (FERC) jurisdiction.	*Energy*
Intrastate pipeline	Any person engaged in natural gas transportation (not including gathering) that is not subject to the jurisdiction of the Commission under the Natural Gas Act (other than any such pipeline that is not subject to the jurisdiction of the Commission solely by reason of Section 1(c) of the Natural Gas Act).	*Energy*
Intraveinal	Associated along or within veins.	*Forestry*
Intrinsic gettering	The capture of oxygen in a silicon device by heat treating the silicon wafer to form SiO2 precipitates below the surface region where the integrated circuit is being developed.	*Material Process*
Intrinsic permeability	a measure of the relative ease with which a permeable medium can transmit a fluid (liquid or gas). Intrinsic permeability is a property only of the medium and is independent of the nature of the fluid.	*Chemical*
Intrinsic Safety	Intrinsic safety is intended for products in which the level of electrical energy circulating or stored in the product is insufficient to ignite a surrounding explosive atmosphere even under fault conditions.	*Reliability Engineering*
Intrinsic safety	A set of standards that ensures a particular device is unable to create enough energy to ignite a flammable gas-rich environment.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Intrinsic semiconductor	Material with semiconducting behavior independent of any impurity additions.	*Material Process*
Intrinsic semiconductors	pure materials having a conductivity range between that of insulators and conductors	*Physics*
Intrinsically Safe	Refers to equipment or wiring which is incapable of releasing sufficient electrical or thermal energy under either abnormal or normal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignited concentration.	*Electrical Engineering*
Intrinsically Safe	Limits electrical/thermal energy to levels incapable of causing ignition. External barriers are required.	*Electrical Engineering*
Intrusive	A body of igneous rock formed by the consolidation of magma intruded into other rocks, in contrast to lavas, which are extruded upon the surface.	*Mining*
Intrusive Rocks	Igneous rocks formed from magma injected beneath the earth's surface. These rocks have large crystals caused by slow cooling.	*Petroleum Engineering*
Inulin (C6H10O5)n (alant starch, menyanthin)	Horny, colorless, amorphous lumps or white powder, hygroscopic. Soluble in water. It is used in diabetic bread and manufacture of fructose.	*Material Process*
In-use (vehicles)	Implies that a vehicle is:	*Energy*
Invariant Point	A point on a binary phase diagram at which three phases are in equilibrium.	*Engineering Physics*
Invariant point	Point in a phase diagram that has zero degrees of freedom.	*Material Process*
Inventoriable Costs	Synonym for product costs.	*Procurement*
Inventory	a list of current goods that you have or own	*Agriculture*
Inventory	Quantitative method used to estimate the actual volume, composition, and market value of standing timber.	*Forestry*
Inventory Management	The process by which inventory is controlled. Typically this includes: Tracking usage of stock items	*Maintenance*
Inventory Management	The formal management of the timing and quantities of goods to be ordered and stocked by an organization in order that demand can always be satisfied without excess expenditure.	*Reliability Engineering*
Inventory of Employee Skills	a compilation or listing of the ability or training or individual employees.	*Industrial Relations*
Inventory turn rate	A measure of asset management capability (see "annual total inventory turns").	*Quality*
Inverse Multiplexing over ATM	An MGX card module that supports T3 or E3 inverse multiplexing on up to eight T1 or E1 lines.	*Electrical Engineering*
Inverse power law	An accelerated life testing model commonly used when the accelerating factor is a single, non-thermal stress.	*Reliability Engineering*
Inverse spinel	Compound crystal structure associated with ferrimagnetic ceramics and a variation of the spinel structure.	*Material Process*
Inverse Voltage (PIV) or Peak Reverse Voltage (PRV)	Refers to the maximum voltage a diode or other device can withstand in the reverse-biased direction before breakdown. Also may be called Reverse Breakdown Voltage.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Inverse Voltage (PIV) or Peak Reverse Voltage (PRV)	refer to the maximum voltage a diode or other device can withstand in the reverse-biased direction before breakdown. Also may be called Reverse Breakdown Voltage.	*Electrical Engineering*
Invert sugar	A mixture of 50% glucose and 50% fructose obtained by the hydrolysis of sucrose. It absorbs water readily, and is usually only handled as a syrup. Invert sugar is often incorporated in products where loss of water must be avoided. Commercially it is obtained from the inversion of a 96% cane sugar solution. It is used in food industry, brewing industry and medicine.	*Material Process*
Invertase (sucrose, invertin)	Enzyme produced by yeast, white powder, soluble in water. Catalyzes the conversion of sucrose (ordinary sugar) to glucose and levulose (fructose) during fermentation of sugars, and in production of invert sugar for syrups and candy.	*Material Process*
Inverter	An electrical device for converting direct current (DC) into alternating current (AC). (See also Rectifier.)	*Electrical*
Inverting Switching Regulator	A switch-mode voltage regulator in which output voltage is negative with respect to its input voltage.	*Electrical Engineering*
Investment of municipality	The investment of the municipality in its utility department, when such investment is not subject to cash settlement on demand or at a fixed future time. Include the cost of debt-free utility plant constructed or acquired by the municipality and made available for the use of the utility department, cash transferred to the utility department for working capital, and other expenditures of an investment nature.	*Energy*
Investments and advances to unconsolidated affiliates	The balance sheet account representing the cost of investments and advances to unconsolidated affiliates. Generally, affiliates that are less than 50-percent owned by a company may not be consolidated into the company's financial statements.	*Energy*
Investor-owned utility (IOU)	A privately-owned electric utility whose stock is publicly traded. It is rate regulated and authorized to achieve an allowed rate of return.	*Energy*
Investor-Owned Utility (IOU)	An IOU is a form of electric utility owned by a group of investors. Shares of IOUs are traded on public stock markets.	*Energy*
Invoice	A bill for goods or service being purchased that includes pertinent information with respect to the quantity, price, terms, and nature of delivery.	*Procurement*
Involuntary Check-off	a form of dues deduction by the employer in which the employee has no choice.	*Industrial Relations*
Involute	The curve formed by the path of a point on a straight line, called the generatrix, as it rolls along a convex base curve. (The base curve is usually a circle.) This curve is generally used as the profile of gear teeth.	*Mechanical Engineering*
Iodamine	Trade mark for betaine hydroiodide. White odorless crystals, soluble in water, in alkalies and in organic solvents. Insoluble in fats and oil.	*Material Process*
Iodargyrite (AgI)(iodyrite)	A natural silver iodide. Color yellow or yellowish green, luster resinous to adamantine, streak shining yellow.	*Material Process*
Iodesin (C20H8I4O5) (tetraiodofluorescein)	Red power	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Iodesin ($C_{20}H_8I_4O_5$) (tetraiodofluorescein) Red power	Iodesin ($C_{20}H_8I_4O_5$) (tetraiodofluorescein) Red power soluble in dilute alkalies, slightly soluble in alcohol and ether, insoluble in water. It is used as indicator in analytical chemistry.	*Material Process*
Iodine cyanide (ICN) (cyanogen iodide)	Iodine cyanide (ICN)(cyanogen iodide) Colorless needles, very pungent odor, acrid taste, violent poison, soluble in water, alcohol, and ether. Poison class B, poison labeled.	*Material Process*
Iodine number	The percentage of iodine absorbed into chemical combination by oils, waxes, and resins containing unsaturated compounds. The iodine number is fairly definite for each type of material and is used to specify or identify products of a given quality.	*Material Process*
Iodine tincture	A solution of iodine and potassium iodide or sodium iodide in alcohol A reddish brown liquid having the odors of iodine and alcohol. Contains from 44-50% by volume of alcohol and 2g of iodine per 100 cubic cm3.	*Material Process*
Iodine tincture, colorless	A solution of iodine and potassium iodide in an aqueous solution of sodium thiosulfate.	*Material Process*
Iodinemonobromide (IBr) (bromine iodide)	Crystalline, purplish-black mass. Soluble in water, alcohol and ether.	*Material Process*
Iodinemonochloride (ICl)	Reddish brown, oily liquid, two solid forms, alpha and beta. Soluble in alcohol, water, and dilute hydrochloric acid. Corrosive liquid, white label.	*Material Process*
Iodoacetophenone ($C_6H_5COCH_2I$)	alfa-iodoacetophenone ($C_6H_5COCH_2I$) Crystals, soluble in alcohol, benzene, ether, insoluble in water.	*Material Process*
Iodoalphionic acid (C6H5CH(COOH) CH2C6H2I2 OH)	Iodoalphionic acid (C6H5CH(COOH)CH2C6H2I2 OH) White crystals or as white or faintly yellowish powder, having a faint, characteristic odor and taste. Insoluble in water, readily soluble in alcohol and ether. Slightly soluble in benzene and chloroform. Soluble in both alkali carbonate and hydroxide solutions.	*Material Process*
Iodocresol (C6H3I(CH3) OH) (cresol iodide)	Reddish-violet, amorphous powder, odorless. Contains 55% iodine. Soluble in chloroform, alkaline solutions, difficulty soluble in ether, insoluble in water, alcohol, and acids. It derivates by interaction of potassium iodide solution and a cresol-water emulsion.	*Material Process*
Iodoform (CHI3) (triiodomethane)	Small, greenish yellow or lustrous crystals or powder, characteristic penetrating odor. Soluble in alcohol, glycerol, chloroform, carbon disulfide and ether. Insoluble in water. It is used in medicine, external.	*Material Process*
Iodozen (C6H2I2 (COOCH3)ONa)	Yellowish-white powder. Insoluble in water.	*Material Process*
IO-Link	IO-Link is a 24-volt, three-wire, half-duplex, point-to-point sensor and actuator communication interface. Remote configuration, diagnostics, event triggering and process data readout are made possible from a PLC via a three layer protocol stack. IO-Link can be used for simple binary sensors and smart sensors.	*Electrical Engineering*
IO-Link	IO-Link is a 24-volt, three-wire, half-duplex, point-to-point sensor and actuator communication interface. Remote configuration, diagnostics, event triggering and process data readout are made possible from a PLC via a three layer protocol stack. IO-Link can be used for simple binary sensors and smart sensors.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Iomag	Trade mark for a potassium iodide mixture containing 90% potassium iodide and made free-flowing with 8% magnesium carbonate and 2% potassium hydroxide.	*Material Process*
Ion	An element or compound that has gained or lost an electron so it is no longer neutral electrically.	*Petroleum Engineering*
Ion Charged species due to an electron(s) added to, or removed from, a neutral atom	Ion Charged species due to an electron(s) added to, or removed from, a neutral atom. 1. In solutions, an electrically charged atom or group of atoms. 2. In gases electrically charged molecules. Ions may be either positively or negatively charged, indicating that the atom has either lost or gained one electron.	*Material Process*
Ion exchange	Reversible exchange of ions adsorbed on a mineral or synthetic polymer surface with ions in solution in contact with the surface. A chemical process used for recovery of uranium from solution by the interchange of ions between a solution and a solid, commonly a resin.	*Energy*
Ion Exchange	A transfer of ions between two electrolytes or between an electrolyte solution and a complex. The term normally denotes the processes of purification, separation and decontamination of aqueous and other ion-containing solutions with an insoluble (usually resinous) solid.	*Lubrication*
Ion exchange resins	Synthetic resins containing active groups (usually sulfonic, carboxylic, phenol, or substituted amino groups) that give the resin the property of combining with or exchanging ions between the resin and a solution. Thus a resin with active sulfonic groups can be converted to the sodium form and will then exchange its sodium ions with the calcium ions present in hard water. Amberlite' resins are of this type.	*Material Process*
Ion exchange	An exchange of ions in a crystal with irons in a solution. Used as a method for recovering valuable metals, such as uranium, from solution.	*Mining*
Ion Implantation	A process whereby impurity ions are accelerated to a specific energy level and impinged upon the silicon wafer. The energy level determines the depth to which the impurity ions penetrate the silicon. Impingement time determines the impurity concentration. Thus, it is possible to independently control these parameters, and buried piezoresistors are easily produces. Ion implantation is increasingly used throughout the semiconductor industry to provide a variety of products with improved performance over those produced by diffusion.	*Electrical Engineering*
Ion Nitriding	Also called plasma nitriding. A vacuum glow discharge technique of nitriding. See Nitriding.	*Paint and Coatings*
Ion Plating	A process in which positive ions produced in a glow discharge are attracted to the substrate which is connected as the cathode. The ions are typically made by evaporation.	*Paint and Coatings*
Ionac	Trade mark for a line of cation and anion exchangers.	*Material Process*
Ionac	Trade mark for a line of cation and anion exchangers.	*Material Process*
Ionic bond	Primary, chemical bond involving electron transfer between atoms.	*Material Process*
Ionic Bonding	the simplest type of bonding between atoms, the donation of an electron from an electropositive material to an adjacent electronegative material	*Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ionic concentration cell	Electrochemical cell in which the corrosion and associated electrical current are due to a difference in ionic concentration.	*Material Process*
Ionic Mobility	Defined similarly to the mobility of nonelectrolytic particles, viz., as the speed that the ion obtains in a given solvent when influenced by unit power.	*Electronic Process*
Ionic packing factor (IPF)	The fraction of the unit cell volume for a ceramic occupied by the various cations and anions.	*Material Process*
Ionic Strength	The weight concentration of ions in solution, computed by multiplying the concentration of each ion in solution (C) by the corresponding square of the charge on the ion (Z) summing this product for all ions in solution and dividing by 2: ionic strength - 1/2_Z2 C.	*General Engineering*
Ionic Strength	The weight concentration of ions in solution, computed by multiplying the concentration of each ion in solution (C) by the corresponding square of the charge on the ion (Z) summing this product for all ions in solution and dividing by 2 - ionic strength - 1/2_Z2 C.	*Electronic Process*
Ion-Implantation	A process in which a beam of positive ions is projected towards and into the surface. It is carried out in partial vacuum and the ions diffuse into the surface layer of the substrate. Typically this is carried out with nitrogen giving a nitrided effect.	*Paint and Coatings*
Ionization	The separation or dissociation of the atoms of a molecule in solution. Some compounds, called electrolytes, dissociate readily in water sodium chloride and hydrochloric acid, for example. Molecules of a gas can also be ionized by passing through an electric field.	*Material Process*
Ionized gas	If a material is exposed to high temperatures or an electrical field, it can become ionized, i.e., its particles can become electrically charged. Also known as plasma, ionized gases can enable an electric current to jump across a gap in an electric circuit. To avoid this problem, circuit breakers are equipped with various insulators that inhibit arc formation. See also Circuit breaker.	*Electrical*
Ionizing radiation	Any electromagnetic or particle radiation capable of producing ions as a direct or indirect result of passing through matter.	*Material Process*
IOU	See Investor-Owned Utility	*Energy*
IP	Institute of Petroleum (UK)	*Petro-Chemical Abbreviations*
IP	European environmental ratings similar to USA NEMA ratings.	*Electrical Engineering*
IP Rate	The Initial Production rate of a well refers to the amount of oil and natural gas initially produced as the well is flowed back (see flowback.) While IP rates can be indicative of how productive the well can be, high IP rates may not translate to sustained long term production or high EUR.	*Petroleum Drilling*
IP Rating	The ingress protection rating of electronic equipment, such as barcode scanners.	*Gears*
IPIECA	International Petroleum Industry Environmental Conservation Association	*Petro-Chemical Abbreviations*
IPM	Integrated Pest Management.	*Agriculture*
IPP	See Independent Power Producer	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
IPTO	independent power take-off	*Petro-Chemical Abbreviations*
IPTS-48	International Practical Temperature Scale of 1948. Fixed points in thermometry as specified by the Ninth General Conference of Weights and Measures which was held in 1948.	*Electrical*
IPTS-68	International Practical Temperature Scale of 1968. Fixed points in thermometry set by the 1968 General Conference of Weights and Measures.	*Electrical*
IPTS-68	International Practical Temperature Scale of 1968. Fixed points in thermometry set by the 1968 General Conference of Weights and Measures.	*Electronic Process*
IR	A portion of the spectrum of light which is not visible (wavelengths which extend beyond 770nm).	*Electrical Engineering*
Iran (1960-present)	Iran (1960-present)	*Energy*
Iraq (1960-present)	Iraq (1960-present)	*Energy*
IRED	Infrared: Emitting Diode: a diode capable of emitting radiant energy in the infrared region of the spectrum.	*Electrical Engineering*
Iridic bromide (IrBr4) (iridium bromide, iridium tetrabromide)	Hygroscopic powder, soluble in alcohol and water.	*Material Process*
Iridic chloride (IrCl4) (iridium chloride, iridium tetrachloride)	Brownish black mass, and hygroscopic. Soluble in water and alcohol.	*Material Process*
Iridite	Trade mark for chromate conversion coatings for zinc, cadmium, copper, bronze, brass, aluminum, magnesium and silver surfaces.	*Material Process*
Irisone	Trade mark for a series of compounds consisting of alpha – and beta-ionones. Available in several grades of purity and used in perfume, soaps, and pharmaceuticals especially for a violet odor. Also, used for chemical synthesis and in some flavors.	*Material Process*
Iron	wrought Highly purified iron that has been uniformly admixed with a small proportion of slag, the mixing occurring while the iron is in a pasty stage somewhat below its melting point. This was the normal product of early iron forges because of the relatively low temperatures reached in such equipment. Wrought iron is now made from pi iron by special purification and mixing procedures referred to as pudding and shotting. A typical composition is carbon 0.1% manganese, 0.1% phosphorus 0.08 to 0.16% (about half of this is in the slag), up to 0.035% sulfur, and 0.1 to 0.2% silicon (all in the slag, which itself is form 1 to 4% of the whole). Higher percentages of carbon and manganese generally indicate contamination with steel. Wrought iron is relatively soft and malleable, has a fibrous structure due to the admixed slag, and shows great resistance to progressive corrosion.	*Material Process*
Iron acetate liquor (iron liquor, black mordant, iron pyrolignite)	Intensely black liquor, sometimes containing copper or tanin. Absorb oxygen from the air. It is used for mordant, especially for alizarine and nitroso dyes, and for dyeing and printing logwood.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Iron and steel industry	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills Establishments primarily engaged in manufacturing hot metal, pig iron, and silvery pig iron from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; and in hot-rolling iron and steel into basic shapes, such as plates, sheets, strips, rods, bars, and tubing.	*Energy*
Iron bacteria	Oxidative bacteria that cause taste, staining, and odor problems in water. The precipitation of iron by the bacteria can build up in piping and heat exchangers to restrict water flow. Although they are not a direct cause of corrosion, differential aeration cells will form under deposits and localized corrosion will appear.	*Chemical Engineering*
Iron balls	ironstone nodules.	*Mining*
Iron black	Fine black powder. It is derivated by the action of zinc upon an acid solution of an antimony salt, a black antimony being precipitated as a fine powder.	*Material Process*
Iron blues	Iron blues are prepared by precipitating a solution of a soluble ferrocyanide salt with iron sulfate, thereby forming a ferrous ferrocyanide which is then oxidized to a ferric ferrocyanide. An ammonium salt is used with sodium ferrocyanide because the blue made from straight sodium ferrocyanide does not have satisfactory pigment properties. It is used for blue ink, laundry blue, paint pigment dyeing paper, and ingredient of fertilizer mixtures.	*Material Process*
Iron buff (Nankin yellow)	Ferric hydroxide dyed on cotton or cotton goods by steeping the latter in a solution of ferrous sulfate, basic ferric sulfate or ferric nitrate and precipitating the hydroxide on the fiber by means of calcium hydroxide solution, sodium hydroxide solution or soda ash.	*Material Process*
Iron cast	Any iron-carbon alloy that contains more than 1.7% carbon, and usually between 2 and 4%. Such iron usually also contains 0.1 to 0.2% sulfur, 0.5-3% silicon, 0.5 to 1% manganese and up to 1% phosphorus. Cannot shaped by hammering, rolling, or pressing.	*Material Process*
Iron ductile	A malleable cast iron produced by the addition of sufficient magnesium and/or cerium to the melt to cause graphite to precipitate as spherulites rather than flakes. It has superior strength, ductility, toughness, machinability and corrosion resistance as compared to gray cast iron and has better castability, finish, and machinability than cast steel.	*Material Process*
Iron Law of Wages	according to economist David Ricardo, wages tend to remain at the subsistence level, the natural price of labor.	*Industrial Relations*
Iron ore cement	Cements in which ferric oxide replaces large part of the alumina. There must be some alumina present, however. Iron-ore cement is rather slow setting and hardening, but is more resistant to sea water than is portland cement. It is light to chocolate brown in color and has a specific gravity higher than portland cement.	*Material Process*
Iron oxide black (FeO Fe2O3) (ferrosofferic oxide, iron oxide, magnetic, iron ethiops, black rouge)	Reddish-black, amorphous powder, soluble in acids, insoluble in water, alcohol and ether. a) It is derivated a) by action of air, steam or carbon dioxide on iron, b) occurs in nature as the mineral magnetite. It is used in metallurgy, medicine, pigment polishing compound, etc.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Iron oxide brown (iron subcarbonate, iron carbonate, precipitated)	Reddish brown powder, containing ferric carbonate with ferric hydroxide Fe(OH)3, and ferrous hydroxide in Fe(OH)2, varying quantities. It is not true oxide. Soluble in acids, insoluble in water and alcohol. It is derivated by the interaction of solution of ferrous sulfate and sodium carbonate. Using as the paint pigment.	*Material Process*
Iron oxide process	A process for the removal of sulfides from a gas by passing the gas through a mixture of iron oxide, Fe2O3, and wood shaving. the iron oxide is converted to iron sulfide and can be regenerated by allowing the iron sulfide to contact air.	*Material Process*
Iron potassium tartrate (Fe2(C4H4O6)3 K2O3 C4H4O6 H2O) (tartrated iron, tartar, chalybeated, boules de Nancy, ferric-potassium tartrate)	Thin transparent scales deep garnet color, sweetish taste, astringent, arsenic limit 5 parts per million. Soluble in water, sparingly in alcohol. It is used in medicine.	*Material Process*
Iron pyrophosphate (Fe4(P2O7)3)(ferric pyrophosphate)	White powder, soluble in acids and carbonated water, insoluble in ordinary water.	*Material Process*
Iron red	A name given to red varieties of ferric oxide that are used as pigment.	*Material Process*
Iron reduced (ferrum reductum)	Elementary iron obtained by chemical process in powdered form. grayish black, amorphous, fine granular powder with no more than a slight luster. Stable in dry air. It is used in medicine and organic synthesis.	*Material Process*
Iron sponge	Finely divided porous form of iron made by reducing an iron oxide at such low temperatures that melting does not occur, usually by mixing iron oxide and coke and applying limited increase in temperature. It is used for precipitating copper or lead from solutions of their salts, removing sulfur compounds from coke-oven gas, and in electrical-furnace steel operations.	*Material Process*
Iron timbers	a term used by older miners for steel supports when they were introduced into mining.	*Mining*
Iron, wrought	Highly purified iron that has been uniformly admixed with a small proportion of slag, the mixing occurring while the iron is in a pasty stage somewhat below its melting point. This was the normal product of early iron forges because of the relatively low temperatures reached in such equipment. Wrought iron is now made from pi iron by special purification and mixing procedures referred to as pudding and shotting. A typical composition is carbon 0.1% manganese, 0.1% phosphorus 0.08 to 0.16% (about half of this is in the slag), up to 0.035% sulfur, and 0.1 to 0.2% silicon (all in the slag, which itself is form 1 to 4% of the whole). Higher percentages of carbon and manganese generally indicate contamination with steel. Wrought iron is relatively soft and malleable, has a fibrous structure due to the admixed slag, and shows great resistance to progressive corrosion.	*Material Process*
Ironclad Agreement (Contract)	sometimes referred to as an anti-union or yellow-dog contract.	*Industrial Relations*
Irone (C14H19O)	Colorless oil, violet odor. Soluble in alcohol, insoluble in water. It is derivated from a ketone found in oil of orris. Used in perfumery (artificial cassia).	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Iron-nickel alloys (nickel-alloys)	Alloys of iron and nickel which are entirely austenitic in character at room temperature are properly called iron-nickel alloys, otherwise they considered nickel-steels. All alloys containing over 34% nickel are austenitic at all temperatures. With lower nickel content the heat treatment helps determine classification as an alloy or a steel. The iron-nickel system has a peculiar range of properties of thermal expansion, thermo-elasticity, and magnetic characteristics. Tremendous variations in magnetic properties are possible. Iron-nickel alloys (austenitic) of nickel content below 30% are non magnetic at ordinary and at high temperatures. The iron-nickel alloys are not heat-hardenable, but addition of aluminum and titanium develops tempering characteristics.	*Material Process*
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Irons, stainless	Alloys containing 3 to 28% chromium, with or without traces of nickel, essentially magnetic and ferritic in character. High chromium irons are brittle after welding. Most popular composition for fabrication is 15 .-18% chromium, 0.1% carbon.	*Material Process*
Irradiated nuclear fuel	Nuclear fuel that has been exposed to radiation in the reactor core at any power level.	*Energy*
Irradiation	The exposure of a material to high energy emissions. In insulations for the purpose of favorably altering the molecular structure. Excessive exposure can be detrimental to the physical and electrical properties.	*Electrical*
Irrathene	Trade mark for a thermosetting form of polyethylene formed by irradiation of polyethylene with high energy cathode rays (electrons). The product does not melt up to 250 °C (482°F) but oxidizes rapidly at elevated temperatures unless protected by an inhibitor. Its resistance to acids, alkalies, and solvents is superior to that of polyethylene and it has excellent electrical properties, even at 200 °C (392 °F). It is available in films and tapes used for packing and electrical insulation.	*Material Process*
Irregular Powder	Particles lacking symmetry.	*Paint and Coatings*
IS	See Intrinsic Safety.	*Maintenance*
ISA	Instrument Society of America.	*Control Engineering*
Isethionic acid (HOCH2CH2HSO3)	A liquid, very soluble in water, insoluble in alcohol. It is used for detergents and surfactants.	*Material Process*
Isinglass	A form of gelatin derived from the swimming bladders of fishes used as an adhesive and clarifier.	*Material Process*
ISO	See Independent System Operator	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
ISO (International Standards Organization)	An organization which sets minimum international standards for a wide variety of items manufactured and used in pipeline services.	*Mechanical*
ISO 14000	International standards for environmental management systems set by the International Standards Organization.	*Electrical*
ISO 14001	International environmental management system (EMS) standard developed by the International Standards Organization. The standard is designed to address all facets of an organization's operations, products and services. It covers environmental policy, resources, training, operations, emergency response, audits, measurement, and management views. It contains five major elements that an organization must satisfy to be registered or certified. These elements are policy, planning, implementation and operations, checking and corrective action, and management review.	*Maintenance*
ISO 9000	International standards for quality assurance set by the International Standards Organization. It includes some 20 elements of quality process performance, and is a prerequisite for delivering predictable, quality products to customers.	*Electrical*
ISO Solid Contaminant Code (ISO 4406)	A code assigned on the basis of the number of particles per unit volume greater than 5 and 15 micrometers in size. Range numbers identify each increment in the particle population throughout the spectrum of levels.	*Oil Analysis*
ISO Standard 4021	The accepted procedure for extracting samples from dynamic fluid lines.	*Oil Analysis*
ISO viscosity grade	A number indicating the nominal viscosity of an industrial fluid lubricant at 40°C (104°F) as defined by ASTM Standard Viscosity System for Industrial Fluid Lubricants D 2422. Essentially identical to ISO Standard 3448.	*Oil Analysis*
ISO International Organization for Standardization	A network of national standards institutes from 140 countries working in partnership with international organizations, governments, industry, business and consumer representatives. The source of ISO 9000 and more than 13,000 international standards for business, government and society. Click here to view the Foreign Specification & ASTM Cross-Reference Chart.	*Materials Process*
Isoamyl alcohol	Solvent-alcohol.	*Material Process*
Isoamyl butyrate (C5H11COOC3H7)	Practically water white. Soluble in alcohol and ether, very slightly soluble in water. It is obtained by treating isoamyl alcohol with butyric acid. Flavoring extracts, solvent and plasticizer for cellulose acetate.	*Material Process*
Isoamyl chloride	Any of several compounds or mixtures thereof may be referred to by this name, since numerous isomers are possible. Colorless liquid , insoluble in water, soluble in alcohol and ether. It is obtained by isoamyl alcohol and hydrogen chloride, or chlorination of isopentane. It is used in mixtures, usually also containing normal amyl chloride, solvent for nitrocellulose, varnishes, lacquers, neoprene, in rotogravure inks, and for soil fumigation, also for organic compounds.	*Material Process*
Isoamyl isovalerate	See isoamyl valerate.	*Material Process*
Isoamyl salicilate (C6H4OHCOOC5H11)	Isoamyl salicilate (C6H4OHCOOC5H11) A water white liquid sometimes having a faint yellow tinge which should not be pink or red. Has a flowerly orchid like odor. Should not give a red ring when superimposed on a layer of sulfuric acid (indicating free amyl alcohol). Soluble in alcohol, insoluble in water and glycerol. It is obtained by esterifying salicylic acid with amyl alcohol. The ordinary article of commerce is the isoamyl ester. Used as an ingredient in perfumes and in perfuming soap. Formerly used medicinally.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Isoamyl valerate (C4H9CO2C5H11)(apple essence, apple oil, isoamyl isovalerate, amyl valeriana, amyl valerate)	Clear liquid, odor of apples when diluted with alcohol, soluble in alcohol and ether, slightly soluble in water. Derivated from amyl alcohol and valeric acid in the presence of catalysts. Subsequent recovery by distillation. It used in medicine, fruit essences.	*Material Process*
Isoamylacetate (CH3COOCH2CH2 CH(CH3) 2)	Colorless liquid, slightly soluble in water, miscible with alcohol and ether. It is used as solvent, perfumes etc..	*Material Process*
Isobars	Isobars 1. Lines on a weather map connecting points with the same atmospheric pressure. Constant pressure lines on any type of graph. 2. Atoms or elements with the same atomic weight but different chemical properties, such as nitrogen 14 and carbon 14.	*Material Process*
Isobars	1) Lines on a weather map connecting points with the same atmospheric pressure. Constant pressure lines on any type of graph. 2) Atoms or elements with the same atomic weight but different chemical properties, such as nitrogen 14 and carbon 14.	*Material Process*
Isobutane (C_4H_{10})	A branch-chain saturated (paraffinic) hydrocarbon extracted from both natural gas and refinery gas streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 11 degrees Fahrenheit.	*Energy*
Isobutyl acetate	Solvent-ester.	*Material Process*
Isobutyl acetate (C4H9OOCCH3)	Colorless, neutral liquid, fruit like odor. soluble in alcohol, ether, and hydrocarbons, immiscible with water. It is derivated by reacting isobutyl alcohol with acetic acid in the presence of catalysts. It is used as a solvent for nitrocellulose and lacquers.	*Material Process*
Isobutyl alcohol	Solvent-alcohol.	*Material Process*
Isobutylene Colorless, volatile liquid, b.p. 22 °F (-5.55 °C)	Derived from petroleum. Raw material for butyl rubber and several plastics. Also, important in the manufacture of 100 octane aviation gasoline.	*Material Process*
Isobutylene (C_4H_8)	A branch-chain olefinic hydrocarbon recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Isobutylene is used in the production of gasoline and various petrochemical products.	*Energy*
Isobuyl amine (CH3)2CHCH2 NH2)	Colorless liquid, amine odor, strongly caustic. Soluble in water, alcohol, ether, and hydrocarbons. Flammable liquid, used in organic synthesis and insecticides.	*Material Process*
Isohexane (C_6H_{14})	A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2 degrees Fahrenheit.	*Energy*
Isolation	The reduction of the capacity of a system to respond to an external force by use of resilient isolating materials.	*General Engineering*
Isomerisation	The chemical process by which a compound is transformed into any of its isomers i.e., forms with the same chemical composition but with different structure or configuration and, generally different physical and chemical properties	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Isomerization	A refining process that alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C_4), an alkylation process feedstock, and normal pentane and hexane into isopentane (C_5) and isohexane (C_6), high-octane gasoline components.	*Energy*
Isomers	Compound having the same kind and number of atoms but with different molecular structures and properties.	*Material Process*
Isomorphism	The condition in which two or more entirely different substances have closely similar crystal structures, lattice dimensions, and chemical composition.	*Material Process*
Iso-octane	A hydrocarbon molecule (2,2,4-trimethylpentane) with excellent antiknock characteristics on which the octane number of 100 is based.	*Petroleum Engineering*
Isopach	A line on a map drawn through points of equal thickness of a designated unit (such as a coal bed).	*Energy*
Isopentane	A saturated branched-chain hydrocarbon (C_5H_{12}) obtained by fractionation of natural gasoline or isomerization of normal pentane.	*Energy*
Isophorone	Solvent- ketone.	*Material Process*
Isopotential Point	A potential which is not affected by temperature changes. It is the pH value at which dE/dt for a given electrode pair is zero. Normally, for a glass electrode and SCE reference, this potential is obtained approximately when immersed in pH 7 buffer.	*General*
Isoprene	Natural rubber is polymerized isoprene plus some modifying agents which science has not yet been able to identify.	*Material Process*
Isopropyl ether	Solvent–ether.	*Material Process*
Isopropyl benzene	Solvent-hydrocarbon.	*Material Process*
Isostrain	Loading condition for a composite in which the strain on the matrix and dispersed phase are the same.	*Material Process*
Isostress	Loading condition for a composite in which the stress on the matrix and dispersed phase are the same.	*Material Process*
Isotactic	A type of polymer chain configuration wherein all side groups are positioned on the same side of the chain molecule.	*Engineering Physics*
Isotactic	Pertaining to a type of polymeric molecular structure containing a sequence of regularly spaced asymmetric atoms arranged in like configurations in a polymer chain, usually used in reference polypropylenes.	*Engineering Physics*
Isotherm	Constant temperature line used on climatic maps or in graphs of thermodynamic relations, particularly the graph of pressure-volume relations at constant temperature.	*Material Process*
Isothermal	A process or area that is a constant temperature. Joule: The basic unit of thermal energy.	*Electrical*
Isotope	Atoms of the same element having the different masses.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Isotopes	Forms of the same chemical element that differ only by the number of neutrons in their nucleus. Most elements have more than one naturally occurring isotope. Many isotopes have been produced in reactors and scientific laboratories.	*Energy*
Isotropic	Having properties that do not vary with direction.	*Material Process*
isotropic	the condition in which hydraulic properties of an aquifer are equal when measured in any direction.	*Chemical*
ISP	This is the standard abbreviation for the Interoperable Systems Project, which a number of companies are hoping will produce an international fieldbus. The main industry backers are Fisher-Rosemount, Yokogawa and Siemens.	*Control Engineering*
ISRS	Inside screw, rising stem - common term for any valve design in which the stem threads are exposed to the fluid below the packing and the stem rises up through the packing when the valve is opened.	*Mechanical*
ISRS	Inside screw, rising stem - common term for any valve design in which the stem threads are exposed to the fluid below the packing and the stem rises up through the packing when the valve is opened.	*General Mechanical*
ISTEA	Intermodal Surface Transportation Act (US)	*Petro-Chemical Abbreviations*
Italian red	Red pigment consisting essentially of ferric oxide.	*Material Process*
Itch	Sometimes called glass itch or lace itch. An automotive sound caused by metal sliding on glass.	*Reliability Engineering*
Iterative closed loop	control precalculates drive signals but then modifies those signals based upon resulting motion, in order to better match measured with desired motions. Evaluation and modifications take place after each excitation, repeating until the match is acceptable.	*Reliability Engineering*
Itinerant Worker	a worker who is not attached to a specific community and moves from job to job.	*Industrial Relations*
IVD	intake valve deposit	*Petro-Chemical Abbreviations*
IVDT	intake valve deposit test	*Petro-Chemical Abbreviations*
IVHS	Intelligent Vehicle Highway System	*Petro-Chemical Abbreviations*
IWRC	Independent Wire Rope Core.	*Wire Rope & Cable*
IZA	International Zinc Association	*Materials Process*
Izod Impact	A test for shock loading wherein a notched sample bar is held at one end and broken by striking.	*Engineering Physics*
Izod Impact Test	One of two tests that may be used to measure the impact energy of standard notched specimen.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
J	J	*Mining*
Jabber	a pneumatic pick. (Lancs.).	*Mining*
Jabez	inferior hard coal near the top of the Swallow Wood Seam. (Yorks.).	*Mining*
jack	A male donkey.	*Agriculture*
Jack Davy lamp or Jack lamp	a Davy lamp with the addition of a glass cylinder outside the gauze.	*Mining*
Jack engine	the engine for raising men, waste and materials in a sinking pit. (N. East).	*Mining*
Jack holes	a short connecting roadway or a 'slit' (N. Staffs).	*Mining*
Jack of All Trades	a person who claims ability to perform a variety of jobs, but is not an expert at any of them.	*Industrial Relations*
Jack pit	a shallow pit shaft in a mine connecting with an overcast or at a fault. Also called a 'Jackey Pit'. (N. East) –see also Jacky Pit.	*Mining*
Jack roll	a windlass that was worked by hand and used in sinking to moderate depths both underground and on the surface. Known in West Durham as 'Row and Stoches'. -see also Roll.	*Mining*
Jackanapes	a succession of frames with pulleys or 'sheaves' suspended from them to carry an overhead rope. The small guide pulleys of a 'whim'.	*Mining*
Jack-bate	time to eat. i.e.. Jack-bit time. (Lancs.).	*Mining*
Jack-bit, food	see also Snap and Snap-time.	*Mining*
Jack-catch	safety catch in the track to stop the running back of tubs on inclines, i.e. a tub arrester.	*Mining*
Jacket	The enclosure on a water heater, furnace, or boiler.	*Energy*
Jacket	A material covering over a wire insulation or an assembly of components, usually an extruded plastic or elastomer.	*Electrical*
Jacket	The lower section, or "legs", of an offshore platform.	*Petroleum Drilling*
Jackleg	A percussion drill used for drifting or stopping that is mounted on a telescopic leg which has an extension of about 2.5 m. The leg and machine are hinged so that the drill need not be in the same direction as the leg.	*Mining*
Jack-legs or Jack legging, temporary props. (Leics.), (Scot.)	Jack-legs or Jack legging, temporary props. (Leics.), (Scot.).	*Mining*
Jack-prop	a wood or steel prop used as a temporary support when setting permanent supports.-see also Derrick and Warwick.	*Mining*
Jackrock	A caltrop or other object manufactured with one or more rounded or sharpened points, which when placed or thrown present at least one point at such an angle that it is peculiar to and designed for use in puncturing or damaging vehicle tires. Jackrocks are commonly used during labor disputes.	*Mining*
Jacks	large fissures or cracks in the roof. (N. East); or wood wedges; or inferior cannel coal.	*Mining*

Term	Definition	*Industry*
Jacks, Jay, Jays Johnnies or Jay coal	see Geyes.	*Mining*
Jacksonville Wage Agreement	an agreement signed by the United Mine Workers and Union Coal Operators extending the basic $7.50 a day wage from April 01924 to April 1927.	*Industrial Relations*
Jacky Pit	another name for a Staple Pit, or a small shallow mine at the surface (S. Staffs.)—see also Blind Pit.	*Mining*
Jacobs	very lean ironstone in the Red Mine Ironstone (blackband) (N. Staffs).	*Mining*
Jag	the last trip on the main haulage, e.g. 'That's the last jag for today'. (Lancs).	*Mining*
Jailer	a small tub or box in which water was transported in the mine. The water was taken into the working places to damp down the 'binching' to soften it over night making it easier to work the following day. (Som.). - see also Goose.	*Mining*
Jam Nuts	See LOCKNUT	*Maintenance*
Jam out	to cut out, or knock away, the 'spurns' in holing. (S. Staffs.).	*Mining*
JAMA	Japan Automobile Manufacturers Association Inc.	*Mechanical, Process, and Operations*
JAN	Japanese Article Number	*Gears*
Janusol	Trade mark for a mixture of lauryl and myristil esters containing both primary amino and sulfated groups. tan paste, readily soluble in water, effective under certain conditions as anionic or cationic surface - active agent, stable in highly alkaline solutions, peroxide solutions, and hypochlorite solutions.	*Material Process*
Japan wax	A soft wax obtained from sumac bushers growing in Japan, m.p. 127 °F (52.77 °C).	*Material Process*
Japanese Labor	Recent interest in labor management relations in Asian and other countries suggests that some entries in the Dictionary be devoted to literature in the field of labor management relations in these countries and source references will be found under those headings.	*Industrial Relations*
JARI	Japanese Automotive Research Institute	*Petro-Chemical Abbreviations*
JASO	Japanese Automotive Standards Organization	*Petro-Chemical Abbreviations*
JAST	Japanese Society of Tribologists	*Petro-Chemical Abbreviations*
Jaw crusher	A machine in which rock is broken by the action of steel plates.	*Mining*
Jaw crusher	A machine in which the rock is broken by the action of moving steel jaws.	*Mining*
Jawck	hard stone occurring within a coal seam. It can run the entire length of the face. (Scot.).	*Mining*
Jay, roof coal. (Derbys.)	see also Jacks.	*Mining*
Jazz	a collier's name for shaker pans.	*Mining*
Jazz rails	a safety device consisting of rails with a very sharp bend in them. Slow moving tubs can negotiate the bend, but runaway tubs would be thrown off the rails. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
JC	Joint Commission for Accreditation of Healthcare Organizations	*Quality*
JCAP	Japan Clean Air Program	*Petro-Chemical Abbreviations*
JD	John Deere	*Petro-Chemical Abbreviations*
Jeelateen or Jelly box	a powder box or powder can. Used for carrying explosives into the mine. (Scot.).	*Mining*
Jencks Case	case in which the U.S. Supreme Court reversed the conviction of a union official of violating the False Information Act by filing a false non-Communist affidavit with the NLRB pursuant to section 9 of the Taft-Hartley Act.	*Industrial Relations*
Jenkin	see Fast jenkin.	*Mining*
Jenking or Jenkin	a narrow roadway driven through a pillar of coal; or an opening cut into, or a work place formed by taking a slice off a pillar, from 6 to 8 feet in width, alongside the bord, in the 'bord and pillar' system of working, also known as a 'judd', or 'lift',	*Mining*
jenny	Female donkey.	*Agriculture*
Jerk	The rate of change of acceleration with time.	*Reliability Engineering*
Jersey	A breed of cattle that originated on the Isle of Jersey, in the British Isles. It is light brown with a pronounced bone structure. The Jersey is noted for production of milk with a rich butter fat content. Their popularity in the United States has fallen.	*Agriculture*
Jet	a compact coaly substance found in isolated masses in shales, capable of taking a high polish. It is thought to have been formed from individual logs of driftwood.	*Mining*
Jet A	A civil grade of kerosene type aviation turbine fuel only supplied for operations in the United States. It has a freezing point of -40oC max which differs from JET A-1 (-47oC).	*NATO Fuel*
Jet action	A value design type in which flow effect is controlled by the relative position of a nozzle and a receiver.	*Mechanical, Process, and Operations*
Jet B	A civil grade of wide cut type aviation turbine fuel which has a different freezing point (-50oC) from F-40 (-58oC) and does not normally contain FSII.	*NATO Fuel*
Jet fuel	A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.	*Energy*
Jet molding	Type of automatic injection molding for thermosetting materials in which composition is preheated in controlled cycles.	*Material Process*
Jet molding	Jet molding Type of automatic injection molding for thermosetting materials in which composition is preheated in controlled cycles.	*Material Process*
Jetting	Propulsion of water under high pressure into sandy aquifers to create a hole for a well point.	*Petroleum Engineering*
Jetting	Turbulence in the resin melt flow caused by undersized gate, an abrupt change in cavity volume, or low melt temperature.	*Engineering Physics*
Jewel coal	a high grade coal with a clear shining surface. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Jewelry Workers' Union; International (AFL-CIO)	originally established in 1900 but gave up its charter in 1912. It reorganized in 1916.	*Industrial Relations*
Jib-In	to perform the operation of starting to cut by swinging in the jib of the coal cutter, (while the chain is cutting) from the front of the face to the full cutting position. –see Sump in.	*Mining*
JIC	See: Joint Industrial Council	*Industrial Relations*
Jig	A piece of milling equipment used to concentrate ore on a screen submerged in water, either by the reciprocating motion of the screen or by the pulsation of water through it.	*Mining*
JIG	An apparatus used in milling to concentrate ore on a screen submerged in water, either by a reciprocating motion of the screen or by the pulsation of water through it.	*Mining*
Jig chain	a chain fastened to the back of a 'skip' and passed around a prop to hold back its progress on a steep roadway (S. Staffs.).	*Mining*
Jig or Gig	a type of shaker conveyor; or a self-acting incline haulage system worked by a drum or wheels, with hemp or wire ropes. -see also Brake; or a steeply inclined underground roadway.	*Mining*
Jig pin	a pin used to lock the pulley at the top of a self-acting incline. (Derbys.).	*Mining*
Jig runner	the man who worked the brake on the pulley at the top of the jig road. (York.). Also known in some areas as a 'jinney tenter'.	*Mining*
Jigger	a type of coupling hook that was used when working on an incline. (Scot.); or another name for the 'onsetter'. (Leics.); or a steel conveyor consisting of a number of steel trays, troughs or pans, each about 4ft long, bolted together. The motion of the troughs was of 'jigging' or 'shoveling', i.e. an upwards and forwards motion, making the material on the conveyor slide along, also called a 'Shaker Conveyor'.	*Mining*
Jigger stick	a long piece of timber used in a 'twin-way' to lift loaded carriages back onto the rails. (Som.).	*Mining*
Jigging	clipping tubs onto the haulage chain or rope on a self-acting incline. (Lancs.); or washing coal in a jig.	*Mining*
Jim Crow Laws	laws directed in some way to restrict the rights of Negroes.	*Industrial Relations*
Jim crow or Jimmy	an appliance used for putting the bend in tub rails. Known as a 'Jimmy' in Scotland. A rail bender.	*Mining*
Jinny	a large wheel placed beneath the wheelhouse used to lower men into the pit. Also known as a 'horse drum'. Also another name for a Jig or self-acting incline.	*Mining*
JIS	Japanese Industrial Standards	*Petro-Chemical Abbreviations*
JIT	Just In Time. A manufacturing process that produces products just in time to meet orders, not for stock.	*Control Engineering*
JIT	Just-In-Time	*Gears*
JIT delivery	Delivery of parts and materials in small lots - and on a frequent basis - timed to the needs of the production system.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
JIT/continuous-flow production	Implementation of "just-in-time" techniques to reduce lot sizes, reduce setup times, slash work-in-process inventory, reduce waste, minimize non-value-added activities, improve throughput, and reduce manufacturing cycle time. JIT production typically involves use of "pull" signals to initiate production activity, in contrast to work-order ("push") systems in which production scheduling typically is based on forecasted demand rather than actual orders. In many pull systems, a customer order/shipment date triggers final assembly, which in turn forces replenishment of component WIP inventory at upstream stages of production.	*Quality*
Jitter	The slight movement of a transmission signal in time or phase that can introduce errors and loss of synchronization. More jitter will be encountered with longer cables, cables with higher attenuation, and signals at higher data rates. Also, called phase jitter, timing distortion, or intersymbol interference.	*Electrical Engineering*
Jitty	a short slit between two roadways, along which empties, horses or men travelled. (Leics.). -see also Cut-through and Snicket.	*Mining*
JMT	See: Job Methods Training	*Industrial Relations*
Job	in general usage it includes all of the factors which go into a person's activities, responsibilities, and operations in the performance of his work.	*Industrial Relations*
Job Action	See: Direct Action	*Industrial Relations*
Job Analysis	a complete investigation or study of a particular job or position in order to determine the facts about a job including the methods or procedures of work, tools, responsibilities, supervision, the standards of output, and other data concerning the technical nature of the work.	*Industrial Relations*
Job Analyst	an individual whose function and responsibility are to prepare specifications and descriptions of specific jobs to analyze them, and to classify and grade all jobs or occupations.	*Industrial Relations*
Job Assignment	the allotting or assigning of specific duties and responsibilities to a person.	*Industrial Relations*
Job Breakdown	the basic elements of a particular job divided into separate units, so that a complex job can be divided and broken down into simpler operations and the less complex operations performed by the less skilled worker.	*Industrial Relations*
Job Card	See Work Order.	*Maintenance*
Job Classifications	a method of arranging jobs into various categories or classes in a particular company or industry.	*Industrial Relations*
Job Content	includes all of the functions, requirements, and duties of a given job.	*Industrial Relations*
Job Control	applies to the efforts by an organization to have the right to consulted about employees working in an occupation, company, or industry.	*Industrial Relations*
Job Description	a written record summarizing the main features or characteristics of the job.	*Industrial Relations*
Job Enlargement	the procedure of broadening the core, and assigning additional responsibilities to a job in order assure, among other things, greater satisfaction to the employee who is performing the it or to give him a wider sense of the significance of the particular operation.	*Industrial Relations*
Job Environment	those factors which surround an employee while performing his work.	*Industrial Relations*

Term	Definition	*Industry*
Job Evaluation	a systematic method of determining the value of each job in relation to the other jobs in the plant.	*Industrial Relations*
Job Evaluation Plans	sometimes referred to as job evaluation systems; the broad classifications used in the setting up of a job evaluation program.	*Industrial Relations*
Job Factor	an element or characteristic of the job which has important bearing on the relative worth or value of the job among the major elements or job factors.	*Industrial Relations*
Job Family	a grouping of jobs having similar skill, experience, or other factors in common, such as training and aptitude.	*Industrial Relations*
Job Grades	setting job grades is sometimes considered the last stage or step in job classification when the relationship of jobs one to the other has been established.	*Industrial Relations*
Job Grading	the procedure in setting or establishing the various classes of jobs in relation or according to their relative importance.	*Industrial Relations*
Job Instruction Training (J.I.T.)	a program which received special attention during World War II mainly through the efforts of the Training-Within-Industry program of the War Manpower Commission designed to teach foremen and other supervisory employees the techniques of imparting information to workers.	*Industrial Relations*
Job Instructor	the individual assigned the job of showing workers, particularly new or transferred workers, how to perform their jobs.	*Industrial Relations*
Job Methods Training	a job methods training program was developed and accelerated during World War II as part of the Training-Within-Industry program.	*Industrial Relations*
Job Open for Bid	the phrase refers to the existence of a job opening and the opportunity for employees who feel they are qualified to perform the job to request that they be considered for the job opening.	*Industrial Relations*
Job Opening	an available or vacant position which is to be filled through the employment or transfer of an individual.	*Industrial Relations*
Job Pattern	See: Manning Table	*Industrial Relations*
Job Placement	one of the major functions of the personnel office is to recruit employees and, through various methods of testing and interview, place these individuals in positions for which they are best qualified.	*Industrial Relations*
Job Protection	a somewhat loosely used term to cover various efforts of a union to protect its members.	*Industrial Relations*
Job Questionnaire	a form filled in by the employee with specific information on his job, on the basis of which a job analysis is made.	*Industrial Relations*
Job Ranking	See: Job Grading	*Industrial Relations*
Job Rate	the lowest or minimum rate paid to a qualified or experienced worker for a particular job.	*Industrial Relations*
Job Rating	comparison of information on each job or position against the rating scales already established.	*Industrial Relations*
Job Relations Training (J.R.T.)	the training is concerned with methods of obtaining increased production by getting the supervisor to understand better the people who work for him, to appreciate their basic differences.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Job Rotation	a method used in some plants to provide an opportunity for employees to become familiar with a variety of operations in the company.	*Industrial Relations*
Job Safety Analysis (J.S.A.)	A job breakdown that gives a safe, efficient job procedure.	*Mining*
Job Safety Training	training given to employees and supervisors to reduce the hazards in certain occupations and to provide safer working conditions.	*Industrial Relations*
Job Satisfaction	those outward or inner manifestations which give the individual a sense of enjoyment or accomplishment in the performance of his work.	*Industrial Relations*
Job Scarcity	a limited opportunity for employment which may be due to economic or business recession or seasonality of work or special problems in connection with production in a particular industry.	*Industrial Relations*
Job Security	a sense or feeling of security in the particular work which the employee is performing.	*Industrial Relations*
Job Selling	a procedure one quite widespread in the form of kickbacks or payment of fees for obtaining employment.	*Industrial Relations*
Job Specification	this is sometimes referred to as a man-job specification or job description or personnel specification.	*Industrial Relations*
Job Splitting	the breaking up of a job into its various components so that those parts requiring the least skill can be performed by individuals who are not highly skilled and the specialized work done by skilled employees.	*Industrial Relations*
Job Study	an attempt to collect full and complete information concerning a particular job and its content.	*Industrial Relations*
Job Tenure	the term is used to denote a situation in which barring special considerations, and so long as the employee performs his job efficiently and funds are available, he will be retained and permitted to continue his employment.	*Industrial Relations*
Job Title	the name or other designation which is used to identify the particular work such as carpenter, painter, pipe fitter, dye maker, etc.	*Industrial Relations*
Job Training	various methods and procedures directed toward providing an opportunity for unskilled or semi-skilled workers to qualify for jobs of a higher skill or greater complexity.	*Industrial Relations*
Job Turnover	See: Labor Turnover	*Industrial Relations*
Job Turnover Rate	See: Net Labor Turnover Rate	*Industrial Relations*
Job Work	usually work for which an employee is paid a fixed amount after the work is completed.	*Industrial Relations*
Jobber	steel tool for drawing props out of the waste.	*Mining*
Jobs Sent Out	in certain industries or operations, it occasionally is necessary to send out work or subcontract.	*Industrial Relations*
Jock	an iron rod, usually pronged, attached to the rear tub on a run being drawn up an incline. (Scot.). -see also Devil, Drag and Cow.	*Mining*
Jockey or Jockeying	riding out-bye on the tubs. (Lancs.); or a self-acting apparatus carried on the front tub of a set, for releasing the tub from the haulage rope at a certain point. (Mids.). Also called a 'monkey'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Joey	a man employed to set the timbers in a stall during the 'turn'. He was a butty, and was not paid for doing the work. He took his turn with the other butties working in the stall. (Mids.).	*Mining*
John Hopkins University Studies (in Historical and Political Science) on American Trade Unionism	some of the studies are listed.	*Industrial Relations*
Johnstown Citizens Committee	this was a special group of "citizens" organized in 1937 during the Little Steel Strike.	*Industrial Relations*
Joint Council Board	an organization or group of delegates who represent a number of locals of the same national on international union in a particular locality or region.	*Industrial Relations*
Joint Wage Review Committee	during World War II procedures sometimes were adopted whereby joint committees of labor and management would review the work of employees after their probationary period.	*Industrial Relations*
Joint	A connection between two lengths of pipe or between a length of pipe and a fitting.	*Maintenance and Repair*
Joint Penetration	The minimum depth a groove weld extends from its face into a joint, exclusive of reinforcement.	*Maintenance and Repair*
Joint – Blast	(Blast Joint) For tubing strings in oil wells, 'Blast Joint' means to a piece of heavy walled specifically manufactured tubing joint, run in the tubing string and positioned along side a perforated zone section to resist external erosion caused by high velocity production fluid entering from that zone, thereby resisting wear.	*Petroleum Engineering*
Joint Agreement	sometimes used interchangeably with the term "Collective Bargaining Agreement" or with the term "Industry Wide Agreement". Generally, it is a contract signed by several unions with one employers, or several employers with one union, or several unions and several employers.	*Industrial Relations*
Joint and Survivor Annuity	an annual income which begins at retirement and continues for life with a provision that should the employee die while his annuitant is still living, predetermined payments or a predetermined rate will continue to the annuitant for life.	*Industrial Relations*
Joint Congressional Committee on the Economic Report	under the terms of the Full Employment Act of 1946, a special committee of Senators and Representatives is required to review the President's Annual Economic Report and report to the Congress.	*Industrial Relations*
Joint Control Tightening	See YIELD CONTROLLED TIGHTENING	*Maintenance*
Joint Electron Device Engineering Council	A JFET, or junction field-effect transistor, or JUGFET, is a FET in which the gate is created by reverse-biased junction (as opposed to the MOSFET which creates a junction via a field generated by conductive gate, separated from the gate region by a thin insulator). Example: A p-channel JFET would consist of a bar of p-type silicon with the "drain" at one end and the "source" at the other. Between these two terminals is some n-type material connected to a "gate". A positive voltage applied to the gate creates a "depletion field" which restricts current flow between the source and drain.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Joint Electron Device Engineering Council	A JFET, or junction field-effect transistor, or JUGFET, is a FET in which the gate is created by reverse-biased junction (as opposed to the MOSFET which creates a junction via a field generated by conductive gate, separated from the gate region by a thin insulator). Example - A p-channel JFET would consist of a bar of p-type silicon with the "drain" at one end and the "source" at the other. Between these two terminals is some n-type material connected to a "gate". A positive voltage applied to the gate creates a "depletion field" which restricts current flow between the source and drain.	*Electrical Engineering*
Joint Hiring Hall	Essentially, a central hiring or employment office which is administered by the union and employer or unions' and employers' organizations.	*Industrial Relations*
Joint Implementation (JI)	Agreements made between two or more nations under the auspices of the Framework Convention on Climate Change (FCCC) whereby a developed country can receive "emissions reduction units" when it helps to finance projects that reduce net emissions in another developed country (including countries with economies in transition).	*Energy*
Joint Industrial Council	sometimes known as work councils or Whitley Councils, named after a special British parliamentary committee known as the Whitley Committee, which made recommendations in 1917 leading to the establishment of joint consultation committees.	*Industrial Relations*
Joint Label	where more than one labor organization has taken part in the production of a particular commodity or product and a union label indicates the names of those labor organizations, it is generally known as a joint label.	*Industrial Relations*
Joint Production Committees	these are labor-management committees concerned primarily with increasing production during periods of emergency or war.	*Industrial Relations*
Joint Time Study	generally refers to efforts in time and motion study where both union and company representatives take part in timing the operation or job.	*Industrial Relations*
Joint	A divisional plane or surface that divides a rock and along which there has been no visible movement parallel to the plane or surface.	*Mining*
Joint, Rotary	A joint connecting lines which rotate in relation to each other. JOINT, SWIVEL - A joint which permits variable operational positioning of lines.	*Mechanical, Process, and Operations*
Joint-use facility	A multiple-purpose hydroelectric plant. An example is a dam that stores water for both flood control and power production.	*Energy*
Jointy-bass	shale possessing the same cleat as the underlying coal (N. Staffs).	*Mining*
Joist	Supports for fan decking, or for film fill modules.	*Facility Engineering*
Joist man	an old term for a man whose job was controlling the movement of tubs. (Mids.).	*Mining*
Jominy end-quench test	Standardized experiment for comparing the hardenability of different steels.	*Material Process*
Jones and Laughlin Steel Case	See: NLRB v. Jones & Laughlin Steel Co.	*Industrial Relations*
Josephson junction	Device consisting of a thin layer of insulator between superconducting layers.	*Material Process*

Term	Definition	*Industry*
Jost Effect	The name given to the reduction in the frictional resistance that occurs in a direction different to that in which slip is occurring. This effect is used in many applications including the removal of corks from bottles. If the cork is first rotated the force needed to pull the cork from the bottle is significantly reduced. It is also the fundamental reason why threaded fasteners experience self-loosening. Frictional resistance is first overcome in the transverse direction by slip occurring on the joint resulting in the frictional resistance in the circumferential direction reducing to a small value. The torque acting on the fastener in the loosening direction (as a result of its preload) that when coupled with the Jost Effect results in self-loosening occurring. The term is named after the Institute that completed research into this effect, the Jost Institute of Tribotechnology at the University of Central Lancashire in the UK.	*Maintenance*
Jostler	a hand-held device for slowing down tubs. (Mids.).	*Mining*
Joug or Jugg	an iron collar, fixed by a short chain to a wall, which was fastened around the neck of a disobedient miner as a form of punishment. 17th century. (Scot.).	*Mining*
Joule	A measurement of energy or work. In mechanical systems, it is the force of one Newton, moving an object a distance of one meter. In electronics, it's the same amount of energy, in electrical units. One joule is one watt of power, applied for one second (a watt-second); or a coulomb of electrical charge raised to a potential of one volt.	*Electrical Engineering*
Joule	A unit of work, energy, or heat. 1J (joule)=1 Nm) (Newton meter).	*Lubrication*
Joule (J)	The meter-kilogram-second unit of work or energy, equal to the work done by a force of one Newton when its point of application moves through a distance of one meter in the direction of the force; equivalent to 107 ergs and one watt-second.	*Energy*
Joule heating	Heating of a material due to the resistance to electrical current flow. A source of energy loss in ferromagnetic materials.	*Material Process*
Joule's Law	The rate of heat production by a steady current in any part of an electrical circuit that is proportional to the resistance and to the square of the current, or, the internal energy of an ideal gas depends only on its temperature.	*Energy*
Journal	A journal is that part of a rotor that is in contact with or supported by a bearing in which it revolves.	*General Engineering*
Journal	That part of a shaft or axle that rotates or angularly oscillates in or against a bearing or about which a bearing rotates or angularly oscillates.	*Lubrication*
Journal Bearing	A sliding type of bearing having either rotating or oscillatory motion and in conjunction with which a journal operates. In a full or sleeve type journal bearing, the bearing surface is 360¦ in extent. In a partial bearing, the bearing surface is less than 360¦ in extent, i.e., 150¦, 120¦, etc.	*Lubrication*
Journey	a train or set of tubs, dans or mine cars, all coupled together running on the haulage road.	*Mining*
Journeyman	a qualified, skilled tradesman who has completed a special apprenticeship program and mastered a specific skill or craft.	*Industrial Relations*
Journeyman Pay (Rate)	the wages or rate of pay given to a skilled craftsman or journeyman.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Journeymen Barbers, Hairdressers, Cosmetologists and Proprietors' International Union of America (AFL-CIO)	See: Barbers, Hairdressers, Cosmetologists and Proprietors' International Union of America; Journeymen (AFL-CIO)	*Industrial Relations*
Journeymen Horseshoers of the United States and Canada (AFL-CIO)	See: Horseshoers of the United States and Canada; International Union of Journeymen (AFL-CIO)	*Industrial Relations*
Journeymen Stone Cutters Association of North America (AFL-CIO)	See: Stone Cutters Association of North America; International Union of Journeymen (AFL-CIO)	*Industrial Relations*
Jowin in the shank	the action of a cage that either descends or stops too quickly causing the rope to stretch and spring back. The cage lurches and bounces in the shaft until the motion of the rope settles. (Scot.).	*Mining*
Jowl or Jowell	the noise made when beating on the face of the coal to test the thickness of the coal between two headings that are about to meet or checking the roof to see if it is safe by tapping it. (N East). Also called 'chap'.	*Mining*
Jowling	a sort of tattoo beaten with a hammer on the faces of two places or drifts that are near to holing or intending to hole into each other. (N. East)	*Mining*
Joy Silk Mills Case	case in which NLRB ordered an employer to bargain with a union even though the union lost a consent representation election conducted by the Board.	*Industrial Relations*
Joyce v. Great Northern Railway Case	a decision of the Supreme Court of Minnesota holding constitutional a law forbidding the use of the blacklist.	*Industrial Relations*
JPI	Japanese Petroleum Institute	*Petro-Chemical Abbreviations*
JRT	See: Job Relations Training	*Industrial Relations*
JSA	See: Stone Cutters Association of North America; Journeymen (AFL-CIO)	*Industrial Relations*
JSAE	Japanese Society of Automotive Engineers	*Petro-Chemical Abbreviations*
JST	Job Safety Training	*Industrial Relations*
Jud or Judd	a portion of the seam kirved, nicked, and ready for blasting, also called a 'vatish', 'vantage', 'advantage' or a 'lift'. Also a portion of a pillar in the course of being worked; or a work place. –see Jenkin.	*Mining*
Judge	a long 'L' shaped staff used for measuring the depth of a holing under the coal. The longest arm of the staff was pushed under the coal and the shorter arm was held vertically against the coalface.	*Mining*
Judicial Procedure of Unions	See: Internal Affairs of Unions	*Industrial Relations*
Jummer	see Tub (N. Staffs.).	*Mining*
Jump, Jump-up or Jump-down	the sudden up-throw or down-throw of a fault, or to raise boring-rods in a borehole and allow then to fall under their own weight thereby cutting their way through the strata; or to bore by hand, using a 'jumper'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Jumper	A short length of conductor used to make a connection between terminals, around a break in a circuit, or around an instrument.	*Electrical*
Jumper dirt or Jumping muck	the dirt between the Black Bands and Lime Coal in the Stanley Main Seam, (Yorks.).	*Mining*
Jumper, Jumper drill or Jumping bar	a long iron bar (approx. 5ft long and ¾ inch diameter) with a chiseled shaped end used for boring holes for blasting. The bar could be used on its own without a hammer, the borer using the weight of the jumper to give it momentum, or one end could be struck with a sledge hammer when drilling in harder ground	*Mining*
Jumping a Claim	Relocating a claim on which the required work has been done.	*Mining*
Jumping switch	a self-acting switch in the rails that lifted the hutches up and over a small hitch in the roadway. (Scot.).	*Mining*
Junction	A region of transition between semiconductor layers, such as a p/n junction, which goes from a region that has a high concentration of acceptors (p-type) to one that has a high concentration of donors (n-type).	*Energy*
Junction Diode Sensor	The use of a PN junction on a silicon die for determining die temperature.	*Electrical Engineering*
Junk Batteries	This term usually refers to spent automotive lead-acid batteries, which are purchased by secondary lead smelters. The standard form of shipment is in the whole and undrained state to meet environmental regulations. Lead metal constitutes around half the weight of a junk battery. Other parts, including the plastic case, also are recycled.	*Metallurgy*
Junking	a passage through a pillar of coal. (N. East).	*Mining*
Jurisdiction, Union	the authority claimed by a union to represent certain groups of workers either in a specific type of work or occupation in a particular industry or industries or in a certain geographic area.	*Industrial Relations*
Jurisdictional Agreement	an understanding or pact between two or more organizations indicating some agreement as to the employees which each should have the authority to organize.	*Industrial Relations*
Jurisdictional Dispute	a disagreement, controversy, or conflict between two or more unions concerning the assignment of, or the right to perform, certain types of work.	*Industrial Relations*
Jurisdictional Guide, NLRB	a booklet prepared by the Division of Information of the National Labor Relations Board offering guidance to labor and management and other parties who may want to use the processes of the Act.	*Industrial Relations*
Jurisdictional Strike	a work stoppage resulting from a dispute over jurisdictional claims by two competing unions.	*Industrial Relations*
Jurisdictional utilities	Utilities regulated by public laws.	*Energy*
Jurisdictional	Utilities, ratepayers and regulators (and impacts on those parties) that are subject to state regulation in a state considering restructuring.	*Energy*
Jury Leave	See: Paid Jury Leave	*Industrial Relations*
Just a Bunch of Disks	An array of hard disks without a controller.	*Electrical Engineering*
Just In Time (JIT)	Used to describe a manufacturing process in which materials arrive as close as possible to the time required. Implementation of "just in time" techniques to reduce lot sizes, reduce setup times, slash work-in-process inventory, reduce waste, minimize non-value-added activities, improve throughput, and reduce	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	manufacturing cycle time. JIT production typically involves use of "pull" signals to initiate production activity, in contrast to work-order ("push") systems in which production scheduling typically is based on forecasted demand rather than actual orders. In many "pull" systems, a customer order/shipment date triggers final assembly, which in turn forces replenishment of component inventory at upstream stages of production.	
Just Wage	See: Living Wage, Standard of Living, Fair Day's Pay	*Industrial Relations*
Justiciable Arbitration	See: Arbitration, Justiciable	*Industrial Relations*
Just-in-Time	Also known as JIT. It is an inventory strategy that is employed to increase efficiency and decrease waste by receiving goods only as they are needed.	*Reliability Engineering*
Jute	Fiber of Corchorus, used to make twine and as fiber for certain plastics.	*Material Process*
JWU	Jewelry Workers' Union; International (AFL-CIO)	*Industrial Relations*
K	1. Kilo: Metric unit representing 1000. E.g.: 1kHz is a 1 kilohertz (1000 Hertz). Note that the k is always lowercase. In digital systems, "K" or "k" is often used to mean 210, that is, 1024. This is not well-standardized but it's usually apparent from context. On the Maxim site, we use upper-case K to mean 1024 and lower-case k to mean 1000. This standard is applied to new documents but older documents may use "k".	*Electrical Engineering*
K	1. Kilo - Metric unit representing 1000. E.g. - 1kHz is a 1 kilohertz (1000 Hertz). Note that the k is always lowercase. In digital systems, "K" or "k" is often used to mean 210, that is, 1024. This is not well-standardized but it's usually apparent from context. On the Maxim site, we use upper-case K to mean 1024 and lower-case k to mean 1000. This standard is applied to new documents but older documents may use "k".	*Electrical Engineering*
K Factor	The factor in the torque tightening equation: T=KDF where T is the fastener tightening torque in Newton meters, D is the fastener diameter in meters, F is the fasteners preload in Newtons and K is a factor whose value is often taken as 0.2. The formula gives the approximate tightening torque for standard fasteners used under normal conditions. The K factor is also known as the nut factor and the torque coefficient.	*Maintenance*
Kain coal	coal that was claimed by the coal owner as part, or whole, of the rent of the mine. (Scot.).	*Mining*
Kaizen	The systematic, organized improvement of processes by those who operate them, using straightforward methods of analysis. It is a "do-it-now" approach to continuous improvement.	*Quality*
Kaizen	A Japanese term that has been adopted into English over the past two decades. It refers to a philosophy or practices focusing on continuous improvement in manufacturing activities, business activities in general, and even life in general. The object is to continually seek perfection and to remove waste.	*Reliability Engineering*
Kaizen event	A concentrated effort, typically spanning three to five days, in which a team plans and implements a major process change or changes to quickly achieve a quantum improvement in performance. Participants generally represent various functions and perspectives and may include non-plant personnel.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Kaizen Method	A term originating from Japanese industry relating to a philosophy for continual quality improvement (CQI). Individuals and teams feel empowered to take personal steps toward minimization of: Defective finished products and inventory (zero defects).	*Maintenance*
Kanal+	Kanal+ support allows a VCR to record audio and video signals captured by both the set top box (STB) and the television, without changing SCART connections on the back of the TV, STB, and VCR.	*Electrical Engineering*
Kanal+	Kanal+ support allows a VCR to record audio and video signals captured by both the set top box (STB) and the television, without changing SCART connections on the back of the TV, STB, and VCR.	*Electrical Engineering*
Kanban signal	A method of signaling suppliers or upstream production operations when it is time to replenish limited stocks of components or subassemblies in a just-in-time system. Originally a card system used in Japan, kanban signals now include empty containers and even electronic messages.	*Quality*
Kanch or Kench	see also Canch, Brushing and Ripping lip.	*Mining*
Kank	a twist or snarl in a rope. (Mids.); or another way of spelling 'Cank'. (Lancs.).	*Mining*
Kansas Court of Industrial Relations	until the passage of compulsory arbitration statutes by various state legislatures in 1947, the only prior state experience in the United States with compulsory arbitration was in the state of Kansas.	*Industrial Relations*
Kansas State Federation of Labor (AFL-CIO)	located at 503 New England Building, Topeka, Kansas.	*Industrial Relations*
Kaolin	An linear natural white pigment, also called Chine clay, consisting of hydrated aluminum silicate.	*Material Process*
Kaolinite	Silicate crystal structure.	*Material Process*
Kaplan turbine	A type of turbine that that has two blades whose pitch is adjustable. The turbine may have gates to control the angle of the fluid flow into the blades.	*Energy*
Kaplan-Meier Estimator	This is an estimator used as an alternative to the median ranks method for calculating the estimates of the unreliability for probability plotting purposes. It is also used to determine reliability estimates for nonparametric data analysis	*Reliability Engineering*
Karl Fischer Reagent Method	The standard laboratory test to measure the water content of mineral base fluids. In this method, water reacts quantitatively with the Karl Fischer reagent. This reagent is a mixture of iodine, sulfur dioxide, pyridine, and methanol. When excess iodine exists, electric current can pass between two platinum electrodes or plates. The water in the sample reacts with the iodine. When the water is no longer free to react with iodine, an excess of iodine depolarizes the electrodes, signaling the end of the test.	*Lubrication*
Karst Topography	Water moving through fractures in limestone, dissolving the rock, enlarging fractures, and creating caverns. Characterized by sinkholes, caves, and underground drainage.	*Petroleum Engineering*
Kauri	A fossil resin from New Zealand, the most used hard gum in high quality varnishes. The supply is diminishing and the price rising yearly.	*Material Process*
KBS	A Knowledge Based System is a system which attempts to use a database to solve problems by inference. These are sometimes called expert systems.	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Keeker	an inspector in charge of the hewers or other workmen underground, or an inspector at the pit top who examined the coal coming out of the pit. (N. East).	*Mining*
Keel	a vessel used to carry coals from the Staiths above the old bridge on the Tyne, and above the shipping berths on the Wear, to the ships. A keel is a broad flat vessel (on the Tyne sharp at both ends) carrying 8 Newcastle chaldrons or 21 tons 4 cwt.	*Mining*
Keep-Out Zone	The area on or near a CPU or GPU processor that the circuit board layout design cannot use, due to thermal management components, cooling, and mounting constraints.	*Electrical Engineering*
Keep-Out Zone	The area on or near a CPU or GPU processor that the circuit board layout design cannot use, due to thermal management components, cooling, and mounting constraints.	*Electrical Engineering*
Keeps	see Keps.	*Mining*
Kelf	the vertical height at the back of the under-cutting or holing at any time during the process of holing a stint.	*Mining*
Kelly	Hollow steel bar that is the main section of drill string to which the power is directly transmitted from the rotary table to rotate the drill pipe and bit.	*Petroleum Engineering*
Kelve	to beat out gas from a working place using a jacket or piece of cloth. (Ire.).	*Mining*
Kelvin	Temperature scale. Zero K is defined as absolute zero. 273.15K is 0 degrees C. Note that temperatures on the kelvin scale are called kelvins, not "degrees kelvin." The K symbol is uppercase and used without a degree symbol. The word "kelvin" in this context is not capitalized.	*Electrical Engineering*
Kelvin	Temperature scale. Zero K is defined as absolute zero. 273.15K is 0 degrees C. Note that temperatures on the kelvin scale are called kelvins, not "degrees kelvin." The K symbol is uppercase and used without a degree symbol. The word "kelvin" in this context is not capitalized.	*Electrical Engineering*
Kema plough	a scraper box type of plough used on longwall faces.	*Mining*
Kemp, et al. v. Division No. 241	a court case affecting employees of the Chicago Railway Company and the Amalgamated Association of Street and Electrical Railway Employees of America.	*Industrial Relations*
Kennel	a collier's name for cannel coal. (Lancs.) and (Mids.).	*Mining*
Kennell	the signal to finish work; or the time indicated by the signal.	*Mining*
Kenner	an expression meaning 'It is time to knock off working'. (N. East).	*Mining*
Kentlidge	additional weight applied to a 'free falling' shaft lining, during sinking, to overcome the friction between the lining and the strata.	*Mining*
Kentucky State	AFL-CIO - address 312 Armory Place, Louisville, Kentucky. Its weekly publication is the Kentucky Labor News	*Industrial Relations*
Kentucky Whip and Collar Co. v. Illinois Central Railway	the Ashurst–Sumners Act of 1935 provided that an effort should be made to limit the shipment and sale of prison-made goods.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Kentucky, Eastern	All mines in the following counties in Eastern Kentucky: Bell, Boyd, Breathitt, Carter, Clay, Clinton, Elliot, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Magoffin, Martin, McCreary, Menifee, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley, and Wolfe.	*Energy*
Kentucky, Western	All mines in the following counties in Western Kentucky: Breckinridge, Butler, Caldwell, Christian, Crittenden, Daviess, Edmonson, Grayson, Hancock, Hart, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Todd, Union, Warren, and Webster.	*Energy*
Kep	a level or gently sloping roadway, close to the shaft, on which the full tubs stood waiting to be wound up the shaft.	*Mining*
Keps	A pre-assembled nut and washer assembly (the washer is attached to the nut so that it won't fall off)- a trademark of ITW Shakeproof. The origin of the word came from ShaKEProof. The s on the end being acquired due to them being purchased in quantities usually greater than one.	*Maintenance*
Keps or Keeps	supports for the cage on it arriving at the surface or shaft bottom and at intermediate loading places, if there are any. Also called Cage props, Catches, Fans, Fallers or Shuts.	*Mining*
Kerf	the cut under the coal in mechanical coal-cutting.	*Mining*
Kerf	The undercut of a coal face.	*Mining*
Kernel	the seed of a grain plant	*Agriculture*
KernPrint. Engineering	The central area of any horizontal section of a wall, column, etc., within which the resultant forces of all compressive loads must pass if there is to be only compression at that point.	*Civil Engineering*
Kerosene	A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. Also see Kerosene-type jet fuel.	*Energy*
Kerosene-type jet fuel	A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbo jet and turbo prop aircraft engines.	*Energy*
Ketone	A compound containing the carbonyl group (CO) united with the carbon atoms of two hydrocarbon radicals.	*Material Process*
Ketone-alcohol (cyclohexanol)	An oily, colorless, hygroscopic liquid with a camphor-like odor. Used in soap making, dry cleaning, plasticizers, insecticides, and germicides.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Kettle	a barrel in which men used to ride in the shaft. (Scot.); or an iron or wooden barrel used to wind dirt or waste in shaft sinking. -see also Hoppit and Kibble.	*Mining*
Kettle	molten zinc-filled tank where the metallurgical bonding of zinc and steel takes place	*Materials Process*
Kettle bottom	A smooth, rounded piece of rock, cylindrical in shape, which may drop out of the roof of a mine without warning. The origin of this feature is thought to be the remains of the stump of a tree that has been replaced by sediments so that the original form has been rather well preserved.	*Mining*
Kettle Heat Exchanger	Steam circulating within a jacket transfers heat through the wall of the vessel.	*Industrial*
Kevils	the weight of coals sent out by the hewers over a specified period. (N. East).	*Mining*
Kevlar	A brand name for a certain type of carbon fiber, used in everything from driver's helmets to bodywork to bulletproof vests used by police. A very strong, expensive and lightweight material.	*NASCAR*
Key Job (or Key Personnel)	a general term to designate individuals in the plant operations who are responsible for the overseeing of operations or whose particular jobs are such that others are dependent on them.	*Industrial Relations*
Key performance indicator (KPI)	A measurable objective used by organizations to monitor progress towards a specific goal. Such measures are commonly used to define and evaluate an organization's performance against internal benchmarks or those of peer organizations.	*Electrical*
Key Performance Indicators	A Select Number Of Key Measures That Enable Performance Against Targets To Be Monitored.	*Plant Engineering*
Key Performance Indicators (KPI)	A select number of key measures that enable performance to be monitored against targets. The KPI will indicate how well the business is doing at attaining its goals. In a manufacturing quality scenario, this may be the amount of scrap or rework that gets metered. In a service quality scenario, such as an insurance company, this may be the open inventory of unprocessed claims. In brand management, market share in itself and in comparison with competing brands is sure to be relevant. In logistics, on-time deliveries, empty return loads, or missing items are candidate indicators.	*Maintenance*
Key prop	an adjustable rigid prop with a wedge-shaped key which was hammered in to tighten it. Known by the trade name of the manufacturer 'Bathgate', or colloquially as the 'thumb buster' or 'finger trapper'. The prop was also called the 'duckbill.	*Mining*
Key Stop	A method of restricting the travel of a ball valve from fully open to fully closed. The stem key bears against the ends of an arc machined in the adaptor plate.	*Mechanical*
Key words	A string of words attached to an article to be used to index or code the article in a database. See also: MEDLINE, MeSH headings (Medical Subject Headings)	*Quality Engineering*
Keyboard Video Mouse	Defacto standard for the three cables used on a typical cpr—One for the keyboard; one for the monitor (video); one for the mouse. Also - A	*Electrical Engineering*
Keyphasor	A signal used in rotating machinery measurements, generated by a sensor that observes a once-per-revolution event. Used in phase measurements for analysis and for balancing. Bentley-Nevada trade name.	*Reliability Engineering*

Term	Definition	Industry
Keyway	A depression or slot carved into rock to provide a bond or anchorage for a structure, as a dam.	*Civil Engineering*
kg	Kilograms	*Oil Analysis*
kHz	Thousand Hertz (cycles per second)	*Oil Analysis*
Kibble	Iron Cornish bucket used to hoist ore and miners to the surface.	*Mining*
Kibble, a wooden or metal tub	The early ones were usually barreled shaped to prevent them tipping while being wound in the shaft. In later years they were of a square box shape with a capacity of about 20 gallons, used in conveying waste and water. Also used in shaft sinking. -see also Hoppit, Kettle and Bowk.	*Mining*
Kibbles	small coal (S. Staffs.).	*Mining*
Kick	An intrusion of pressurized gas into the wellbore that causes drilling fluid to be displaced. It can be the precursor to a blowout.	*Petroleum Drilling*
Kick	When the formation pressure exceeds the pressure exerted by the mud column.	*Petroleum Drilling*
Kick	A well is said to "kick" if the formation pressure exceeds the pressure exerted by the mud column.	*Petroleum Drilling*
Kickback	a form of extortion which may be perpetrated either by labor leaders or by employers.	*Industrial Relations*
Kickoff	A planned deviation from vertical, executed at the bottom of the wellbore.	*Petroleum Drilling*
Kick-ups	a hand operated tippler for emptying tubs. -see Tumblers.	*Mining*
Kiding	holing or under-cutting the coal. (N. East).	*Mining*
Kieselguhr	See Diatomaceous earth.	*Material Process*
Kilkenny	see Anthracite.	*Mining*
Kill	If a well is experiencing a kick, or the early stages of a blowout, the company may need to "kill the well" This may involve pumping heavier drilling mud down the hole or other measures to achieve a balanced mud situation again.	*Petroleum Drilling*
Kill	In drilling, to control a kick by taking preventative measures. In production, to stop a well from producing oil and gas in order to recondition the well.	*Petroleum Drilling*
Kill (a well)	To prevent the threatened blowout of a well or to stop a blowout in progress, usually accomplished by the pumping of heavy fluids under pressure into the wellbore to overbalance (exceed) the formation pressure.	*Petroleum Engineering*
Kilo	Thousand	*Oil Analysis*
Kilogram - meter per second	See Newton.	*Mechanical, Process, and Operations*
Kilopascals (kPa)	Unit of air pressure; in metric terms it takes 6.895 kPa to equal 1 psi.	*Mechanical Engineering*
Kilopond	A unit of force used in Germany and equal to I KG(f) (kilogram, force).	*Mechanical, Process, and Operations*
Kilovolt ampere (kVA)	The practical unit of apparent power, which is 1,000 volt-amperes. The volt-amperes of an electric circuit are the mathematical products of the volts and amperes of the client.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Kilovolt amperes (kva)	1000 volt amps.	*Electrical*
Kilovolt-Ampere (kVa)	A unit of apparent power, equal to 1,000 volt-amperes; the mathematical product of the volts and amperes in an electrical circuit.	*Energy*
Kilowatt (kw)	Equivalent to 1000 watts.	*Electronic Process*
Kilowatt (kW)	The electrical unit of power equal to 1,000 watts.	*Energy*
Kilowatt Hour (kwh)	1000 watt hours. Kilovolt amperes (kva): 1000 volt amps.	*General Engineering*
Kilowatt Hour (kwh)	1000 watthours. Kilovolt amperes (kva) - 1000 volt amps.	*Electronic Process*
Kilowatt-electric (kWe)	One thousand watts of electric capacity.	*Energy*
Kilowatt hour (kWh)	A measure of electricity defined as a unit of work or energy, measured as 1 kilowatt (1,000watts) of power expended for 1 hour. One kWh is equivalent to 3,412 Btu.	*Energy*
Kilowatt-hour (kWh)	The standard unit of measure for electricity. The total number of kilowatt-hours charged to your bill is determined by your electricity use. Specifically, a Kilowatt Hour is defined as the unit of energy that is expended in one hour by one kilowatt of power.	*Energy*
Kilowatt-Hour (kWh)	The basic unit of electric energy equal to one kilowatt of power supplied to or taken from an electric circuit for one hour.	*Energy*
Kimberlite	A variety of peridotite; the most common host rock of diamonds.	*Mining*
Kind	a term meaning soft or easily dug or drilled.	*Mining*
Kinematic Viscosity	Measure of a fluid's resistance to flow under gravity at a specific temperature (usually 40°C or 100°C).	*Lubrication*
Kinematic viscosity	the ratio of dynamic viscosity to mass density. Kinematic viscosity is a measure of a fluid's resistance to gravity flow - the lower the kinematic viscosity, the easier and faster the fluid will flow.	*Chemical*
Kinetic energy	Energy available as a result of motion that varies directly in proportion to an object's mass and the square of its velocity.	*Energy*
Kinetic energy	Energy that a substance or body has by virtue of its mass (weight) and velocity. L	*Mechanical, Process, and Operations*
Kinetics	Science of time dependent transformations.	*Material Process*
Kingle	a very hard, often limey (calcareous) sandstone; ferruginous kingle is a hard irony sandstone. Also called 'Kennel'. (Scot.).	*Mining*
Kink	A unique deformation of a wire rope caused by a loop of rope being pulled down tight. It represents irreparable damage to and an indeterminate loss of strength in the rope.	*Wire Rope & Cable*
Kip	a bucket used in the shaft for lowering bulky or odd-shaped material, which would not fit in the cage. (Mids.); or a level or gently sloping roadway running outbye at the end of a haulage road. Here the full tubs would stand so that they could be run down to the shaft bottom under gravity to be loaded into the cage. Also known as a 'kep'.	*Mining*
Kirf or Kirv	to hole. (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Kirner	a hand jumper or boring bar for boring shot holes. (Scot.).	*Mining*
Kirning	boring a shot hole with a kirner. (Scot.).	*Mining*
Kirving	the holing or wedge shaped excavation made at the bottom of the coal by the hewer. Kirving was the same as holing. (N. East). This term was generally applied to undercutting shorter undercuts in pillar and stall working. –see also Nick.	*Mining*
Kirvings	small coal and dust produced when under-cutting the coal by hand or machine.	*Mining*
Kislar-aga	A high-ranking eunuch (under sultan and grand vizier) in the Ottoman Empire	*Breakroom*
Kist	a workman's tool box, also a meeting place. (N. East); or a cabin in the pit. (Lancs.), (N. East); or a wooden water tank mounted on wheels. (Scot.).	*Mining*
Kit	a wooden vessel of any size used for carrying water in the mine. (Derbys.).	*Mining*
Kitchens	coal prepared and sold expressly for cooking purposes in ranges, stoves etc.	*Mining*
Kittle	dangerous or risky. (Scot.).	*Mining*
Kitty	a length of straw about 4 inches long filled with gunpowder used as a fuse in blasting. It was placed in the 'pricker hole', which was open to the cartridge or shot. The end of the kitty nearest to the cartridge was closed, with the outer end open. When a light was applied to the kitty it would move along the pricker hole like a miniature rocket and ignite the powder. (N. East).	*Mining*
Kitty litter	This term describes two things: the absorbent powder used to soak up fluid spills on the track (often real kitty litter) and the gravel runoff areas on the outside of many road course turns that help slow cars that go off the track.	*NASCAR*
KM	See Knowledge Management.	*Maintenance*
Knee Brace	A structural brace at an angular position to another structural component for the purpose of providing support and/or stability of the conveyor frame.	*Equipment*
Knife Claims	Minerals dug from crevices with knife, or spoon.	*Mining*
Knife Coating	An adjustable knife or blade controls.	*Engineering Physics*
Knights of Labor	The Noble Order of the Knights of Labor had its origin in Philadelphia in 1869 through the efforts of Uriah Smith Stevens, a tailor, who organized the Garment Cutters in Philadelphia.	*Industrial Relations*
Knights of Saint Crispin	an organization of skilled craftsmen in the shoe industry organized in large part to protest the introduction of shoe making equipment which would lead to the loss of their jobs.	*Industrial Relations*
Knob	a small support for the roof (S. Staffs.).	*Mining*
Knobber	one who gets knobs of coal off a face with a view to straightening it for efficient machine coal cutting.	*Mining*
Knock	to signal, as for example with bell signals.	*Mining*
Knock on	to give a signal for the haulage rope to start. (Lancs.).	*Mining*
Knock out	to give a signal for the haulage rope to stop. (Lancs.).	*Mining*
Knocked Off	the colloquial for being discharged or sometimes referred to as being "canned"	*Industrial Relations*
Knocker	another name for the 'onsetter'. (Lancs.), (Wales).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Knockings	signals made by knocking on the coal (S. Wales).	*Mining*
Knocking-up	When the banksman beats on the 'runner', the boards that cover the shaft, to signal the men below it is time to come up (S. Staffs.).	*Mining*
Knock-off	the point on the haulage road where the train or set was disconnected from the rope, or where a jockey was set.	*Mining*
Knockout Bar	A bar which holds and actuates ejector pins(s) in mold. Used in ejection of molded piece from mold.	*Engineering Physics*
Knockout drum	A vessel wherein suspended liquid is separated from gas or vapor.	*Petroleum Engineering*
Knockout Pin	A pin that ejects a molded piece the amount of coating material laid down on a moving from the mold web.	*Engineering Physics*
Knowledge Management (KM)	The whole of initiatives and instruments that support creation and flow of knowledge through an organization. This includes initiatives from human resources, information technology, and quality processes. Examples are job rotation, partnering, yellow pages, best practice databases, etc.	*Maintenance*
Knowledge-Based Systems (KBS)	A wide range of software systems that support decision making for knowledge intensive tasks (i.e. failure diagnosis). The system is based on knowledge that resides in heuristic rules, cases, empirical test results, or partly physical models.	*Reliability Engineering*
Knudsen cell	See Effusion cell.	*Material Process*
Knurl Thumb Adj. Nut	A nut used on accumulating conveyors to adjust the pressure required to drive the product, may be turned with-out the use of tools.	*Manufacturing*
Koepe	a system of winding that dispenses with winding drums and has pulleys only. Only one winding rope is used, which is attached to both cages.	*Mining*
kow	see octanol/water partition coefficient.	*Chemical*
KPI	See Key Performance Indicators	*Management*
ksi	(Abbreviation) One thousand pounds per square inch used to indicate material (i.e. steel) strength can also	*Petroleum Engineering*
Kuder Preference Record	one of the interest tests used in personnel counseling.	*Industrial Relations*
Kuwait (1960-present)	Kuwait (1960-present)	*Energy*
kVa	See Kilovolt-Ampere	*Energy*
KVA	Kilovolt amperes (1000-volt amps).	*Electronic Process*
KVM switch	A switch box used to connect one KVM to multiple computers.	*Electrical Engineering*
KVM, Keyboard Video Mouse	Defacto standard for the three cables used on a typical cpr: One for the key-board; one for the monitor (video); one for the mouse. Also: A	*Electrical Engineering*
kw	Kilowatt	*Electrical Engineering*
kWe	See kilowatt-electric	*Energy*
kWh	See kilowatt hour	*Energy*
whir	Kilowatt hour	*Electrical Engineering*
Kevil	a specific work place. (N. East).	*Mining*

Term	Definition	*Industry*
Kyevilin day	changing the place of work, usually by lottery or an order, on a certain day. (N. East). –see Cavills.	*Mining*
Kyle, a coil of rope. (Scot.).	Kyle, a coil of rope. (Scot.).	*Mining*
Kyoto Protocol	The result of negotiations at the third Conference of the Parties (COP-3) in Kyoto, Japan, in December of 1997. The Kyoto Protocol sets binding greenhouse gas emissions targets for countries that sign and ratify the agreement. The gases covered under the Protocol include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), per fluorocarbons (PFCs) and sulfur hexafluoride.	*Energy*
L	L	*Forestry*
--L--	--L--	*Petroleum Drilling*
L7, L7M	ASTM specification for bolting, A320 Grade L7, specified in API Spec 6A for low temperature bolting. L7M is L7 bolting modified with controlled hardness in the (impact tested) (and a GR4M nut) for sour service (NACE) exposed bolts.	*Petroleum Engineering*
Labe plot	A scatter plot of the risk in the experimental group against the risk in the control group. Ideally the size of the plotting symbols should be proportional to the size of the trials. Trials in which the experimental treatment had a higher risk than the control will be in the upper left of the plot, between the y axis and the line of equality. If experimental is no better than control then the point will fall on the line of equality, and if the control treatment has a higher risk than the experimental treatment then the point will be in the lower right of the plot, between the x axis and the line of equality.	*Quality Engineering*
Label Trades	those occupations which generally use the union label on their products.	*Industrial Relations*
Label, Union	See: Union Label	*Industrial Relations*
Labels	Labels can come in all widths, sizes and colors. They can also be made out of different materials such as wax, resin and Valero. This allows the label to be used in different environments such as humid climates, exterior warehouses and low level lighted areas. In order to purchase labels, it is a good idea to know the "core" size and the inches between each label. Labels are purchased per case.	*Gears*
Labor	this is the generic term which refers to the human effort or exertion applied to the production of goods and services toward an economic end and for which some compensation or payment is received.	*Industrial Relations*
Labor Attaches	these are special agents of the State Department whose functions parallel in part those of the commercial attache.	*Industrial Relations*
Labor Agreement	the phrase is generally used as the equivalent of the collective bargaining agreement, the collective agreement, the union contract, or the labor-management contract.	*Industrial Relations*
Labor Arbitration	See: Arbitration, Labor	*Industrial Relations*
Labor Attorney	the term generally applied to a lawyer who specializes in industrial and labor legislation and who works for either the union or an employer in handling cases before the various labor agencies, such as the National Labor Relations Board or the state labor agencies.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Labor Audit	a term which is not used widely today, but in the early part of the century referred to the general review of the personnel policy of a particular company or organization.	*Industrial Relations*
Labor Banking	during the early 1920's more specifically from 1920 to 1926, there was widespread interest in the establishment of labor banks, that is, banks owned or controlled by a union or cooperating unions.	*Industrial Relations*
Labor Bureau	essentially an agency designed to reduce unnecessary unemployment resulting essentially from lack of information about the labor market.	*Industrial Relations*
Labor Camp	in current usage applies to those facilities made available by some labor unions for vacation opportunities and camps where labor union officials, union members and their families can take vacations, and where it frequently is possible for them to get together to discuss various problems.	*Industrial Relations*
Labor Code	the term is generally applied to the total collection of laws on the statute books as well as administrative regulations dealing with industrial relations.	*Industrial Relations*
Labor Conscription	generally refers to an action or law which requires compulsory labor service.	*Industrial Relations*
Labor Content	a measure designed to determine the relative amount of the cost of the product which is allocable to labor as between overhead plant costs of machinery and equipment and the costs actually allocated for the payment of labor.	*Industrial Relations*
Labor Contract	sometimes referred to as a labor or collective bargaining agreement, which results from the negotiation or collective bargaining process.	*Industrial Relations*
Labor Convention	this is generally a meeting of the elected delegates of local unions of a national union throughout the country held annually or biennially to determine the policy for the union for the ensuing year or years.	*Industrial Relations*
Labor cooperation	the generally refers to efforts by labor and management to cooperate in meeting various problems within the plant.	*Industrial Relations*
Labor Costs	this term generally applies to the total bill, sometimes divided between direct labor costs, wages, and other payments, and indirect costs which apply throughout the plant but which may not be specifically allocable.	*Industrial Relations*
Labor Coupon	a form of exchange designed for certain socialist communities which would utilize it instead of the normal gold or monetary exchange.	*Industrial Relations*
Labor Day	this is a legal holiday celebrated the first Monday of September in almost all of the states of the United States in honor and interest of working men and women.	*Industrial Relations*
Labor Department, U.S.	one of the executive departments of the United States government headed by a Secretary who is a member of the President's Cabinet.	*Industrial Relations*
Labor Dispute	the term generally involves any controversy dealing with the terms, tenure, or conditions or employment, or those concerning the association or representation of persons in negotiating, fixing, maintaining or changing the terms and conditions of employment regardless of "whether the disputants stand in the proximate relation of employer and employee".	*Industrial Relations*
Labor Disunity	a general term which seeks to describe the difficulties within the labor union movement leading to discord and difficulty.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Labor Economics	a division of the general area of economics which is concerned primarily with the employment situation and the relation of the worker and his job.	*Industrial Relations*
Labor Education	this term is generally applied to the area of worker education which in its early application was designed to provide the workers with knowledge and additional skills which might be directed toward a particular vocational program or in the development of an apprenticeship program, or in immigrant or foreign communities, directed toward citizenship programs and greater understanding of American political and social institutions.	*Industrial Relations*
Labor Efficiency	See: Efficiency of Labor	*Industrial Relations*
Labor Espionage	See: Espionage, Anti-Union Practices, LaFollette Committee. Pinkerton Detective Agency.	*Industrial Relations*
Labor Exchange	this is sometimes known as an employment agency.	*Industrial Relations*
Labor Exchange Notes	these are sometimes referred to as labor coupons. They were designed as a form a currency in cooperative societies and were suggested, by Robert Owen among others, in 1829.	*Industrial Relations*
Labor Flux	this term is the equivalent of the term more frequently used in American parlance, namely, labor turnover.	*Industrial Relations*
Labor Flux Rate	this is the same as the labor turnover rate and is measured by the addition of accessions plus separations divided by the full time working force.	*Industrial Relations*
Labor Force	this term is the one generally used by the census and defines by it for each of the censuses taken.	*Industrial Relations*
Labor Force Time Lost	an attempt to measure the man hours not used or utilized because or unemployment and involuntary part-time work.	*Industrial Relations*
Labor Gazette	the official publication of the Canadian Department of Labour published since 1900.	*Industrial Relations*
Labor Government	a reference generally to a labor party which is broadly representative of the labor movement or trade union movement in the country which has obtained political control of the government.	*Industrial Relations*
Labor Grade	in a job evaluation or wage analysis procedure, it is generally necessary after reviewing the job content, skill, experience, education and other job requirements, to place occupations, or groups which have approximately equal value into the same labor grade or job class.	*Industrial Relations*
Labor History	the term generally applied to any systematic recording of developments which have taken place during the history of the labor movement.	*Industrial Relations*
Labor Hour	a term designed to describe the amount of work actually performed by an individual during one-hour period.	*Industrial Relations*
Labor Immobility	this is an attempt to explain the lack of mobility or the unwillingness and sometimes inability of an individual to move from one labor market area to another which might possibly provide better terms and conditions of employment.	*Industrial Relations*
Labor Injunction	See: Injunction, Anti-Injuction Act	*Industrial Relations*
Labor Inspection	a procedure in which individuals, usually attached to a labor enforcement agency within a state or elsewhere, determine whether or not certain conditions established under state safety or other laws are being carried out.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Labor Inspector	generally, the individual who has the responsibility for determining whether or not provisions of a particular statute or regulation are being properly enforced in a plant or other place of work.	*Industrial Relations*
Labor Institute	a term frequently used to describe either a particular center where industrial relations programs are carried out or directed in large part toward the trade unions and toward labor leadership.	*Industrial Relations*
Labor Journalism	refers generally to the labor press and the program of individual unions concerned with procedures for presenting their stories to the community.	*Industrial Relations*
Labor Law Journal	a monthly publication issued by the Commerce Clearing House, which is devoted entirely to articles dealing with the developing problems in labor law and legislation.	*Industrial Relations*
Labor Leader	a designation usually assigned to an individual who is devoting his full time to the labor movement, or one who has achieved prominence as a person active in leading either a major local union. A national union, or a person active as a leader of a parent organization.	*Industrial Relations*
Labor Legislation	See: Labor Law	*Industrial Relations*
Labor Lobby	a term applied to those groups of trade unionists or individuals assigned to the state or federal legislatures to attempt to influence action and support of special labor legislation or members of their organization.	*Industrial Relations*
Labor Lobbying	the activities by those assigned to state and federal legislatures to work with legislators, or attempts to obtain legislation favorable to the welfare of labor unions or their members.	*Industrial Relations*
Labor Maintenance	the activities by those applied to procedures or policies designed to maintain a stable labor force.	*Industrial Relations*
Labor Management	this term is sometimes used as the equivalent of personnel management or the activity involved in the operation of a personnel department which generally covers the areas to selection, assignment, training, and the most effective utilization of the labor force.	*Industrial Relations*
Labor Management Conference (1945)	although other conferences have been held involving labor and management, the one which is generally known as the Labor-Management Conference applies to the one convened in November 1945 by President Truman, following the end of the National War Labor Board.	*Industrial Relations*
Labor Manager	the labor manager or personnel director generally has the prime responsibility for the organization and direction of the working force.	*Industrial Relations*
Labor Market	a concept used in labor economics to indicate the relation or interplay between the supply and demand for labor in a particular area.	*Industrial Relations*
Labor Market Area	the "market" is generally considered to be an area or region where the supply and demand for a particular commodity or for a given grade of commodity prevail.	*Industrial Relations*
Labor Mobility	Labor mobility is occasionally referred to as "labor flux" of "labor turnover".	*Industrial Relations*
Labor Monopoly	the term applied to the control which labor unions have over the supply of labor and the labor market in order to obtain wages and working conditions favorable to a particular group of employees.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Labor Motivation	those factors or incentives which have th capacity to bring out the greatest productive effort or the greatest service from those engaged in production or service.	*Industrial Relations*
Labor Movement	this is a generally inclusive term designed to bring within its scope the variety or organized group action, essentially economic in its nature but which may also include political activity.	*Industrial Relations*
Labor Organization	a group of workers in a voluntary association combined for the common purpose of protecting or advancing that wages, hours, and working conditions of their members.	*Industrial Relations*
Labor Organizer	a person generally on the payroll of a union, usually the international union, who is assigned to a particular plant or region to attempt to bring employees of a particular company or region into a labor union.	*Industrial Relations*
Labor Peace	See: Industrial Peace	*Industrial Relations*
Labor Per Product (LPP/LPU)	Also known as Labor Per Unit, is calculated using vague estimates of material, Direct Labor, and overhead cost. The cost per unit is normally used for external reporting only, not management decision. Example: Direct labor (operator) X 30% fringe benefits = LPP = LPU.	*Maintenance*
Labor Piracy	sometimes referred to as labor pirating. This is a procedure followed by some employers who steal from other employers, generally in the same field of work, highly skilled individuals and technical staff.	*Industrial Relations*
Labor Turnover Rate	A measure of a plant's ability to retain workers, expressed as a percentage of the production workforce that departs annually-or an annualized rate of employee departures. High turnover rates often indicate employee dissatisfaction with either working conditions or compensation.	*Maintenance*
Labor, Common	the term refers to individuals who usually perform unskilled, manual work which involves relatively simple duties and which can be learned within a short period of time and also does not require substantial judgment or special skills.	*Industrial Relations*
Labor, Dilution of	the term generally applies to the breaking down of skilled or semi-skilled jobs into separate operations which dilute the particular skill and permit the job to be performed by individuals who are less skilled.	*Industrial Relations*
Labor, Horizontal Movement of	a term used to describe the shift or movement of individuals from one company one from one employer or firm to another, but continuing to perform the same type or class of work.	*Industrial Relations*
Labor, Indirect	See: Indirect Labor	*Industrial Relations*
Laboring	An engine that is struggling to keep turning due to lack of revs. or the use of too high of a gear.	*Mechanical Engineering*
Labor-Management Citizens Committee	this usually refers to a tripartite group consisting of public representatives and representatives of labor and management whose prime function is directed toward the handling of labor-management disputes.	*Industrial Relations*
Labor-Management Committee	the committee which generally consists of the representatives of management and employees whose prime concern is with the most effective use of materials and manpower in the plant.	*Industrial Relations*
Labor-Management Cooperation	this involves, essentially, joint efforts by labor and management to develop areas of agreement.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Labor-Management Dispute	See: Labor Dispute, Industrial Disputes, Work Stoppage, Anti-Injunction Act	*Industrial Relations*
Labor-Management Production Committees	production was one of the key contributing factors in the winning of the Second World War.	*Industrial Relations*
Labor-Management Relations	See: Industrial Relations	*Industrial Relations*
Labor-Management Relations Act of 1947	this is the formal title of the act that is popularly known as the Taft–Harley Act	*Industrial Relations*
Labor-Management Relations Committee	the term is generally applied to the committee provided by the Labor-Management Relations Act of 1947, known as the Congressional Joint Committee on Labor-Management Relations.	*Industrial Relations*
Labor-Management Reporting and Disclosure Act of 1959	this statute also is known as the Landrum-Griffin Act.	*Industrial Relations*
Labor-Management Understanding	See: Labor-Management Cooperation	*Industrial Relations*
Labor Notes	See: Labor Coupon	*Industrial Relations*
LabView	A programming language (National Instruments) for developing data acquisition software.	*Reliability Engineering*
LAC	lowest additive concentration	*Petro-Chemical Abbreviations*
Lac	A resin of which shellac is the commercial form.	*Material Process*
Lacing	Means used to attach the ends of a belt segment together.	*Manufacturing*
Lacings	split posts secured horizontally between vertical posts to strengthen and tie them together (N. Staffs.); or strips or light bars of wrought iron bent over at the ends and wedged tight between the bars and the roof. In place of wooden bars or headpieces, wrought-iron railway rails were used.	*Mining*
Lacquer	A liquid composition containing cellulose esters or ethers as the basic film forming ingredients. Lacquer driers rapidly by solvent evaporation.	*Material Process*
Lactic acid (CH3CHOHCOOH)	Colorless hygroscopic syrup. Reacts with glycerol to form an alkyl resin used as a catalyst for the polymerization of vinyls added with glycerin to phenolics to aid hardening and transparency.	*Material Process*
Ladder	Typical rung-and-rail device providing access on outside or inside of the tower.	*Facility Engineering*
Ladder cage	Protective cage parallel with and connecting to a vertical access ladder.	*Facility Engineering*
Ladder pit	a shallow mine to which access is gained by ladder/s fastened to the side of the shaft.	*Mining*
Ladle Metallurgy Furnace (LMF)	An electric arc furnace to melt scrap under highly-basic oxidizing slag. To control residue levels, all charge and melting parameters are computer calculated.	*Steel*
Lag	1. A time delay between the output of a signal and the response of the instrument to which the signal is sent. 2. A time relationship between two waveforms where a fixed reference point on one wave occurs after the same point of the reference wave.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lag Time	Lag time is the amount of time after the dead time that the process variable takes to move 63.3% of its final value after a step change in valve position. Lag time is also called a capacity element or a first order process. Very few real processes are pure lag. Almost all real processes contain some dead time.	*Process Control*
Lagged Pulley	A pulley having the surface of its face crowned with a material to provide for greater friction with the belt.	*Equipment*
Lagging	Lagging insulation is usually a fiberglass or other rugged sleeving fabric with a built in adhesive. It is used as a thermal protection on steam pipes and in other high heat environments. Pipe lagging is usually protected from physical damage by cylindrical steel muffs. See also Insulation.	*Industrial*
Lagging, Lagging boards and Lags	long pieces of timber, closely fitted together and fastened to the oak curbs to form part of a drum, used when sinking through soft ground; or to secure the roof and sides behind the main timber or steel supports with short lengths of timber (also called 'Slabs' if placed behind posts or 'Runners' if behind roof bars (N. Staffs.); or the secondary support by (corrugated) steel sheets, or concrete slabs between the main roadway supports.	*Mining*
Lagoon	An artificial pool for storage and treatment of polluted or excessively hot sewage, industrial waste, etc.	*Civil Engineering*
Laid-in	When a colliery had ceased working and was being dismantled it was said to be 'laid-in'. (N. East).	*Mining*
Laid-out	tubs of coal forfeited by the hewer as having excess stone or shale content. (N. East).	*Mining*
Laigh	a low roof in a seam. (Scot.).	*Mining*
Laigh doors	the lowest of two or more landings in a shaft. (Scot.).	*Mining*
Light scaffold	an area at the surface level where men and materials are loaded. (Scot.).	*Mining*
Lam or Lamb	a kind of fireclay. (Wales).	*Mining*
Lambskin	a type of inferior anthracite sold under the name 'Lambskin' in the Swansea area of South Wales.	*Mining*
Lameskirting	widening, by cutting off coal from the side of the roadways in order to gain more room. Also a method of gaining a tub or two of easily worked coal. An action classed as fraud by the owners. (N. East). -see also Pillar robbing.	*Mining*
Laminar Flow	Fluid flow in a pipe is usually considered laminar if the Reynolds number is less than 2000. Depending upon many possible varying conditions, the flow may be laminar at a Reynolds number as low as 1200 or as high as 40,000; however, such conditions are not experienced in normal practice.	*Maintenance and Repair*
Laminar (flow)	A condition where the fluid particles move in continuous parallel paths. Stream-line flow.	*Mechanical, Process, and Operations*
laminar composites	composites that are made by altering the layering of different materials	*Physics*
Laminar Flow	Streamlined flow of a fluid where viscous forces are more significant than inertial forces, generally below a Reynolds number of 2000.	*Electronic Process*

Term	Definition	*Industry*
Laminar Flow	The movement of one layer of fluid past or over another layer without the transfer of matter from one to the other. Laminar flow in injection molding is achieved by solidifying the layer in contact with the mold surface. This acts as an insulating tube through which material can flow to fill remainder of cavity. This process is essential to mold surface duplication.	*Engineering Physics*
Laminar particles	Particles generated in rolling element bearings which have been flattened out by a rolling contact.	*Oil Analysis*
Laminate	To unite sheets of material by a binder, usually with heat and pressure. Fiber reinforced composite structure in which woven fabric is layered with the matrix.	*Material Process*
Laminated wood	Term frequently misused, sometimes interchange ably with plywood. In general, however, the distinction is that in laminated wood the grain of the adjacent layers is parallel, in plywood, adjacent layers have cross grains.	*Material Process*
Lamination	Any layer in a stack of sheet materials.	*Material Process*
Lamings	the collier's name for accidents of any description to men or lads working in or about the mine. (N. East).	*Mining*
Lamp	A term generally used to describe artificial light. The term is often used when referring to a "bulb" or "tube."	*Energy*
Lamp cabin	- see also Lamp station and Lamp room.	*Mining*
Lamp station	a designated place underground in a safety lamp mine, usually in the intake airway. The lamp stations are the only places underground where a flame safety lamp can be opened and relit.	*Mining*
Lampman	The man employed at the mine to clean and maintain the colliers' lamps. He is usually responsible for booking the time the men enter and leave the mine. Also called the 'Lamp-keeper'. (N. East).	*Mining*
Lamproom	The surface building at a mine where the electric and flame safety lamps are stored, charged and maintained. Also known as the 'Lamp Cabin'.	*Mining*
Lamprophyre	An igneous rock, composed of dark minerals, that occurs in dykes; sometimes contains diamonds.	*Mining*
LAN	Local Area Networks are used to link up computers. The best known protocol for LANs is Ethernet.	*Control Engineering*
Lanara	The generic term for casein fiber.	*Material Process*
Lancashire Method	a method of working coal that was used to work moderately inclined seams. A panel was split into pillars by driving roadways to the boundary then the pillars would be extracted on the retreat by a longwall face.	*Mining*
Land	The portion of a mold which provides the separation or cutoff of the flash from the molded piece.	*Material Process*
Land	1. The horizontal bearing surface of a semipositive or flash mold by which excess material escapes. 2. The bearing surface along the top of the flights of a screw in a screw extruder. 3. The surface of an extrusion die parallel to the direction of melt flow. 4. The mating surfaces of any mold, adjacent to the cavity depressions, which prevent the escape of material.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Land use	The ultimate uses to be permitted for currently contaminated lands, waters, and structures at each Department of Energy installation. Land-use decisions will strongly influence the cost of environmental management.	*Energy*
Land weight	the pressure of the surface ground caused by subsidence. (Lancs.).	*Mining*
Lander	the man who worked at the top of a sinking shaft to unload the kibble. Another name for 'banksman'.	*Mining*
Landfill	A low area of land that is built up from deposits of solid refuse in layers covered by soil.	*Civil Engineering*
Landfill gas	Gas that is generated by decomposition of organic material at landfill disposal sites. The average composition of landfill gas is approximately 50 percent methane and 50 percent carbon dioxide and water vapor by volume. The methane percentage, however, can vary from 40 to 60 percent, depending on several factors including waste composition (e.g. carbohydrate and cellulose content). The methane in landfill gas may be vented, flared, combusted to generate electricity or useful thermal energy on-site, or injected into a pipeline for combustion off-site.	*Energy*
Landing	A horizontal flooring, designed to provide offset clearances for stairways, ladders, or other access arrangements.	*Facility Engineering*
Landing shaft	the pit shaft that was used for winding coal (S. Wales).	*Mining*
Landings	the amount of coal drawn from the pit (S. West).	*Mining*
Landman	A land leasing agent who typically works for an oil and gas company. Landmen research county records and locate mineral rights owners, which they may then offer and oil and gas lease to on behalf of an exploration company.	*Petroleum Drilling*
Lands	The circumferential areas between the grooves of a piston.	*Lubrication*
Landsale	coals sold to carters at the colliery for direct delivery. Sometimes sold in bags or sacks to be carried away on horses; or a colliery without a railway, tramway or canal access was known as a 'landsale' or 'landsale pit'.	*Mining*
Landside	the highest working point or heading in steep inclined seam. (Som.).	*Mining*
Land-use restrictions	Constraints placed upon mining by societal policies to protect surface features or entities that could be affected by mining. Because laws and regulations may be modified or repealed, the restrictions, including industrial and environmental restrictions, are subject to change.	*Energy*
Langelier's Index	A formula for predicting whether water will tend to dissolve or precipitate calcium carbonate.	*Chemical Engineering*
Langley	A unit or measure of solar radiation; 1 calorie per square centimeter or 3.69 Btu per square foot.	*Energy*
Lantern Ring	A rigid spacer used in the packing, with packing above and below it. The lantern ring is used to allow lubrication to the packing or allow access to a leak off connection. On some new fugitive emission packing systems, it also acts as a stem guide.	*Industrial Engineering*
Lantern ring	See "Chevron Packing."	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lantern ring (seal cage)	A ring in line with a port in a gland to introduce a lubricant or a coolant to the packing or stuffing box.	*Mechanical, Process, and Operations*
Lanthanides	Commonly referred to as 'Rare Earth' metals. Examples: Neodymium, Lanthanum and Ytrrium.	*Metallurgy*
LAP	Laboratory Accreditation Program	*Quality*
Lap Weld	Weld along a longitudinal seam in which one part is overlapped by the other. A term used to designate pipe made by this process.	*Maintenance and Repair*
Lap Splice	A permanent joint formed in a short overlapping region of two parallel conductors or tapes. Also called parallel splice.	*Electrical*
Lapped Joint	A type of pipe joint made by using loose flanges on lengths of pipe whose ends are lapped over to give a bearing surface for a gasket or metal-to-metal joint.	*Maintenance and Repair*
Lapping	A term that describes a procedure for reducing the leakage rate on metal-to-metal seated valves. The plug and seat are lapped together with the aid of an abrasive compound in an effort to establish a better seating surface than would normally be achieved by means of machining.	*Industrial Engineering*
Large coal	coal that was handpicked and loaded underground. One of the three main sizes used to grade coal. Included in this grading were large screened coals, trebbles and cobbles. Large coals had no upper size limit, but in some instances had a lower size limit of 1½-2in. In some areas it was a term used for coal over 8 inches in dimensions.	*Mining*
Large passenger car	A passenger car with more than 120 cubic feet of interior passenger and luggage volume.	*Energy*
Large pickup truck	A pickup truck weighing between 4,500-8,500 lbs gross vehicle weight (GVW).	*Energy*
Large Scale Integration (LSI)	The combining of about 1,000 to 10,000 circuits on a single chip. Typical examples of LSI circuits are memory chips and microprocessor.	*General Engineering*
Large Scale Integration (LSI)	The combining of about 1,000 to 10,000 circuits on a single chip. Typical examples of LSI circuits are memory chips and microprocessor.	*Electronic Process*
LARVA (plural = larvae)	The immature instars, between the egg and pupal stages, in an insect having a complete metamorphosis (egg, larva, pupa, adult). Larvae feed and grow but cannot fly, nor can they reproduce.	*Forestry*
Laser	An acronym for light amplification by stimulated emission of radiation.	*Engineering Physics*
Laser Alloying	The application of a powder to a surface followed by fusing and alloying into the surface via the heat from an impinging laser.	*Paint and Coatings*
Laser Driver	An IC that supplies modulated current to a laser diode in response to an input serial-data stream.	*Electrical Engineering*
Laser Etchers	Burn image into media or burn protective coating off of media to form image.	*Gears*
Laser Glazing	The melting and quenching of a surface to form a fine grained structure or 'glaze'.	*Paint and Coatings*
Laser Hardening	The localized surface heating of a medium carbon steel by an incident laser so that the temperature is raised above 900oC. The part is quenched (or self-quenches by virtue of the remaining cool bulk of the component) and tempered to produce a hard martensitic structure at the surface.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Laser Radio Terminal (LRT)	35-46 keys, hand held scanner. When a barcode is scanned, it is instantly sent to a specific location (real time tracking).	*Gears*
Laser Trimming (Automated)	A method for adjusting the value of thick film resistors using a computer: controlled laser system.	*Electrical Engineering*
Lashing chains	chains used on a moving endless rope haulage.	*Mining*
Last tow	the last run of the cages for men before they are used for winding coal. (Scot.).	*Mining*
Lastic	A synthetic material with physical properties similar to those of rubber. Also elastomer.	*Material Process*
Latch	to make an underground survey with a dial and chain, or to mark out on the surface the position of the workings underground.	*Mining*
Latcher	see 'Dialer'.	*Mining*
Latching Logic	A signal modification that causes the output to be energized and remain energized (maintain output). Latched output may be immediate or delayed. Usually, the latch is released by closing a circuit between the reset (RS/D) terminal and ground.	*Electrical Engineering*
Latent defect	A flaw (in a part or assembly) and/or workmanship that is dormant, not immediately apparent visually or by electrical test, yet can result in failure. See Patent Defect.	*Reliability Engineering*
Latent Defect/Fault	An existing fault which is not immediately apparent or that has not yet been detected.	*Reliability Engineering*
Latent Fault	An existing fault that has not yet been detected.	*Maintenance*
Latent Heat	Expressed in BTU per pound. The amount of heat needed (absorbed) to convert a pound of boiling water to a pound of steam.	*General Engineering*
Latent solvent	In paint coatings, an organic thinner that dissolves the nonvolatile constituents only when activated by admixture with a true solvent.	*Material Process*
Lateral canal	A canal running parallel to a stream that is inconvenient or impossible to navigate. One of a number of irrigation canals distributing water from a main canal.	*Civil Engineering*
Lateral canal	A canal running parallel to a stream that is inconvenient or impossible to navigate.	*Civil Engineering*
Lateral header	A pipe or flume distributing water from the distribution header to nozzles, or from other points of discharge to the filling area.	*Facility Engineering*
Lateral sensitivity	See transverse sensitivity.	*Reliability Engineering*
Laterite	A residual soil, usually found in tropical countries, out of which the silica has been leached. May form ore bodies of iron, nickel, bauxite and manganese.	*Mining*
Latex	A water emulsion of a synthetic rubber or plastic obtained by polymerization and used especially in coatings, paints and adhesives.	*Chemical*
Lathe or Laith	a call meaning 'lower the cage down' or 'lower more rope'. (Mids.).	*Mining*
Latitude and longitude	The distance on the earth's surface measured, respectively, north or south of the equator and east or west of the standard meridian, expressed in angular degrees, minutes, and seconds.	*Energy*
Lattice	The regular geometrical arrangement of points in crystal space.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lattice constant	Length of unit cell edge and/or angle between crystalographic axes.	*Material Process*
Lattice direction	Direction in a crystallographic lattice.	*Material Process*
Lattice girder	A trusslike girder having the upper and lower chords connected by latticing.	*Civil Engineering*
Lattice Parameter	The combination of unit cell edge lengths and interaxial angles that defines the unit cell geometry.	*Engineering Physics*
Lattice parameter	See lattice constant.	*Material Process*
Lattice plane	Plane in a crystalographic lattice.	*Material Process*
Lattice point	One of a set of theoretical points that are disturbed in a periodic fashion in three dimensional space.	*Material Process*
Lattice position	Standard notation for a point in a crystalographic lattice.	*Material Process*
Lattice translation	Vector connecting equivalent positions in adjacent unit cells.	*Material Process*
Laue camera	Device for obtaining an x-ray diffraction pattern of a single crystal.	*Material Process*
Launder	A chute or trough for conveying pulp, water or powdered ore in the milling process.	*Mining*
Launder	A chute or trough for conveying pulp, water or powdered ore in a mill.	*Mining*
Lava	A general name for the molten rock ejected by volcanoes.	*Mining*
Law of the wall	Semi-empirical expression for the anisotropic flow close to a solid surface used in turbulence models. Often based on negligible variations in pressure gradient in the direction tangential to the surface.	*Chemical*
Lay	a) The manner in which the wires in a strand or the strands in a rope are helically laid, or b) the distance measured parallel to the axis of the rope (or strand) in which a strand (or wire) makes one complete helical convolution about the core (or center). In this connection, lay is also referred to as LAY LENGTH or PITCH.	*Wire Rope & Cable*
Lay	The distance along a cable occupied by one complete helix of a strand or conductor. The direction of lay (left or right hand) is the direction of the helix looking away from an observer. Also to arrange the wires or members of a conductor either by twisting them or by forming them into one or more layers helically applied.	*Electrical*
Lay barge	A barge that is specially equipped to lay submarine pipelines.	*Petroleum Drilling*
Lay Types	Right Lay: The direction of strand or wire helix corresponding to that of a right hand screw thread. Left Lay: The direction of strand or wire helix corresponding to that of a left hand screw thread. Cross Lay: Rope or strand in which one or more operations are performed in opposite directions. A multiple operation product is described according to the direction of the outside layer. Regular Lay: The type of rope wherein the lay of the wires in the strand is in the opposite direction to the lay of the strand in the rope. The crowns of the wires appear to be parallel to the axis of the rope. Lang Lay: The type of rope in which the lay of the wires in the strand is in the same direction as the lay of the strand in the rope. The crowns of the wires appear to be at an angle to the axis of the rope. Alternate Lay: Lay of a wire rope in which the strands are alternately regular and lang lay. Alberts Lay: An old, rarely used term for lang lay. Reverse Lay: Another term for alternate lay. Spring Lay: This is not definable as a unique lay; more properly, it refers to a specific wire rope construction.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	Industry
Laying down pipe	The operation of pulling drill pipe or tubing from the hole and laying it down on the pipe rack.	*Petroleum Drilling*
Layoff	Excess capacity of a generating unit, available for a limited time under the terms of a sales agreement.	*Energy*
Layout	The design or pattern of the main roadways and workings. The proper layout of mine workings is the responsibility of the manager aided by the planning department.	*Mining*
Lazy back	the place at the surface where the coals were stacked and loaded for sale (S. Staffs.).	*Mining*
Lazy balk	a balk of timber across the top of a screen or hopper against which the top of the tub was thrown to prevent it from going over when being emptied.	*Mining*
lb	Pound	*General*
lb per cu ft	Pounds per cubic foot	*General*
lb per hr	Pounds per hr*	*General*
L-Band	The group of radio frequencies extending from 390MHz to 1550MHz. The GPS carrier frequencies (1227.6MHz and 1575.42MHz) are in the L-band.	*Electrical Engineering*
LCC	See Life Cycle Costing.	*Maintenance*
LCO	light cycle oil	*Petro-Chemical Abbreviations*
LD Ratio	The ratio of the length (L) to diameter (D) of an extruder or injection molding machine. This ratio can be expressed based on barrel length or screw flighted length.	*Engineering Physics*
LDC	See Local Distribution Company.	*Energy*
LDC	See: Laundry and Dry Cleaning International Union (AFL-CIO)	*Industrial Relations*
LDT	light duty truck	*Petro-Chemical Abbreviations*
LDV	light duty vehicle	*Petro-Chemical Abbreviations*
Lea stone	laminated sandstone with ironstone balls (nodules). (Lancs.).	*Mining*
Leach	To dissolve a substance out of another by percolation.	*Material Process*
Leachable	Extractable by chemical solvents.	*Mining*
Leachate	The liquid that has percolated through the soil or other medium.	*Energy*
Leaching	A process in which metal is extracted from mined ore by means of adding a soluble substance. Commonly used in gold mining.	*Metallurgy*
Lead	The distance a screw thread advances axially in one turn.	*Fastening*
Lead acid battery	An electrochemical battery that uses lead and lead oxide for electrodes and sulfuric acid for the electrolyte.	*Energy*
Lead alloy	Metal alloy composed of predominantly lead.	*Material Process*
Lead Chrome Pigments	A series of inorganic pigments including yellows, oranges, and greens, used in polyolefins and other plastics.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lead Line	That part of a rope tackle leading from the first, or fast, sheave to the drum.	*Wire Rope & Cable*
Lead Naphthenate	A lead soap of naphthenic acids, the latter occurring naturally in petroleum.	*Oil Analysis*
Lead Time	The time that elapses from placement of an order until receipt of the order, including time for order transmittal, processing, preparation, and shipping.	*Procurement*
Leaded Chip Carrier	Leaded Chip Carrier also called PLCC or Plastic Leaded Chip Carrier: A square surface mount chip package in plastic with leads (pins) on all four sides. Example: Maxim 20-pin PLCC diagram (PDF)	*Electrical Engineering*
Leaded Chip Carrier	also called PLCC or Plastic Leaded Chip Carrier - A square surface mount chip package in plastic with leads (pins) on all four sides. Example - Maxim 20-pin LCC diagram (PDF)	*Electrical Engineering*
Leaded gasoline	A fuel that contains more than0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon.	*Energy*
Leaded premium gasoline	Gasoline having an antiknock index (R+M/2) greater than 90 and containing more than 0.05 grams of lead or 0.005 grams of phosphorus per gallon.	*Energy*
Leaded regular gasoline	Gasoline having an antiknock index (R+M/2) greater than or equal to 87 and less than or equal to 90 and containing more than 0.05 grams of lead or 0.005 grams of phosphorus per gallon.	*Energy*
Leader	a carter of coals. (Scot.); or the slip of a fault. (Som.); or the man in charge of sinking boreholes. (Scot.); or a cast or wrought-iron ring or shoe bolted to the outside at the bottom of a brick or wrought iron cylinder or wooden drum which was used when sinking a shaft through soft ground. It would be allowed to sink under its own weight, or a fissure in a coal seam. Also known as a 'back'. (N. East); or a constant bed or band of coal or ironstone to be found in a coal seam that was used as a datum line by the surveyor; or a thin band of coal or coaly shale which serves as a guide to finding a seam which has been displaced by a fault.	*Mining*
Leading edge	In reference to a wind energy conversion system, the area of a turbine blade surface that first comes into contact with the wind.	*Energy*
Leading heading	see Advanced heading.	*Mining*
Leadless Ceramic Chip Carrier	Leadless Ceramic Chip Carrier or Leadless Chip Carrier: An IC package, usually ceramic, that has no leads (pins). It instead uses metal pads at its outer edge to make contact with the printed circuit board. Example: Maxim 20-pin LCC diagram (PDF)	*Electrical Engineering*
Leadless Ceramic Chip Carrier	Leadless Ceramic Chip Carrier or Leadless Chip Carrier - An IC package, usually ceramic, that has no leads (pins). It instead uses metal pads at its outer edge to make contact with the printed circuit board. Example - Maxim 20-pin LCC diagram (PDF)	*Electrical Engineering*
Lead-time bias	If prognosis study patients are not all enrolled at similar, well-defined points in the course of their disease, differences in outcome over time may merely reflect differences in duration of illness.	*Analysis*
Leaf	A section of a drawbridge.	*Civil Engineering*
Leaflet, Collaboration	A concise overview of The Cochrane Collaboration's aims and activities. It can be downloaded from the Collaboration web site.	*Quality Engineering*

Term	Definition	*Industry*
Leakage	An unfortunate result of sampling with finite intervals. Results in smearing of frequency components. Improved by windowing (e.g., Hanning).	*Reliability Engineering*
Leakage Classification	A term used to describe certain standardized testing procedures for control valves with a flow coefficient greater than 0. 1 (Cv). These procedures are outlined in ANSI Standard B16.104-1976, which gives specific tests and tolerances for six seat leakage classifications. It should be remembered that these tests are used to establish uniform acceptance standards for manufacturing quality and are not meant to be used to estimate leakage under actual working conditions. Nor should anyone expect these leakage rates to be maintained after a valve is placed in service.	*Industrial Engineering*
Leakage Current	The small current flowing through or leaking from the output device in the Off state due to semiconductor characteristics.	*Electrical Engineering*
Leakage Inductance	Leakage inductance in a transformer is an inductive component that results from the imperfect magnetic linking of one winding to another. In an ideal transformer, 100% of the energy is magnetically coupled from the primary to the secondary windings. Imperfect coupling reduces the signal induced in the secondary windings. The electrical equivalent is some self-inductance in series with the primary windings that are properly coupled. This series inductance is the "leakage inductance."	*Electrical Engineering*
Leakage Inductance	Leakage inductance in a transformer is an inductive component that results from the imperfect magnetic linking of one winding to another. In an ideal transformer, 100% of the energy is magnetically coupled from the primary to the secondary windings. Imperfect coupling reduces the signal induced in the secondary windings. The electrical equivalent is some self-inductance in series with the primary windings that are properly coupled. This series inductance is the "leakage inductance."	*Electrical Engineering*
Leakage intake system	a method of ventilating a face using two intake roadways. This method can only be used where there is a strong air current.	*Mining*
Leakage Rate	The maximum rate at which a fluid is permitted or determined to leak through a seal.	*Electrical*
Leakage Rate	The maximum rate at which a fluid is permitted or determined to leak through a seal. The type of fluid, the deferential pressure across the seal, the direction of leakage, and the location of the seal must be specified.	*Electrical Engineering*
Lean	thin coal, or poor coal, or ironstone of inferior quality.	*Mining*
Lean Manufacturing	The systematic identification and elimination of waste to reduce manufacturing or operating costs.	*Maintenance*
Lean Manufacturing	Also known simply as "lean", it is a philosophy that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination. The seven wastes that are targeted by lean are: overproduction, unnecessary transportation, inventory, motion, defects, over-processing and waiting. The tools, techniques and practices are derived from the Toyota Production System.	*Reliability Engineering*
Lean oil	Absorbent oil fed to absorption towers in which gas is to be stripped. After absorbing the heavy ends from the gas, it becomes fat oil. When the heavy ends are subsequently stripped, the solvent again becomes lean oil.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Leap	the direction of throw of a fault, e.g. leap-ups or leap-downs. It could also be quoted as 'up-leaps' or 'down-leaps'.	*Mining*
Lear, empty. (Som.).	Lear, empty. (Som.).	*Mining*
Lease	A legal document conveying the right to drill for oil and gas, or the tract of land on which a lease has been obtained where the producing wells and production equipment are located.	*Petroleum Engineering*
Lease and plant fuel	Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and as fuel in natural gas processing plants.	*Energy*
Lease Bonus	The amount typically paid to a landowner (per acre) for the right to lease land for oil and gas exploration for a specific period of time (often 2 to 3 years.) This is separate from royalty, which is a percentage of revenue from production that may be paid to a landowner if a productive well is made.	*Petroleum Drilling*
Lease equipment	All equipment located on the lease except the well to the point of the "Christmas tree."	*Energy*
Lease fuel	Natural gas used in well, field, and lease operations, such as gas used in drilling operations, heaters, dehydrators, and field compressors.	*Energy*
Lease operations	Any well, lease, or field operations related to the exploration for or production of natural gas prior to delivery for processing or transportation out of the field. Gas used in lease operations includes usage such as for drilling operations, heaters, dehydraters, field compressors, and net used for gas lift.	*Energy*
Lease rates	How much a company pays for land or mineral rights. These are typically executed in five-year increments.	*Petroleum Drilling*
Lease separation facility	A facility installed at the surface for the purpose of (a) separating gases from produced crude oil and water at the temperature and pressure conditions set by the separator and/or (b) separating gases from that portion of the produced natural gas stream that liquefies at the temperature and pressure conditions set by the separator.	*Energy*
Lease separator	A facility installed at the surface for the purpose of separating the full well stream volume into two or three parts at the temperature and pressure conditions set by the separator. For oil wells, these parts include produced crude oil, natural gas, and water. For gas wells, these parts include produced natural gas, lease condensate, and water.	*Energy*
Lease	The instrument by which a leaseholder or working interest is created in minerals.	*Petroleum Drilling*
Leasehold Production	Natural gas liquids produced, extracted, and credited to a company's interest.	*Energy*
Leasehold Reserves	Natural gas liquid reserves corresponding to leasehold production defined above.	*Energy*
Least Squares Line	The straight line for which the sum of the squares of the residuals (deviations) is minimized. This method is used to calculate B.F.S.L. linearity.	*Electrical Engineering*
Least-significant bit	In a binary number, the LSB is the least weighted bit in the number. Typically, binary numbers are written with the MSB in the left-most position; the LSB is the furthest-right bit.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Least-significant bit	In a binary number, the LSB is the least weighted bit in the number. Typically, binary numbers are written with the MSB in the left-most position; the LSB is the furthest-right bit.	*Electrical Engineering*
Least-squares Line	The straight line for which the sum of the squares of the residuals (deviations) is minimized.	*General Engineering*
Leather bed	the clayey material along a fault face, sometimes a term also applied to a soft parting in a coal seam.	*Mining*
Leathery	Mechanical behavior associated with a polymer near its glass transition temperature.	*Material Process*
Led	a word meaning 'spare'.	*Mining*
LED	Light Emitting Diode	*Gears*
LED (Light Emitting Diode)	A solid state light source that emits variable light, or (in MICRO SWITCH modulated LED controls) invisible, infrared radiation.	*Electrical Engineering*
Ledge	A vein or lode.	*Mining*
Leery	a lamp. (Scot.).	*Mining*
Lefthand Thread	A screw thread that is screwed in by rotating counterclockwise.	*Maintenance*
Leg	a single prop to support the roof on the coalface; or the lower part of steel arch road support - a pair of legs and a crown forming a 'ring' - see also Prop and Support.	*Mining*
Legume	any plant that grows seeds in a pod such as peas and beans	*Agriculture*
Legume	A member of the Fabaceae family (pea family). Also the fruit or pod of this family of plants. This family includes many plants grown for food or livestock forage. Leguminous plants commonly grown by U.S. farmers include forage crops such as alfalfa and clover, and food crops such as beans and peas.	*Agriculture*
Length	see Stint.	*Mining*
Length of Action	of Action: The distance on an involute line of action through which the point of contact moves during the action of the tooth profile.	*Mechanical Engineering*
Length Of Engagement	The axial distance over which an external thread is in contact with an internal thread.	*Maintenance*
Length of Lay	The axial length of one turn of the helix of a wire or member.	*Electrical*
Lens	Generally used to describe a body of ore that is thick in the middle and tapers towards the ends.	*Mining*
Lensing	Is a term which refers to a film defect which causes undesirable elongated thin voids in an extruded film. Are sometimes referred to as windows or air pockets.	*Engineering Physics*
Lenticular	A deposit having roughly the form of a double convex lens.	*Mining*
Leon	Maxwell Performance Equation: The selection standard index related to the appropriated performance standard where LMn = C*LN((Iv^a) / (Dv^b)). Where C is an indexing constant, as is a and b and Iv signifies one or more values where increased value equals performance and Dv equals one or more values where the lowest value results in increased performance. The overall value resulting in an LMn of 100 is the highest achievable value	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lesion	A wound; a well-marked, but limited, diseased area; a break or rupture through a tissue, especially a surface tissue.	*Forestry*
Lessee	An independent marketer who leases the station and land and has use of tanks, pumps, signs, etc. A lessee dealer typically has a supply agreement with a refiner or distributor and purchases products at dealer tank-wagon prices. The term "lessee dealer" is limited to those dealers who are supplied directly by are finer or any affiliate or subsidiary of the reporting company. "Direct supply" includes use of commission agent or common carrier delivery.	*Energy*
LEV	low-emission vehicle	*Petro-Chemical Abbreviations*
Levee	An embankment designed to prevent the flooding of a river. Example: to levee a treacherous stream.	*Civil Engineering*
Levee	An embankment designed to prevent the flooding of a river. Example - to levee a treacherous stream.	*Civil Engineering*
Level	The horizontal openings on a working horizon in a mine; it is customary to work mines from a shaft, establishing levels at regular intervals, generally about 50 meters or more apart.	*Mining*
Level	A tunnel cut on the vein from the main tunnel. A drift.	*Mining*
Level free	drained by means of an adit or free level.	*Mining*
Level Translator	A device which translates a logic signal from one type to another. Example: ECL to TTL	*Electrical Engineering*
Level Translator	A device which translates a logic signal from one type to another. Example -	*Electrical Engineering*
Levelized	A lump sum that has been divided into equal amounts over period of time.	*Energy*
Levelized cost	The present value of the total cost of building and operating a generating plant over its economic life, converted to equal annual payments. Costs are levelized in real dollars (i.e., adjusted to remove the impact of inflation).	*Energy*
Leveller	The transfer bar is rolled to a final gauge in the 4Hi Finishing Mill which is equipped with front and back coiler furnaces. The automatic gauge control includes an x-ray thickness gauge feedback.	*Steel*
Lever	An operating device for quarter-turn valves.	*General Mechanical*
Lever Rule	Mathematical expression whereby the relative phase amounts in a two-phase alloy at equilibrium may be computed.	*Engineering Physics*
Leverage	A gain in output force over input force by sacrificing the distance moved. Mechanical advantage or force multiplication.	*Mechanical, Process, and Operations*
Leverage ratio	A measure that indicates the financial ability to meet debt service requirements and increase the value of the investment to the stockholders. (i.e., the ratio of total debt to total assets).	*Energy*
Levey-Jennings control chart	A commonly used control chart in which individual control measurements are plotted directly on a control chart with limit lines drawn either as mean ± 2s or mean ± 3s. Time is displayed on the x-axis usually in terms of days or runs.	*Quality*
LEVP	Low Emissions Vehicle Program.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Leys	a term for shales. (Lancs.).	*Mining*
LFE	See: Locomotive Firemen and Enginemen; Brotherhood of (AFL-CIO)	*Industrial Relations*
LGPN	See: Leather Goods, Plastic and Novelty Workers' Union; International (AFL-CIO)	*Industrial Relations*
LHV	Lower Heating Value.	*Energy*
LIA	See: Insurance Agents; International Union of Life (Ind)	*Industrial Relations*
Liability	An amount payable in dollars or by future services to be rendered.	*Energy*
Libya (1962-present)	Libya (1962-present)	*Energy*
Licensed site capacity	Capacity (number of assemblies) for which the site is currently licensed.	*Energy*
Licensees	Entity that has been granted permission to engage in an activity otherwise unlawful (i.e., hydropower project).	*Energy*
Licht barrier	a light stone-dust barrier situated close to the coalface. (Scot.).	*Mining*
Lid	a flat piece of timber inserted between the top of a prop and the roof to prevent splitting in the case of timber props and to increase friction in the case of steel props. -see also Biscuit, Bonnet, Crown piece, Cap and Pad; or a piece of timber about 1foot long placed on top of a prop to support the roof.	*Mining*
Lie on	to work an extra shift. To work overtime. (Scot.).	*Mining*
Lie or Lye	a 'pass-by', or shunt. A storage or by-pass arrangement in haulage track; or the reference to the dip in the strata.	*Mining*
Lien	Funds are encumbered (liened) when the purchase order is opened and invoicing has not yet occurred.	*Procurement*
Life	That Strange Experience You Have All Day, Every Day. In A Maintenance Context, You May Want To Look At Equipment Life.	*Plant Engineering*
Life Cycle	The minimum number of pressure cycles the transducer can endure and still remain within a specified tolerance.	*General Engineering*
Life cycle assessment (LCA)	A cradle to grave evaluation of environmental and energy impacts of a given product design.	*Material Process*
Life Cycle Assessment LCA	the most detailed method of analyzing the life cycle of a material	*Physics*
Life Cycle Cost	The total cost of a piece of equipment or system over its entire lifetime; the total of all costs generated or forecasted to be generated during the design, development, production, operation, maintenance, and support processes. Life cycle costs include direct, indirect, recurring, non recurring costs such as acquisition, installation, operating, maintenance, upgrades, and removal or disposal costs.	*Maintenance*
Life Cycle Costing (LCC)	A process of estimating and assessing the total costs of ownership, operation, maintenance, and disposal costs of a piece of equipment during its projected equipment life. LCC is typically used to compare alternative equipment design or purchase options to select the most appropriate option. LCC is the practice of obtaining over their lifetime the best use of the physical assets at the lowest cost to the entity. This is achieved through a combination of management, financial, engineering and other disciplines. Life Cycle Costing is sometimes referred to as "Terotechnology" but terotechnology is really the 'science' of life cycle	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	costing; it is concerned more with the analysis of component data and derivation of the appropriate component life cycles than with application. Terotechnology is a more common term in manufacturing industry where it is applied to analyzing the life spans of relatively short lived plant and equipment rather than longer lived infrastructure assets.	
Life cycle history	A time history of events and conditions associated with an item of equipment from its release from manufacturing to its removal from service. The life cycle should include the various phases that an item will encounter it its life, such as: handling, shipping and storage prior to use; mission profiles while in use; phases between missions, such as standby time or storage, transfer to and from repair sites and alternate locations; and geographical locations of expected deployment.	*Reliability Engineering*
Life Cycle Testing	Subjecting units, components or systems to stresses similar to those anticipated in real life service while extracting engineering data related to life expectancy, reliability, specification compliance or improvements, which is usually aimed at determining the units', components' or systems' meantime between failures.	*Reliability Engineering*
Life data analysis	The statistical analysis of failure and usage data performed in order to be able to mathematically model the reliability and failure characteristics of a system	*Reliability Engineering*
Life Distribution	A mathematical model that describes the probability of failures occurring over time. Also known as the probability density function, this function is integrated to obtain the probability that the failure time takes a value in a given time interval. This function is the basis for other important reliability functions, including the reliability function, the failure rate function and the mean life.	*Reliability Engineering*
Life extension	Restoration or refurbishment of a plant to its original performance without the installation of new combustion technologies. Life extension results in 10 to 20 years of plant life beyond the anticipated retirement date, but usually does not result in larger capacity.	*Energy*
Life units	A measure of use duration applicable to the item. Measures include time, cycles, distance, rounds fired, attempts to operate, etc.	*Reliability Engineering*
Lift	The force that pulls a wind turbine blade, as opposed to drag.	*Energy*
LIFT	The height of a column or body of fluid below a given point expressed in linear units.	*Mechanical, Process, and Operations*
Lift bridge	A bridge having a section that can be lifted vertically to permit passage of boats beneath. Also called "vertical lift bridge."	*Civil Engineering*
Lifting costs	The costs associated with the extraction of a mineral reserve from a producing property.	*Energy*
Lifting lugs	Lugs provided on large ball, gate, and check valves, for lifting and positioning valves. Also called lifting eyes.	*Mechanical*
Lifting points	connectors (sometimes temporary) directly on the steel article that aid the galvanizer in handling the article throughout the galvanizing process	*Materials Process*
Light bulbs	A term generally used to describe a man-made source of light. The term is often used when referring to a "bulb" or "tube".	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Light emitting diode (LED)	An electro-optical device.	*Material Process*
Light Ends	Low-boiling volatile materials in a petroleum fraction. They are often unwanted and undesirable, but in gasoline the proportion of light ends deliberately included are used to assist low-temperature starting.	*Lubrication*
Light gas oils	Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees to 650 degrees Fahrenheit.	*Energy*
Light obscuration	The degree of light blockage as reflected in the transmitted light impinging on the photodiode.	*Oil Analysis*
Light Operated (L.O.)	The control operating mode in which the output is energized when the light beam is not blocked (retro/thru scan), or object is present (diffuse) the photosensor is illuminated.	*Electrical Engineering*
Light rail	An electric railway with a "light volume" traffic capacity compared to "heavy rail." Light rail may use exclusive or shared rights-of-way, high or low platform loading, and multi-car trains or single cars. Also known as "street car," "trolley car," and "tramway."	*Energy*
Light trucks	All single unit two-axle, four-tire trucks, including pickup trucks, sports utility vehicles, vans, motor homes, etc. This is the Department of Transportation definition. The Energy Information Administration defined light truck as all trucks weighing 8,500 pounds or less.	*Energy*
Light water	Ordinary water (H_2O), as distinguished from heavy water or deuterium oxide (D_2O).	*Energy*
Light water reactor (LWR)	A nuclear reactor that uses water as the primary coolant and moderator, with slightly enriched uranium as fuel.	*Energy*
Light-duty vehicles	Vehicles weighing less than 8,500 lbs (include automobiles, motorcycles, and light trucks).	*Energy*
Light-Emitting Diode	A semiconductor device that emits light (usually visible or infrared) when forward-biased. The application note, "Driving LEDs in Battery-Operated Applications: Controlling Brightness Power Efficiently" has a good explanation of how LEDs work, especially with regard to current vs. LED brightness and schemes for matching brightness when driving multiple LEDs.	*Electrical Engineering*
Light-Emitting Diode	A semiconductor device that emits light (usually visible or infrared) when forward-biased. The application note, "Driving LEDs in Battery-Operated Applications - Controlling Brightness Power Efficiently" has a good explanation of how LEDs work, especially with regard to current vs. LED brightness and schemes for matching brightness when driving multiple LEDs.	*Electrical Engineering*
Lighting conservation feature	A building feature or practice designed to reduce the amount of energy consumed by the lighting system.	*Energy*
Lighting Demand-Side Management (DSM) program	ADSM program designed to promote efficient lighting systems in new construction or existing facilities. Lighting DSM programs can include: certain types of high-efficiency fluorescent fixtures including T-8 lamp technology, solid state electronic ballasts, specular reflectors, compact fluorescent fixtures, LED and electroluminescent Emergency Exist Signs, High Pressure Sodium with switchable ballasts, Compact Metal Halide, occupancy sensors, and daylighting controllers.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lighting equipment	These are light bulbs used to light the building's interior, such as incandescent light bulbs, fluorescent light bulbs, compact fluorescent light bulbs, and high-intensity discharge (HID) lights.	*Energy*
Lightning Arrestor	This protects lines, transformers, and equipment from lightning surges by carrying the charge to the ground. Lightning arrestors serve the same purpose on a line as a safety valve on a steam boiler.	*Energy*
Lights	All of the light bulbs controlled by one switch are counted as one light. For example, a chandelier with multiple lights controlled by one switch is counted as one light. A floor lamp with two separate globes or bulbs controlled by two separate switches would be counted as two lights. Indoor and outdoor lights were counted if they were under the control of the householder. This would exclude lights in the hallway of multi-family buildings.	*Energy*
Lights-out factory	An automated factory that requires no light because no people work in it.	*Electrical*
Lignin	One component of the matrix of the wood microstructure. A phenol-propane network polymer. (See hemicellulose).	*Material Process*
Lignite	The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e. containing both inherent moisture and mineral matter).	*Energy*
LIHEAP	Low-Income Home Energy Assistance Program.	*Energy*
Likelihood Function	This function represents the joint probability of all points in a data set. For complete data, the likelihood function consists of the product of the pdf for each data point; for data sets that also include suspended or censored data, the likelihood function is more complex. Maximum likelihood estimation techniques maximize this function in order to determine the best parameter estimates.	*Reliability Engineering*
Likelihood of Failure (Lof)	See probability of failure	*Reliability Engineering*
Likelihood ratio	Ratio of the probability that a given diagnostic test result will be expected for a patient with the target disorder rather than for a patient without the disorder.	*Analysis*
LILACS (Latin American and Caribbean Health Sciences Literature)	An electronic database based on a regional database of medical and science literature. It is compiled by the Latin American and Caribbean Centre for Health Science Information, a unit of the Pan American Health Organisation.	*Quality Engineering*
Lilleycock, (Lillicock or Lillycock), the signal for the end of the shift (S. Derbys.).	see also Loosit.	*Mining*
Lill-head	the winding gear at the top of the shaft (S. Mids.). This might derive from the company name, The Lilleshaw Co. Ltd., who manufactured headgears.	*Mining*
Limbers	see Limmer.	*Mining*
Lime	An insoluble mineral deposit found in water.	*Chemistry*
Lime coal	small coals riddled and graded to be sold for lime burning. -see also Pan coal.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Limestone	A sedimentary rock consisting chiefly of calcium carbonate, primarily in the form of the mineral calcite.	*Petroleum Engineering*
Limestone	A bedded, sedimentary deposit consisting chiefly of calcium carbonate.	*Mining*
Limit of Blank (LoB)	Highest measurement result that is likely to be observed (with a stated probability) for a blank sample; typically estimated as a 95% one-sided confidence limit by the mean value of the blank plus 1.65 times the SD of the blank. [CLSI]	*Quality*
Limit of Detection (LoD)	Lowest amount of analyte in a sample that can be detected with (stated) probability, although perhaps not quantified as an exact value; estimated as a 95% one-sided confidence limit by the mean of the blank plus 1.65 times the SD of the blank plus 1.65 times the SD of a low concentration sample. [CLSI]	*Quality*
Limit of draw	the point on the surface beyond which there are no effects of subsidence caused by underground working.	*Mining*
Limit of Quantification (LoQ)/Lower limit of quantification	Lowest amount of analyte that can be quantitatively determined with stated acceptable precision and trueness, under stated experimental conditions; the analyte concentration at which the 95% limit of total error, i.e., bias plus 2*SD, meets the required or stated goal for allowable error. [CLSI]	*Quality*
Limit order	An order made by a client to a broker to buy or sell shares at a specified price or better.	*Mining*
Limit Switch	A mechanical device which, when activated, opens or closes contacts to alter the control circuit.	*Equipment*
Limit switch	An electrical device providing a signal to a remote observation station indicating when the valve is in the fully open or fully closed position. Usually a component of a valve operator.	*Mechanical*
Limits of Error	Error: A tolerance band for the thermal electric response of thermocouple wire expressed in degrees or percentage defined by ANSI specification MC-96.1 (1975).	*Electrical*
Limmer	the shafts by which the horse or pit pony draws the tubs. Also known as 'limbers'; or the shaft-like projections of the rolley on which the driver sits. (N. East).	*Mining*
Limonite	A brown, hydrous iron oxide.	*Mining*
Limousin	A French breed of beef cattle. In the United States they are used to produce beef.	*Agriculture*
lin ft	Linear foot	*General*
Lin, Linsay, Linsey, Linstey, Lin and Wood	all terms for more or less finely interbedded shale and sandstone or striped shales. (derived from mixed linen and woolen fabrics 'Linsey-woolsey'). (Lancs.).	*Mining*
Lincoln	A breed of sheep believed to be the result of crossing the Leicester and the coarse native sheep of Lincolnshire. First imported into the United States at the close of the eighteenth century, the Lincoln has been more popular in Canada. In the United States, it has been most important in the centralized states and in Idaho and Oregon .	*Agriculture*
Lincoln Red	A breed of beef cattle developed in Lincolnshire, England.	*Agriculture*
Lindol	Trade name for tricresyl phosphate, used as a plasticizer for lacquers and plastics.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Line	A line is a system of poles, conduits, wires, cables, transformers, fixtures, and accessory equipment used for the distribution of electricity to the public.	*Energy*
Line	A pipe, tube or hose for conducting fluids.	*Mechanical*
Line cutting	Straight clearings through the bush to permit sightings for geophysical and other surveys.	*Mining*
Line loss	Electric energy lost because of the transmission of electricity. Much of the loss is thermal in nature.	*Energy*
Line of Action	The line of action of a force is the infinite line defined by extending along the direction of the force from the point where the force acts.	*Engineering Physics*
Line Pipe	(LP) Pipe generally for use in the oil and gas industry for the transmission of oil and gas under pressure, or for a variety of process flow applications. Common specifications API Spec 5L and API Spec 5LX. See Carbon Steel Pipe Dimensions at this web site.	*Petroleum Engineering*
Line Regulation	The ability of a power-supply voltage regulator to maintain its output voltage despite variations in its input voltage.	*Electrical Engineering*
Line Regulation	The ability of a power-supply voltage regulator to maintain its output voltage despite variations in its input voltage.	*Electrical Engineering*
Line thermal monitoring (LTM)	Process that measures average power-line temperature and detects temperature changes in power lines. It is important because heat causes wires to expand and sag, resulting in short circuits, fires and blackouts if they contact treetops etc. (See also Wide-Area Monitoring System.)	*Electrical*
Line valve mounting	The valve is mounted directly to system valves.	*Mechanical, Process, and Operations*
Line, Drain	A line returning drain fluid independently to the reservoir or vented manifold.	*Mechanical, Process, and Operations*
Line, Exhaust	A line returning power or control fluid back to the reservoir or atmosphere.	*Mechanical, Process, and Operations*
Line, Pilot	A line which conducts control fluid.	*Mechanical, Process, and Operations*
Line, Suction	A supply line at sub-atmospheric pressure to a pump, compressor, or other component.	*Mechanical, Process, and Operations*
Line	This is the quickest way around a race circuit, taking advantage of braking, cornering and acceleration. For example, the line for a typical right-handed corner would begin by lining up on the left side of the approaching straight, braking hard, turning in all the way across the track to the inside curb, and then unwinding the steering wheel on the exit to release the friction of the turn, which takes the car back across the track to the outside again. The idea is to use the maximum amount of arc possible to maintain the greatest speed through the corner. The line is often visible due to the rubber laid down by cars, and interestingly is not the shortest way around the track, just the fastest.	*NASCAR*
Lineal	in direct line of decent.	*Petroleum Drilling*

Term	Definition	*Industry*
Lineal deviation	the components of Technical Hole Deviation that address differences between actual and planned lineal (linear; relating to lines) well bore properties; includes msVD, RCVD, msHD, and RCHD.	*Petroleum Drilling*
Linear	Having the property that the output is proportional to the input. Example: VOUT = k*VIN ; where k is a constant.	*Electrical Engineering*
Linear	Having the property that the output is proportional to the input. Example -	*Electrical Engineering*
Linear (Output)	Output that is a continuous amplified version of its input. That is, the output is a predetermined variation of its input.	*Electrical Engineering*
Linear actuator	A device for converting hydraulic energy into linear motion -- a cylinder or ram.	*Mechanical, Process, and Operations*
Linear coefficient of thermal expansion	Material parameter indicating dimensional change as a function of increasing temperature.	*Material Process*
Linear defect	One dimensional disorder in a crystalline structure, associated primarily with mechanical deformation. See also, dislocation.	*Material Process*
Linear density	The number of atoms per unit length along a given direction in a crystal structure.	*Material Process*
Linear Elastic	A force-displacement relationship which is both linear and elastic. For a structure, this means the deformation is proportional to the loading, and deformations disappear on unloading. For a material, the concept is the same except strain substitutes for deformation, and stress substitutes for load.	*Engineering Physics*
Linear Feedback Shift Register	A shift register in which some of its outputs are connected to the input through some logic gates (typically, an exclusive-or (XOR)). A wide variety of bit patterns can be generated inexpensively, including pseudo-random sequences. Can be used as a noise generator. Example: DC-to-DC Converter Combats EMI:	*Electrical Engineering*
Linear Feedback Shift Register	A shift register in which some of its outputs are connected to the input through some logic gates (typically, an exclusive-or (XOR)). A wide variety of bit patterns can be generated inexpensively, including pseudo-random sequences. Can be used as a noise generator.	*Electrical Engineering*
Linear Flow Characteristic	A characteristic where flow capacity or (Cv) increases linearly with valve travel. Flow is directly proportional to valve travel. This is the preferred valve characteristic for a control valve that is being used with a distributive control system (DCS) or programmable logic controller (PLC).	*Industrial Engineering*
Linear growth rate law	An expression for the buildup an unprotective oxide coating.	*Material Process*
Linear Low-Density Polyethylene	See Linear Polymer. Includes polyethylenes ranging in density from 0.95 to 0.935.	*Engineering Physics*
Linear Mode	Uses a linear-pass element (BJT or FET) to control/regulate the charging voltage/current.	*Electrical Engineering*
Linear molecular structure	Polymeric structure associated with bifunctional mer.	*Material Process*
Linear molecule, or long molecule	A straight chain molecule.	*Material Process*
Linear Polymer	A polymer in which the monomeric units are linked together in linear fashion with little or no long chain branching. Examples are linear low-density polyethylene and high-density polyethylene.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Linear regression analysis, least-squares analysis, ordinary regression analysis	A statistical technique for estimating the best linear relationship between two variables. The estimated line has the property that the sum of the squares of the deviations from the line is a minimum, hence the name least-squares analysis. This statistical technique is commonly applied to the data from a comparison of methods experiment, taking the test method values as the y-variable and the comparison method values as the x variable. The statistics calculated usually include the slope (b), y intercept (a), and standard deviation about the regression line, also termed the standard error of the regression line (sy/x) and also called the standard deviation of residuals (sres). These statistics provide information about the proportional, constant, and random errors between the methods, respectively.	*Quality*
Linear Regulator	A voltage regulator that is placed between a supply and the load and provides a constant voltage by varying its effective resistance.	*Electrical Engineering*
Linear scale	A scale that increases in equal steps. In a linear scale on a RevMan forest plot, the distance between 0 and 5 is the same as the distance between 5 and 10, or between 10 and 15. A linear scale may be used when the range of numbers being represented is not large, or to represent differences. See also: Logarithmic scale	*Quality Engineering*
Linear scale reticule	An optical glass having a straight scale marked to permit measurement or estimation of distance or length.	*Mechanical, Process, and Operations*
Linear system	A system is linear if its magnitude of response is directly proportional to its magnitude of excitation, for every part of the system.	*Reliability Engineering*
Linear Valve	Another name for a globe valve. It refers to the linear or straight-line movement of the plug and stem.	*Industrial Engineering*
Linearity	The closeness of a calibration curve to a specified straight line. Linearity is expressed as the maximum deviation of any calibration point on a specified straight line during any one calibration cycle.	*General Engineering*
Linearity	The closeness of a calibration curve to a specified straight line. Linearity is expressed as the maximum deviation of any calibration point on a specified straight line during any one calibration cycle.	*Electronic Process*
Linearity (End Point)	see Terminal Base Linearity	*Electrical Engineering*
Linearity (Linearity Error)	The deviation of the sensor output curve from a specified straight line. Linearity error is usually expressed as a percent of full scale output.	*Electrical Engineering*
Linearity (Terminal Base)	see Terminal Base Linearity.	*Electrical Engineering*
Line-miles of seismic exploration	The distance along the Earth's surface that is covered by seismic surveying.	*Energy*
Liners	a bar set between two other bars to support the roof. Usually erected to reinforce a set that is beginning to collapse under roof weight. (Leics.); or a foot piece put under a prop to stop in sinking into a soft floor.	*Mining*
Lines	lengths of string 2 to 3ft long, weighted and hung from small hooks screwed into the roof of a heading. Not less than two sometimes as many as four lines are used to take a sight using an oil-lamp. The original line is set by the surveyor. A white line is painted on the roof between the lines and on the face of the heading. In this way the heading is kept on a true course.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lines	Narrow waves which extend a considerable distance in a straight line so that the reflection from the surface appears as a line. See, also Air locks.	*Material Process*
Lineshaft Conveyor	A roller conveyor with carrying rollers individually powered by drive belts from a rotating shaft.	*Equipment*
Linesman	a member of the colliery survey team. –see Lines.	*Mining*
Lining	brick, concrete, cast-iron or steel casing supports for roadways or shafts; or surveying underground, (N. East); or clay ironstone in beds or bands. (Derbys.).	*Mining*
Lining mark	a drill hole in the roof with a wooden plug driven into it to show where the next lining is to commence. The plug is for the purpose of inserting a small fork from which a plumb-line was hung, behind which was held a candle or lamp forming a back-sight. The fore-sight was also fixed by a temporary plumb-line suspended from a piece of clay stuck to the roof.	*Mining*
Linoleum	Trade name for a semiflexible sheet which may be made by coating canvas with hot oxidized linseed oil, rosin, powdered cork, and pigments.	*Material Process*
Linoleum	A flooring material composed of binders, oxidized oil and resinous material that is mixed with ground cork or wood flour and pigment. The composition is applied to a backing of felt, fabric or burlap.	*Chemistry*
Linseed oil	A yellow to brown liquid pressed from seeds of the flax plant, used in the manufacture of paints and varnishes.	*Material Process*
Linters	Short fiber adhering to the cotton seeds after ginning used as a filler material for plastics, and a base for the manufacture of cellulose derivatives.	*Material Process*
Lip	the top part of a roadway close to the coalface that is taken down by ripping. -see also Canch, Caunch, Kench and Rip, or the edge of a fault slip.	*Mining*
Lip of shaft	the bottom edge of a shaft circle where open to the seam workings.	*Mining*
Lip seal	A circular seal ring of "U" shaped cross section encompassing an elastomeric O-ring which provides resiliency and ensures a seal at the inner and out lips of the "U."	*Mechanical*
Lip Seal	An elastomeric or metallic seal that prevents leakage in dynamic and static applications by a scraping or wiping action at a controlled interference between itself and the mating surface.	*Lubrication*
Lipid	Generic term for a large class of organic molecules. Fats and oils are commonly known lipids.	*Agriculture*
Lipizzan	A breed of horse that represents more than 400 years of select breeding, dating to 1580 when Archduke Charles II established the stud farm in Lipizza (Lipica). The breed is rare, with fewer than 3,000 purebred Lipizzans in the world today. The breed is used in dressage and driving, as well as continuing to be the ultimate mount for classical horsemanship. The first privately owned Lipizzans in the United States were imported in 1937. Today there are an estimated 600 in the United States. Disneyland owns a number of Lipizzan mares and the Marine Corps uses them in their Color Guard.	*Agriculture*
Lipped	see Notched (N. Staffs.).	*Mining*
Lipper	another term for a 'ripper'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Liquefaction	the process of converting coal into liquid fuel.	*Mining*
Liquefaction	The process of converting coal into a synthetic fuel, similar in nature to crude oil and/or refined products, such as gasoline.	*Mining*
Liquefied natural gas (LNG)	Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260 degrees Fahrenheit at atmospheric pressure.	*Energy*
Liquefied Natural Gas (LNG)	Oilfield or naturally occurring gas, chiefly methane, liquefied for transportation.	*Petroleum Drilling*
Liquefied natural gas (LNG)	Oilfield or naturally occurring gas, chiefly methane, liquefied for transportation.	*Petroleum Drilling*
Liquefied Natural Gas (LNG)	Natural gas that has been liquefied by lowering its temperature to negative 260 degrees Fahrenheit.	*Energy*
Liquefied Petroleum Gas (LPG)	Light hydrocarbon material, gaseous at atmospheric temperature and pressure, held in the liquid state by pressure to facilitate storage, transport and handling. Commercial liquefied gas consists essentially of either propane or butane, or mixtures thereof.	*Petroleum Drilling*
Liquefied petroleum gas (LPG)	Light hydrocarbon material, gaseous at atmospheric temperature and pressure, held in the liquid state by pressure to facilitate storage, transport and handling. Commercial liquefied gas consists essentially of either propane or butane, or mixtures thereof.	*Petroleum Drilling*
liquefied petroleum gas (propane)	liquefied petroleum gas (propane)	*Energy*
Liquefied petroleum gases (LPG)	A group of hydrocarbon gases, primarily propane, normal butane, and isobutane, derived from crude oil refining or natural gas processing. These gases may be marketed individually or mixed. They can be liquefied through pressurization (without requiring cryogenic refrigeration) for convenience of transportation or storage. Excludes ethane and olefins. **Note: In some EIA publications, LPG includes ethane and marketed refinery olefin streams, in accordance with definitions used prior to January 2014.**	*Energy*
Liquefied refinery gases (LRG)	Hydrocarbon gas liquids produced in refineries from processing of crude oil and unfinished oils. They are retained in the liquid state through pressurization and/or refrigeration. The reported categories include ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene).	*Energy*
Liquid	The state in which a substance exhibits a characteristic readiness to flow with little or no tendency to disperse and relatively high incompressibility. See also Gas.	*Industrial*
Liquid Penetrant Examination or Inspection	This is a nondestructive examination method for finding discontinuities that are open to the surface of solid and essentially nonporous materials. This method is based on capillary action or capillary attraction by which the surface of a liquid in contact with a solid is elevated or depressed. A liquid penetrant, usually a red dye, is applied to the clean surface of the specimen. Time is allowed for the penetrant to seep into the opening. The excess penetrant is removed from the surface. A developer, normally white, is applied to aid in drawing the penetrant up or out to the surface. The red penetrant is drawn out of the discontinuity, which is located by the contrast and distinct appearance of the red penetrant against the white background of the developer.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Liquid collector	A medium-temperature solar thermal collector, employed predominantly in water heating, which uses pumped liquid as the heat-transfer medium.	*Energy*
Liquid crystal display (LCD)	An optical device in which a liquid crystal, composed of rod shaped polymeric molecules, is used to create visible characters by voltage produced disruption of the molecular orientation.	*Material Process*
Liquid erosion failure	A special form of wear damage in which a liquid is responsible for the removal of material.	*Material Process*
Liquid fuels	All petroleum including crude oil and products of petroleum refining, natural gas liquids, biofuels, and liquids derived from other hydrocarbon sources (including coal to liquids and gas to liquids). Not included are liquefied natural gas (LNG) and liquid hydrogen. See petroleum and other liquids.	*Energy*
Liquid Impingement Erosion	Progressive loss of material from a solid surface due to continue exposure to impacts by liquid drops or jets.	*Paint and Coatings*
Liquid Junction Potential	The potential difference existing between a liquid-liquid boundary. The sign and size of this potential depends on the composition of the liquids and the type of junction used.	*General Engineering*
Liquid Junction Potential	The potential difference existing between a liquid-liquid boundary. The sign and size of this potential depends on the composition of the liquids and the type of junction used.	*Electronic Process*
Liquid limit (LL)	the lower limit for viscous flow of a soil.	*Chemical*
Liquid metal embitterment	A form of degradation in which a material loses some ductility or fractures below its yield stress in conjunction with surface wetting by a lower melting point liquid metal.	*Material Process*
Liquid metal fast breeder reactor	A nuclear breeder reactor, cooled by molten sodium, in which fission is caused by fast neutrons.	*Energy*
Liquid penetrant inspection	A nondestructive method of detecting the presence of surface cracks and imperfections through use of a special red dye. Abbreviated as LPI or PT.	*General Mechanical*
Liquid penetrant inspection	A nondestructive method of detecting the presence of surface cracks and imperfections through use of a special red dye. Abbreviated as LPI or PT.	*Mechanical*
Liquid penetrant testing	A type of nondestructive testing in which surface defects are observed by the presence of a high visibility liquid that has previously penetrated into the defects and is subsequently drawn out the capillary action of a fine powder.	*Material Process*
Liquidation	In commodities market parlance, selling long positions to counterbalance previous buying.	*Metallurgy*
Liquidity index (LI)	quantitative value used to assess whether a soil will behave as a brittle solid, semisolid, plastic, or liquid. LI is equal to the difference between the natural moisture content of the soil and the plastic limit (PL) divided by the plasticity index (PI).	*Chemical*
Liquids	produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Liquidus	In a phase diagram, the line above which a single liquid phase will be present.	*Material Process*
List	thin bed or dirt band, also a weak laminated shale; or fusainous coal; or a bed of hard coal at the base of the Deep Hard Seam (Notts.).	*Mining*
Listing	fine shale or clay with glossy surfaces (slickensides), often associated with faulting. (Lancs.).	*Mining*
Liter	A unit of volume, 3.785 liters = 1 U.S. gallon. LITERS PER MINUTE - A unit of volumetric flow rate. LITER PER REVOLUTION - A unit of volumetric capacity.	*Mechanical, Process, and Operations*
Lith	the width of barren ground between those two portions of a coal seam that are separated by a fault of low hade (N. Staffs.).	*Mining*
Litharge	A fused form of lead monoxide, yellow lead oxide, used as a drier.	*Material Process*
Lithium batteries	Lithium batteries are typically coin-shaped and are used to power items such as Maxim's non-volatile static RAM (NV SRAM) and timekeeping circuits (such as real-time clocks). Lithium batteries for low-power, high-reliability, long-life applications such as non-volatile memory and timekeeping (typically in coin-shaped cells) use a variety of lithium-based chemistries (as differentiated from lithium-ion).	*Electrical Engineering*
Lithium batteries	Lithium batteries are typically coin-shaped and are used to power items such as Maxim's non-volatile static RAM (NV SRAM) and timekeeping circuits (such as real-time clocks).	*Electrical Engineering*
Lithium Grease	The most common type of grease today, based on lithium soaps.	*Lubrication*
Lithography	Print making technique applied to the processing of integrated circuits.	*Material Process*
Lithology	the gross physical character of a rock or rock types in a stratigraphic section.	*Chemical*
Lithology	The character of a rock described in terms of its structure, color, mineral composition, grain size, and arrangement of its component parts; all those visible features that in the aggregate impart individuality of the rock. Lithology is the basis of correlation in coal mines and commonly is reliable over a distance of a few miles.	*Mining*
Lithopone	An equimolecular mixture of zinc sulfide and barium sulfate prepared by coprecipitation.	*Material Process*
Lithosphere	The solid portion of the earth, as compared with the atmosphere and the hydrosphere. It includes the crust and part of the upper mantle.	*Petroleum Engineering*
Little Demon	a magneto-type exploder for firing single shots.	*Mining*
Little Giant	A movable nozzle attached to hydraulic pipes.	*Mining*
Live coal	coal that can be easily won from the face because of a favorable distribution of rock stresses within the enclosing strata, or by virtue of the gas emission from the seam.	*Mining*
Live Loading	Normally associated with valve packing. It designates the packing is spring loaded to maintain constant tension on the packing rings.	*Industrial Engineering*
Live Roller Conveyor	A series of rollers over which objects are moved by the application of power to all or some of the rollers. The power transmitting medium is usually belting or chain.	*Equipment*

Term	Definition	Industry
Livestock	any animals raised on the farm	*Agriculture*
Lloyd-Lipow Model	A reliability growth model based on the number of trials and successes at each stage of product development	*Reliability Engineering*
LMOA	Locomotive Maintenance Officers Association	*Petro-Chemical Abbreviations*
LN_2	Liquid nitrogen, often used for rapid cooling of environmental test chambers.	*Reliability Engineering*
LNC	lean NOX catalyst	*Petro-Chemical Abbreviations*
LNG	See Liquefied Natural Gas.	*Energy*
LNG	Liquefied natural gas. Natural gas becomes a liquid at a temperature of minus 258 degrees F and may be stored and transported in the liquid state.	*Petroleum Drilling*
LNT	lean NOX trap	*Petro-Chemical Abbreviations*
LOA	Linear alphaolefin	*Petro-Chemical Abbreviations*
Load	The electrical demand of a process expressed as power (watts), current (amps) or resistance (ohms).	*Electrical*
Load (electric)	An end-use device or customer that receives power from the electric system. Source: Glossary of Terms Used in NERC Reliability Standards.	*Energy*
Load Building	Programs aimed at increasing use of existing electric equipment or the addition of new equipment.	*Energy*
Load Cell	A device which produces an output signal proportional to the applied load.	*Equipment*
Load Centers	A limited geographical area where large amounts of power are used by customers.	*Energy*
Load control program	A program in which the utility company offers a lower rate in return for having permission to turn off the air conditioner or water heater for short periods of time by remote control. This control allows the utility to reduce peak demand.	*Energy*
Load Current	Is units = Amps/milliamps (DC) or Amps RMS/milliamps RMS (AC). The maximum amount of current that a proximity sensor will switch through its load. Load current for a particular device can be calculated by dividing the load voltage by the load resistance. Attempting to switch a higher load current than the sensor is rated for will result in sensor failure.	*Electrical Engineering*
Load curve	The relationship of power supplied to the time of occurrence. Illustrates the varying magnitude of the load during the period covered.	*Energy*
Load Diversity	The condition that exists when the peak demands of a variety of electric customers occur at different times. This is the objective of "load molding" strategies, ultimately curbing the total capacity requirements of a utility.	*Energy*
Load Dividing Pressure Control Valve	A pressure control valve used to proportion pressure between two pumps in series.	*Mechanical, Process, and Operations*
Load Duration Curve	A curve that displays load values on the horizontal axis in descending order of magnitude against percent of time (on the vertical axis) the load values are exceeded.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Load Factor	The ratio of the average load supplied to the peak or maximum load during a designated period. Load factor, in percent, also may be derived by multiplying the kWh in a given period by 100, and dividing by the product of the maximum demand in kW and the number of hours in the same period.	*Energy*
Load following	Regulation of the power output of electric generators within a prescribed area in response to changes in system frequency, tie line loading, or the relation of these to each other, so as to maintain the scheduled system frequency and/or established interchange with other areas within predetermined limits.	*Energy*
Load Forecast	Estimate of electrical demand or energy consumption at some future time.	*Energy*
Load Impedance	The impedance presented to the output terminals of a transducer by the associated external circuitry.	*Electronic Process*
Load Impedance	The impedance presented to the output terminals of a sensor by the associated external circuitry.	*Electrical Engineering*
Load leveling	Any load control technique that dampens the cyclical daily load flows and increases base load generation. Peak load pricing and time-of-day charges are two techniques that electric utilities use to reduce peak load and to maximize efficient generation of electricity.	*Energy*
Load loss (3 hours)	Any significant incident on an electric utility system that results in a continuous outage of 3 hours or longer to more than 50,000 customers or more than one half of the total customers being served immediately prior to the incident, whichever is less.	*Energy*
Load management	Controlling loads in a utility system to limit peak demand, reduce costs, improve load factor, or in some other way improve the stability and reliability of electrical power distribution.	*Electrical*
Load management technique	Utility demand management practices directed at reducing the maximum kilowatt demand on an electric system and/or modifying the coincident peak demand of one or more classes of service to better meet the utility system capability for a given hour, day, week, season, or year.	*Energy*
Load Management	Influencing the level and shape of demand for electrical energy so that demand conforms to present supply situations and long-run objectives and constraints.	*Energy*
Load on equipment	One hundred percent load is the maximum continuous net output of the unit at normal operating conditions during the annual peak load month. For example, if the equipment is capable of operating at 5% over pressure continuously, use this condition for 100% load.	*Energy*
Load Profile	Measurement of a customer's electricity usage over a period of time that shows how much and when a customer uses electricity. Load profiles can be used by REPs and transmission system operators to forecast electricity supply.	*Energy*
Load Profile	Information on a customer's usage over a period of time, sometimes shown as a graph.	*Energy*
Load Ratio Share	Ratio of a transmission customer's network load to the provider's total load calculated on a rolling twelve-month basis.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Load reduction request	The issuance of any public or private request to any customer or the general public to reduce the use of electricity for the reasons of maintaining the continuity of service of the reporting entity's bulk electric power supply system. Requests to a customer(s) served under provisions of an interruptible contract are not a reportable action unless the request is made for reasons of maintaining the continuity of service of the reporting entity's bulk electric power supply.	*Energy*
Load Regulation	Load regulation refers to circuitry that compensates for changes in load. Most commonly: Circuits that keep voltage constant as load varies.	*Electrical Engineering*
Load Shape	A curve on a chart showing power (kW) supplied (on the horizontal axis) plotted against time of occurrence (on the vertical axis), and illustrating the varying magnitude of the load during the period covered.	*Energy*
Load shedding	Intentional action by a utility that results in the reduction of more than 100 megawatts (MW) of firm customer load for reasons of maintaining the continuity of service of the reporting entity's bulk electric power supply system. The routine use of load control equipment that reduces firm customer load is not considered to be a reportable action.	*Energy*
Load Shifting	A load shape objective that involves moving loads from peak periods to off-peak periods. If a utility does not expect to meet its demand during peak periods but has excess capacity in the off-peak periods, this strategy might be considered.	*Energy*
Load tap changer (LTC)	load tap changers are devices used to adjust the performance of transformers. Adjusting the tap changes the voltage of the transformer's input or output.	*Electrical*
Load Upset	An upset to the process (that is not from changing the set-point). A simple example: you are taking a shower and someone flushes the toilet. The temperature suddenly changes on you, the controller. Another example: you are injecting steam into flowing cold water to get lukewarm water, and the inlet cold water changes temperature.	*Process Control*
Load	The amount of electric power delivered or required at any specified point or points on a system. Load originates primarily at the power consuming equipment of the customer.	*Energy*
Load, Regulation	The change in output (usually speed or voltage) from no-load to full-load (or other specified limits).	*Process Control*
Load-carrying capacity	Property of a lubricant to form a film on the lubricated surface, which resists rupture under given load conditions. Expressed as maximum load the lubricated system can support without failure or excessive wear.	*Oil Analysis*
Loader gate	see main gate.	*Mining*
Loading machine	is used in conventional mining to scoop broken coal from the working area and load it into a shuttle car, which hauls the coal to mine cars or conveyors for delivery to the surface.	*Energy*
Loading machine	Any device for transferring excavated coal into the haulage equipment.	*Mining*
Loading pocket	Transfer point at a shaft where bulk material is loaded by bin, hopper, and chute into a skip.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Loading Pressure	The pressure used to position a pneumatic actuator. It is the pressure that is actually applied to the actuator diaphragm or piston. It can be the instrument pressure if a valve positioner is not used or is bypassed.	*Industrial Engineering*
Loading Time	The available time is derived by subtracting the planned downtime from the available time per day or week, etc.	*Maintenance*
Load-serving entity (electric)	Secures energy and transmission service (and related Interconnect Operations Services) to serve the electrical demand and energy requirements of its end-use customers. See NERC definition.	*Energy*
Load-wear Index (LWI)	Measure of the relative ability of a lubricant to prevent wear under applied loads; it is calculated from data obtained from the Four Ball EP Method. Formerly called mean Hertz load.	*Lubrication*
Lobbing on	shoveling or loading out coal onto a belt (N. Staffs.).	*Mining*
Local	items produced within a specified local region. Not a well defined term, definitions range from being produced within 100 miles to being produced within a day's drive from your home.	*Agriculture*
Local Preheating	Preheating of a specific portion of a structure.	*Maintenance and Repair*
Local Stress-Relief Heat Treatment	Stress-relief heat treatment of a specific portion of a weldment. This is done extensively with induction coils, resistance coils, or propane torches in the field erection of steel piping.	*Maintenance and Repair*
Local distribution company (LDC)	A legal entity engaged primarily in the retail sale and/or delivery of natural gas through a distribution system that includes main lines (that is, pipelines designed to carry large volumes of gas, usually located under roads or other major right-of-ways) and laterals (that is, pipelines of smaller diameter that connect the end user to the mainline). Since there structuring of the gas industry, the sale of gas and/or delivery arrangements may be handled by other agents, such as producers, brokers, and marketers that are referred to as "non-LDC."	*Energy*
Local Distribution Company (LDC)	A business entity that obtains its primary revenues from the operations of a local retail gas distribution system and operates no transportation system other than connections within its own system or to the system of another company. Most often, an LDC is a utility.	*Energy*
Local Interconnect Network (LIN)	Defined by the LIN-BUS consortium, a LIN is a low data-rate, single-wire communications system, used in automotive and heavy vehicle applications.	*Electrical Engineering*
Local temperature	The temperature measured on the die of the temperature-measuring integrated circuit.	*Electrical Engineering*
Local Temperature Sensor	An element or function of an integrated circuit that measures its own die temperature.	*Electrical Engineering*
Localized Corrosion	Corrosion at discrete sites, for example, pitting, crevice corrosion, and stress corrosion cracking.	*Paint and Coatings*
Locate	To establish the possessory right to a mining claim.	*Mining*
Locating Ring	Device which aligns nozzle of injection molding machine with the sprue bushing and the mold with the stationary platen.	*Engineering Physics*
Locavore	a person committed to eating a diet produced within a specific area	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lock	An enclosed chamber in a canal, dam, etc., with gates at each end, for raising or lowering vessels from one level to another by admitting or releasing water. To furnish with locks, as a canal.	*Civil Engineering*
Lock bay	A broadened section of a canal before the gates of a lock.	*Civil Engineering*
Lock Nut	There are two common usage's of this term: 1. A nut which provides extra resistance to vibration loosening by either providing some form of prevailing torque, or, in free spinning nuts, by deforming and/or biting into mating parts when fully tightened. 2. The term is sometimes used for thin (or jam) nuts used to lock a thicker nut. When used in this way the thin nut should be adjacent to the joint surface and tightened against the thick nut. If placed on top of the thick nut the thin nut would sustain loads it was not designed to sustain.	*Maintenance*
Lock up pressure	The differential pressure required to produce tight shutoff in a regulator. It is usually a few PSI.	*Mechanical*
Lockage	The construction, use, or operation of locks, as in a canal or stream.	*Civil Engineering*
Locked Coil Strand	Smooth-surfaced strand ordinarily constructed of shaped, outer wires arranged in concentric layers around a center of round wires.	*Wire Rope & Cable*
Locker dobber	the man who stood by the side of the road pushing lockers between the spokes of the tubs to slow down their progress. (Mids). Also called 'Bob a locker'. -see also Snibbler.	*Mining*
Locker, Lolly or Sprag	a piece of timber or iron placed between the spokes of a tub's wheels to stop it from moving. Also called 'Dregs'. (N. East) and 'Scotches'. -see also Snibble.	*Mining*
Locking device	Any valve attachment whose purpose is to prevent the operation of the valve by unauthorized persons.	*General Mechanical*
Lockout/Tagout	Also referred to as LOTO. It is a safety procedure to ensure that dangerous machines are properly shut off and not started again prior to the completion of maintenance work. It requires that power sources be "isolated and rendered inoperative" before any repair procedure is started. LOTO works in conjunction with a lock usually locking the device or the power source with the hasp, and placing it in such a position that no hazardous power sources can be turned on. The procedure requires that a tag be affixed to the locked device indicating that it should not be turned on.	*Reliability Engineering*
Lock-outs	electrical isolation boxes located at intervals by the side of conveyors enabling the conveyor motor to be switched off to allow work to be carried out safely on or around the conveyor. Also called a 'latch'.	*Mining*
lockup	may occur, the electro-Hydraulic Control Unit (EHCU) is activated. The EHCU then modulates the brake pressure in the appropriate brake lines by means of the solenoid-operated valves. This is intended to prevent wheel lockup and help the vehicle maintain directional stability during potentially hazardous braking situations.	*Mechanical Engineering*
Lock-Up Valve	A special type of regulator that is installed between the valve positioner and the valve actuator, where it senses the supply air pressure. If that pressure falls below a certain level, it locks or traps the air loaded into the actuator causing the valve to fail-in-place.	*Industrial Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Loco level	the main level going inbye from the shaft along which the locomotives haul the coal, men and materials.	*Mining*
Lode	A mineral deposit in solid rock.	*Mining*
Lode	A metallic vein.	*Mining*
Lodge	a reservoir situated near to the winding engine house to collect water pumped out of the pit. The water would be used to fill the boilers to raise steam for the winding engine, or a sump or 'lodge room' situated at the lowest point in a mine to collect water ready to be pumped out of the mine. Also called a 'lodgement'.	*Mining*
Lodge, lodged, lodging	Permanent bending over of a stem. Often, but not always, associated with root diseases.	*Agriculture*
Lofting or Lofting	timbers, wood, usually old refuse, used as packing above and behind roof supports. (Scot.).	*Mining*
Log	Logarithm (common)	*Oil Analysis*
Log Sheet	A document on which brief details of minor activities and repairs are recorded.	*Reliability Engineering*
Logarithmic Scale	A method of displaying data (in powers of ten) to yield maximum range while keeping resolution at the low end of the scale.	*General Engineering*
Logging	The process of recording geological observations of drill core either on paper or on computer disk.	*Mining*
Logging	Well logging refers to using either wireline based instruments, which are lowered down the hole, or MWD - LDW (Measure - Logging While Drilling) equipment to analyze the rock formation being drilled through. Logging tools record properties of rock, such as gamma ray output from the formation, resistivity, conductivity and other factors to create a paper or digital "log" of the well, showing what kind of formation the wellbore penetrated. LWD or logging while drilling is used in the Eagle Ford Shale to help people well on track and in the shale zone instead of above or below it. LWD technology is essential for the horizontal drilling process since it gives the directional driller real-time information that he can use to keep the well inside the pay zone.	*Petroleum Drilling*
Logic	Sound thinking, thinking that makes sense	*Management Discussion*
Logic	The modification of an input signal that produces delayed, pulsed, latched. or other output response. Logic circuitry is sometimes an integral part of the control, but more often, a separate plug: in card or module.	*Electrical Engineering*
Logic devices	The general category of components which perform logic functions; for example AND, NAND OR and NOR. They can permit or inhibit signal transmission with certain combinations of control signals.	*Mechanical, Process, and Operations*
Logic state	Signal levels in logic devices are characterized by two stable states, the logical 1 (one) state and the logical 0 (zero) state. The designation of the two states is chosen arbitrarily. Commonly the logical 1 state represents an "on" signal and the 0 state represents an "off" signal.	*Mechanical, Process, and Operations*
Logistic regression	A form of regression analysis that models an individual's odds of disease or some other outcome as a function of a risk factor or intervention. It is widely used for dichotomous outcomes, in particular to carry out adjusted analysis. See also: Meta-regression	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Logistic Support Analysis (LSA)	A Methodology For Determining The Type And Quantity Of Logistic Support Required For A System Over Its Entire Lifecycle. Used To Determine The Cost Effectiveness Of Asset Based Solutions.	*Plant Engineering*
Logitudinal cell	Tubelike microstructural feature of wood aligned with the vertical axis of the tree.	*Material Process*
LOGMARS	Logistics Application of Automated Marking and Reading Symbols	*Gears*
Lognormal distribution	A lifetime statistical distribution that is often used to model products in which physical fatigue is the prominent contributor to the primary failure mode.	*Reliability Engineering*
Log-odds ratio	The (natural) log of the odds ratio. It is used in statistical calculations and in graphical displays of odds ratios in systematic reviews.	*Quality Engineering*
Logos	Logic	*Management Discussion*
LOLER	This is an acronym for the Lifting Operations and Lifting Equipment (LOLER) Regulations came into force in 1998 in the United Kingdom. They cover all operations and equipment which involve lifting people and goods at work. They cover such equipment as cranes, lifts, hoists, chains, ropes, slings, hooks, shackles, eyebolts, rope and pulley systems, and forklift trucks. They also cover second-hand and leased equipment, e.g. companies hiring out cranes retain duties over how the equipment is used and maintained by their customers. They apply to all workplaces - building sites, offices, hospitals, farms, factories, etc. All the requirements of the Provision and Use of Work Equipment 1998 Regulations apply to lifting equipment	*Reliability Engineering*
Lommy	wetted mudstone or fireclay. Also known as 'sloom'; or a layer of soft material in the roof of the coal seam. (Notts.).	*Mining*
London fix	The twice-daily bidding session held by five dealing companies to set the gold price. There are also daily London fixes to set the prices of other precious metals.	*Mining*
London Metals Exchange	A major bidding market for base metals, which operates daily in London.	*Mining*
Long	In commodities market parlance, buying more futures contracts than you sell.	*Metallurgy*
Long Haul	A network that spans distances larger than a local area network (LAN). Because electrical and optical transmissions fade over distance, long-haul networks are difficult and expensive to implement.	*Electrical Engineering*
Long position	Securities owned outright or carried on margin.	*Mining*
Long range order	A structural characteristics of crystals, and not glasses.	*Material Process*
Long Range Ultrasonic Testing (LRUT)	See Guided Wave testing	*Reliability Engineering*
Long Term Evolution	Proposed next-generation, wireless, broadband network. LTE is presently a project within 3GPP, the Third Generation Partnership Project.	*Electrical Engineering*
Long Tom	Similar to a sluice box, but longer and skinnier.	*Mining*
Long ton	Long ton: 2,240 pounds. Used mainly in England.	*Energy*
long ton	2,240 pounds. For many commodities this is the standard measure for international trade. However, domestic shipments usually are reported in short tons (2000 pounds).	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Longitudinal	Always measured parallel to air intakes and perpendicular to air flow.	*Facility Engineering*
Longitudinal or Compressional or Axial Vibration	is in the same direction as the transfer of energy. Transverse Vibration is perpendicular to that direction.	*Reliability Engineering*
Longnormal Distribution	A lifetime statistical distribution that is often used to model products in which physical fatigue is the prominent contributor to the primary failure mode	*Reliability Engineering*
Long-term debt	Debt securities or borrowing shaving a maturity of more than one year.	*Energy*
Long-term purchase	A purchase contract under which at least one delivery of material is scheduled to occur during the second calendar year after the contract-signing year. Deliveries also can occur during the contract-signing year, during the first calendar year thereafter, or during any subsequent calendar year.	*Energy*
Longwall mining	An automated form of underground coal mining characterized by high recovery and extraction rates, feasible only in relatively flat-lying, thick, and uniform coalbeds. A high-powered cutting machine is passed across the exposed face of coal, shearing away broken coal, which is continuously hauled away by a floor-level conveyor system. Longwall mining extracts all machine-minable coal between the floor and ceiling within a contiguous block of coal, known as a panel, leaving no support pillars within the panel area. Panel dimensions vary over time and with mining conditions but currently average about 900 feet wide (coal face width) and more than 8,000 feet long (the minable extent of the panel, measured indirection of mining). Longwall mining is done under movable roof supports that are advanced as the bed is cut. The roof in the mined-out area is allowed to fall as the mining advances.	*Energy*
Longwall mining machine	shears coal from a long straight coal face (up to about 700 feet) by working back and forth across the face under a movable, hydraulic-jack roof-support system. The broken coal is transported by conveyor. Longwall machines can mine coal at the rate of 1,000 tons per shift. Mine locomotive, operating on tracks, is used to haul mine cars containing coal and other material, and to move personnel in specially designed "mantrip" cars. Large locomotives can haul more than 20 tons at a speed of about 10 miles per hour. Most mine locomotives run on electricity provided by a trolley wire; some are battery-powered.	*Energy*
Longwall Mining	One of three major underground coal mining methods currently in use. Employs a steal plow, or rotation drum, which is pulled mechanically back and forth across a face of coal that is usually several hundred feet long. The loosened coal falls onto a conveyor for removal from the mine.	*Mining*
Longwall	a method of working coal using long straight coal faces. The more modern method involves the progressive extraction of rectangular blocks or panels of a coal seam by means of a straight face.	*Mining*
Longwork	a system of modified longwall working in which a pair of slants are driven to the full dip with level headings at right angles. Also called 'Long-wall' or 'Long-way'. (N. East).	*Mining*
LonWorks	Local Operating Networks is another fieldbus, used by about 2,000 companies. The chips are made by Toshiba and Motorola for the German Echelon. They are then sold onto to various manufacturers.	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Loop	Each DCS controls a number of loops. These consist of a measurement device, a controller and a valve. Each loop is composed of devices to control the flow of liquid at a particular point.	*Control Engineering*
Loop flow	The movement of electric power from generator to load by dividing along multiple parallel paths; it especially refers to power flow along an un intended path that loops away from the most direct geographic path or contract path.	*Energy*
Loop flow	Inadvertent transmission of power through an unnecessary diversion in the transmission network. It is undesirable because it serves no purpose and incurs losses.	*Electrical*
Loop Resistance	The total resistance of a thermocouple circuit caused by the resistance of the thermocouple wire. Usually used in reference to analog pyrometers which have typical loop resistance requirements of 10 ohms.	*Electrical*
Loop Resistance	The total resistance of a thermocouple circuit caused by the resistance of the thermocouple wire. Usually used in reference to analog pyrometers which have typical loop resistance requirements of 10 ohms.	*Electronic Process*
Loop, Closed (Feedback Loop)	A signal path which includes a forward path, a feedback path and a summing point, and forms a closed circuit.	*Process Control*
Loop, Endless	see Endless Loop	*Electrical Engineering*
Loop, Open	A signal path without feedback	*Process Control*
Looper	A caterpillar in which some or all of the middle abdominal prolegs are wanting and which moves by placing the posterior part of the abdomen next to the thorax, forming a loop of the intervening segments, then extending the anterior part of the body forward.	*Forestry*
Loop-powered	A loop-powered device draws its power from the system and does not require a separate power supply.	*Mechanical*
Loose	to stop or finish. –see also Loose-it.	*Mining*
Loose coal	Coal fragments larger in size than coal dust.	*Mining*
Loose place	a place where coal is easily won. (N. East).	*Mining*
Loose side	the side of the face not supported by the coal, i.e. the waste side.	*Mining*
Loose	Same as Oversteer. Typically describes a cornering condition where the rear tires lose adhesion before the front tires, resulting in a car that feels like it wants to spin easily. This is one of the most unpleasant sensations for a driver because once the car goes, it is almost impossible to catch. Solutions include adjustments to tire pressure, increasing the angle of the rear wing for more rear downforce, adjusting the rear anti-roll bar setting or spring rates in order to provide more grip, and reducing grip at the front by reducing the front wing angle or stiffening the front anti-roll bar setting or spring rates. Here is an easy way to remember whether a car is loose (oversteer) or tight (understeer): If the front end hits the wall, it was understeer. If the rear end hits the wall, it was oversteer.	*NASCAR*
Loose-end	the corner of a pillar or the place where two faces at right angles meet.	*Mining*
Loose-it	the end of the shift (N. Staffs.)—see Lowse.	*Mining*

Please see the Appendix for further illustration

Term	Definition	Industry
Loss Coefficient	the fraction of mechanical energy lost in a stress strain cycle. The loss coefficient for each material is a function of the frequency of the cycle. A high loss coefficient can be desirable for damping vibrations while a low loss coefficient transmits energy more efficiently. The loss coefficient is also an important factor in resisting fatigue failure. If the loss coefficient is too high, cyclic loading will dissipate energy into the material leading to fatigue failure.	*Metallurgy*
Loss Factor	The product of the power factor and the dielectric constant.	*Material Process*
Loss of Load Probability (LOLP)	A measure of the probability that system demand will exceed capacity during a given period; this period is often expressed as the expected number of days per year over a long period, frequently taken as ten consecutive years. An example of LOLP is one day in ten years.	*Energy*
Loss Of Revenues	Term derived by calculating total revenues lost minus direct avoided cost of production.	*Reliability Engineering*
Loss of service (15 minutes)	Any loss in service for greater than 15 minutes by an electric utility of firm loads totaling more than 200 MW, or 50 percent of the total load being supplied immediately prior to the incident, whichever is less. However, utilities with a peak load in the prior year of more than 3000 MW are only to report losses of service to firm loads totaling more than 300 MW for greater than 15 minutes. (The DOE shall be notified with service restoration and in any event, within three hours after the beginning of the interruption.)	*Energy*
Loss prevention	Limitation of the loss of the damage and injury caused if an incident occurs, pressure relief, plant layout, provision of fire fighting equipment.	*Material Process*
Loss to follow up	See Attrition	*Quality Engineering*
Losses	The general term applied to energy (kWh) and capacity (kW) lost in the operation of an electric system. Losses occur principally as energy transformations from kWh to waste-heat in electrical conductors and apparatus. This waste-heat in electrical conductors and apparatus. This power expended without accomplishing useful work occurs primarily on the transmission and distribution system.	*Energy*
Losses	in an electricity distribution system depend on the length of the cable (the longer the cable, the greater the losses); the conductivity of the material (higher resistance means greater losses); the square of the current (at twice the current, there will be four-times the losses); and the cross-sectional area of the cable. Therefore, to minimize losses, power should be transmitted at the highest practical voltage. This reduces the current and therefore the amount of power lost in transmission. Most electrical transmission systems are alternating current at voltages between 110 and 800 kV. (See also HVDC.)	*Electrical*
Lost Circulation	The result of drilling fluid escaping from the borehole into the formation by way of crevices or porous media.	*Petroleum Engineering*
Lot number	"An alphanumeric and/or symbolic identification placed on the label by the manufacturer that enables the manufacturing history of the product to be traced." [CLSI]	*Quality*
Loudness	The human ranking of an auditory sensation, usually in terms ranging from soft to loud, expressed in sones (not in deciBels).	*Reliability Engineering*

Term	Definition	*Industry*
Loup	a slip or a fault. (Scot.).	*Mining*
Louvers	Members installed horizontally in a tower wall to provide openings through which the air enters the tower while also containing the falling water within the tower. Usually installed at an angle to the direction of air flow to the tower.	*Facility Engineering*
Low alloy steel	Ferrous alloy with less than 5 wt % noncarbon additions.	*Material Process*
Low Alloy Steel	An iron based metal alloy with small amounts of other elements added which is to produce a desired response to heat treatment cycles and to achieve targeted mechanical properties.	*Petroleum Engineering*
Low Btu gas	A fuel gas with a heating value between 90 and 200 Btu per cubic foot.	*Energy*
Low Density Polyethylene (LDPE) And Linear Low Density Polyethylene (LLDPE)	LDPE offers a unique combination of properties: toughness and high-impact strength, high gloss and clarity, good heat stability and chemical resistance, low permeability to water, outstanding electrical properties, and great flexibility and processibility. Linear low density polyethylene (LLDPE) adds extra toughness. Properties: Strong but lightweight, LDPE is easy to process, use and seal (including heat seal). It has excellent insulating properties, and provides a good barrier to water, moisture and most organic chemicals (except ones with aromatic or chlorine content). It's also a fair gas barrier. Although not as stiff and strong as some resins, LDPE is very flexible and offers good impact resistance. LDPE is opaque except in the thinner films. Applications: LDPE is used to shrink or stretch wrap thousands of consumer products and make various foils, trays and bags — the soft kind that do not crackle — for both food (milk pouches, bread, sandwich and frozen food bags, boil-in bags, and bags-in-a-box) and non-food items (most soft plastic shopping bags, as well as dry cleaning, mattress and trash bags, and can liners). It is also used in bubble packaging, envelope film, industrial liners, shipping sacks and overwrap, and agricultural and construction films. The resin is also used as a protective coating on paper, textiles and other plastics (for example, in milk cartons), as a chemically resistant lining, and as insulation in wire/cable and electrical/electronic applications.	*Engineering Physics*
Low Drop Out	A linear voltage regulator that will operate even when the input voltage barely exceeds the desired output voltage.	*Electrical Engineering*
Low Drop Out	A linear voltage regulator that will operate even when the input voltage barely exceeds the desired output voltage.	*Electrical Engineering*
Low E glass	Low-emission glass reflects up to 90% of long-wave radiation, which is heat, but lets in short-wave radiation, which is light. Windows are glazed with a coating that bonds a microscopic, transparent, metallic substance to the inside surface of the double-pane or triple-pane windows.	*Energy*
Low Energy Circuit	A qualitative term having no exact definition. It usually refers to a circuit having such low voltage and current that there are no significant thermal effects at the contact interface.	*Electrical Engineering*
Low flow showerheads	Reduce the amount of water flow through the showerhead from 5 to 6 gallons a minute to 3 gallons a minute.	*Energy*
Low flush toilet	A toilet that uses less water than a standard one during flushing, for the purpose of conserving water resources.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Low Grade Ore	Ore which runs below twenty ounces of silver to the ton, fifty per cent of the ton being lead.	*Mining*
Low head	Vertical difference of 100 feet or less in the upstream surface water elevation (headwater) and the downstream surface water elevation (tailwater) at a dam.	*Energy*
Low Heat Value (LHV)	The low or net heat of combustion for a fuel assumes that all products of combustion, including water vapor, are in a gaseous state.	*Energy*
Low Income Home Energy Assistance Program (LIHEAP)	The purpose of LIHEAP is to assist eligible households to meet the cost of heating or cooling in residential dwellings. The Federal government provides the funds to the States that administer the program.	*Energy*
Low or Lowe	a pit candle, or more generally, a flame or light.	*Mining*
Low power testing	The period of time between a plant's nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during this period is 5 percent of the unit's thermal rating.	*Energy*
Low Pressure	A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.	*Energy*
Low pressure molding	A method of distributing a relatively uniform low pressure over a prearranged, resin bearing, fibrous assembly of cellulose, glass or asbestos, with or without the application of heat from some external source, to form a coherent, laminated structure possessing definite physical properties.	*Material Process*
Low Recovery Valve	A valve design that dissipates a considerable amount of flow stream energy due to turbulence created by the contours of the flow path. Consequently, pressure downstream of the valve vena contracta recovers to a lesser percentage of its inlet value than a valve with a more streamlined flow path. The conventional globe style control valve is in this category.	*Industrial Engineering*
Low sulfur diesel (LSD) fuel	Diesel fuel containing more than 15 but less than 500 parts per million (ppm) sulfur.	*Energy*
Low temperature collectors	Metallic or nonmetallic collectors that generally operate at temperatures below 110 degrees Fahrenheit and use pumped liquid or air as the heat transfer medium. They usually contain no glazing and no insulation, and they are often made of plastic or rubber, although some are made of metal.	*Energy*
Low volatile bituminous coal	See Bituminous Coal.	*Energy*
Low voltage	Up to and including 660 volts by federal standards.	*Mining*
Low-Density Polyethylene	This term is generally considered to include polyethylenes ranging in density from about 0.915 to 0.925. In low density polyethylenes, the ethylene monomeric units are linked in random fashion, with the main chains having long and short side branches. This branching prevents the formation of a closely knit patter, resulting in material that is relatively soft, flexible and tough, and which will withstand moderate heat.	*Engineering Physics*
lower explosive limit (LEL)	the concentration of a gas below which the concentration of vapors is insufficient to support an explosion. LELs for most organics are generally 1 to 5 percent by volume.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lower limit of detection, LLD	Older term that was commonly used to refer to an estimate of detection limit calculated from replicate measurements of a blank sample. Typically the estimate is given as the mean of the blank sample plus 2 SD of the variation observed for the blank sample.	*Quality*
Lower yield point	The onset of general plastic deformation in a low carbon steel.	*Material Process*
Lowest Point of Single Tooth Contact	The smallest diameter on a spur gear at which a single tooth of one gear is in contact with its mating gear. Often referred to as LPSTC. Gear set contact stress is determined with a load placed at this point on the pinion.	*Mechanical Engineering*
Low-line or Low-pressure gas	Low-pressure (5 psi) gas from atmospheric and vacuum distillation recovery systems that is collected in the gas plant for compression to higher pressures.	*Petroleum Engineering*
Low-pressure sodium lamp	A type of lamp that produces light from sodium gas contained in a bulb operating at a partial pressure of 0.13 to 1.3 Pascal. The yellow light and large size make them applicable to lighting streets and parking lots.	*Energy*
Lowse or Loose	to cease work. -see Loose-it.	*Mining*
Low-Side	An element connected between the load and ground. Low-side current sensing applications measure current by looking at the voltage drop across a resistor placed between the load and ground.	*Electrical Engineering*
Low-sulfur coal	generally contains 1 percent or less sulfur by weight. For air quality standards, "low sulfur coal" contains 0.6 pounds or less sulfur per million Btu, which is equivalent to 1.2 pounds of sulfur dioxide per million Btu.	*Energy*
Low-temperature boiler	Low-temperature boilers operate with infinitely variable temperature control. As a result, they operate with distinctly lower heating water temperatures than used to be the case with constant-temperature boilers. Since the flue gas loss and the heat lost through the boiler surface are distinctly lower, these low-temperature boilers achieve standard efficiency values of 92 % to 96 %.	*Thermal Management*
LP	See Line Pipe.	*Petroleum Engineering*
LP Thread	Line Pipe Thread (NPT).	*Petroleum Engineering*
LPG	See Liquefied Petroleum Gases.	*Energy*
LPPS	See 'Vacuum or Low Pressure Plasma Spraying.'	*Paint and Coatings*
LRG	LRG:	*Energy*
LRI	Lubricant Review Institute	*Petro-Chemical Abbreviations*
LS	limited slip	*Petro-Chemical Abbreviations*
LSA	See Logistic Support Analysis	*Plant Engineering*
LSAR files	Acronym for Logistics support analysis records which contain reliability and maintenance data for a system and its modifications. They are text files that conform to MIL-STD-1388 2B	*Reliability Engineering*
LSC	Lubricant Standards Committee	*Petro-Chemical Abbreviations*
LSD	low sulfur diesel	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
LSD (Least-Significant Digit)	The rightmost active (non-dummy) digit of the display.	*General Engineering*
LSD (Least-Significant Digit)	The rightmost active (non-dummy) digit of the display.	*Electronic Process*
LSE	Load Serving Entity	*Energy*
LSR	light straight run gasoline	*Petro-Chemical Abbreviations*
LSRD	low sulfur road diesel	*Petro-Chemical Abbreviations*
LS-TTL Compatible	For digital input circuits, a logic 1 is obtained for inputs of 2.0 to 5.5 V which can source 20 ¦ÌA, and a logic 0 is obtained for inputs of 0 to 0.8 V which can sink 400 ¦ÌA. For digital output signals, a logic 1 is represented by 2.4 to 5.5 V with a current source capability of at least 400 ¦ÌA, and a logic 0 is represented by 0 to 0.6 V with a current sink capability of at least 16 MA. ¡°LS¡± stands for Low-power Schottky.	*Electrical*
LS-TTL Compatible	For digital input circuits, a logic 1 is obtained for inputs of 2.0 to 5.5 V which can source 20 µA, and a logic 0 is obtained for inputs of 0 to 0.8 V which can sink 400 µA. For digital output signals, a logic 1 is represented by 2.4 to 5.5 V with a current source capability of at least 400 µA; and a logic 0 is represented by 0 to 0.6 V with a current sink capability of at least 16 MA. “LS” stands for low-power Schottky.	*Electronic Process*
LS-TTL Unit Load	A load with LS-TTL voltage levels, which will draw 20 ¦ÌA for a logic 1 and ¨C400 ¦ÌA for a logic 0.	*Electrical*
LTCD	Light Truck Clean Diesel	*Petro-Chemical Abbreviations*
LTFT	low temperature flow test	*Petro-Chemical Abbreviations*
Lubricant	A friction reducing substance. A substance, typically oil or grease, applied to a surface to reduce friction between moving parts.	*Maintenance*
Lubricant	A substance which when interposed between parts or particles tends to make surfaces slippery, reduce friction, and prevent sticking between the lubricated surfaces. Lubricants are added to plastics to assist flow in extrusion, assist in knitting and wetting of the resin in mixing and milling operations, and impart lubricity to finished products.	*Engineering Physics*
Lubricant Analysis	See oil analysis.	*Maintenance*
Lubricant bloom Irregular	cloudy, greasy exudation on the surface of a plastic.	*Material Process*
Lubricants	Substances used to reduce friction between bearing surfaces, or incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils, from spindle oil to cylinder oil to those used in greases.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Lubricate	Swabbing or spraying the dies with lubricant to assist in initial flow and to facilitate ejection of the forging.	*Metallurgy*
Lubricating Grease	A solid to semifluid dispersion of a thickening agent in a liquid lubricant containing additives (if used) to impart special properties.	*Lubrication*
Lubrication	Control of friction and wear by the introduction of a friction-reducing film between moving surfaces in contact. May be a fluid, solid, or plastic substance. (See Boundary Lubrication, Elastohydrodynamic Lubrication, Hydrodynamic Lubrication.)	*Lubrication*
Lubrication	The control of friction and wear by the introduction of a friction-reducing film between moving surfaces in contact. The lubricant used can be a fluid, solid, or plastic substance.	*Lubrication*
Lubrication Management	Lubrication management at a production facility includes all activities related to the lubrication of machinery. Included, but not limited to, are the following activities: Establishing a lubrication strategy "where to go, in what period".	*Maintenance*
Lubrication System	Components that work together in order to distribute oil between the moving parts of machinery and keep them from rubbing together.	*Reliability Engineering*
Lubricator	A device which adds controlled or metered amounts of lubricant into a pneumatic system.	*Mechanical, Process, and Operations*
Lubricator Adaptor	Top Connector (same, see below definition)	*Petroleum Engineering*
Lubricity	Ability of an oil or grease to lubricate; also called film strength.	*Lubrication*
Lucite	A trade name for methyl methacrylate plastics material.	*Material Process*
Lug (foot)	A mounting device consisting of a block extending past the basic cylinder profile. The block usually has a tapped or through mounting hole at right angles to the cylinder axis.	*Mechanical, Process, and Operations*
Lum	a chimney built on top of an upcast shaft for purpose of lengthening it to create a stronger draught of air.	*Mining*
Lumarith	A trade name for cellulose acetate plastic.	*Material Process*
Lumen	An empirical measure of the quantity of light. It is based upon the spectral sensitivity of the photosensors in the human eye under high (daytime) light levels. Photometrically it is the luminous flux emitted with a solid angle (1 steradian) by a point source having a uniform luminous intensity of 1 candela.	*Energy*
Lumens/Watt (lpw)	A measure of the efficacy (efficiency) of lamps. It indicates the amount of light (lumens) emitted by the lamp for each unit of electrical power (Watts) used.	*Energy*
Luminescence	The remission of photons of visible light in association with photon absorption.	*Material Process*
Lump coal	a term used to describe coal in the range 1 to 5 inches.	*Mining*
Lump sum	The sale of specified timber on a specified area whereby the buyer assumes responsibility for determining timber volume and the seller guarantees ownership and boundaries.	*Forestry*
Luncart or lunker	an ironstone nodule or ball that is more ovoid than round. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Luster	Reflected light intensity from a grease; its sheen or brilliance. Luster is either: Bright — reflects light with a relatively strong intensity. Dull — reflects light with a relatively weak intensity. A high water content or certain thickeners and fillers may give a grease a characteristic dull luster.	*Lubrication*
Luster	Term used to describe the gloss, shine, or brightness of a finished surface.	*Material Process*
LVI	Low Viscosity Index, typically below 40 VI units.	*Lubrication*
LWD	Logging While Drilling equipment (see logging above) refers to equipment placed in the drilling assembly, near the mud motor and bit, to analyze the rock formation being drilled. LWD equipment can tell the directional driller what type of rock (such as sandstone or shale) they are drilling in, so that the well can stay in the desired payzone.	*Petroleum Drilling*
LWIU	See: Laundry, Dry Cleaning and Dye House Workers International Union (Ind)	*Industrial Relations*
LWR	See Light Water Reactor.	*Energy*
LWU	See: Leather Workers International Union of America (AFL-CIO)	*Industrial Relations*
Lype	a break in the strata having a slickensided or polished face.	*Mining*
M	Mega; one million. When referring to memory capacity, two to the twentieth power (1,048,576 in decimal notation).	*Electrical*
--M--	--M--	*Petroleum Drilling*
M.S.P.	Maximum Service Pressure.	*Petroleum Engineering*
M	Thousand	*Energy*
MAAC	Mid-Atlantic Interconnected Network	*Energy*
MAAG	Monitoring Agency Advisory Group (CMA)	*Petro-Chemical Abbreviations*
MAC Address	Media Access Control Address (maca, MAC): A hardware address that uniquely identifies each node of a network, as in IEEE-802 (Ethernet) networks. The MAC layer interfaces directly with the network medium.	*Electrical Engineering*
Macadam	A macadamized road or pavement. The broken stone used in making such a road.	*Civil Engineering*
Macadam	A macadamized road or pavement. The broken stone used in making such a road.	*Civil Engineering*
Macadamize	To pave by laying and compacting successive layers of broken stone, often with asphalt or hot tar.	*Civil Engineering*
Macadamize	To pave by laying and compacting successive layers of broken stone, often with asphalt or hot tar.	*Civil Engineering*
Machine availability rate	The percentage of time that production equipment is available for use, divided by the maximum time it would be available if there were no downtime for repair or unplanned maintenance.	*Quality*
Machine Crowned Pulley	A pulley in which the crown or vertex has been produced by an automatic, usually computer driven, machine.	*Manufacturing*

Term	Definition	*Industry*
Machine drive (motors)	The direct process end use in which thermal or electric energy is converted into mechanical energy. Motors are found in almost every process in manufacturing. Therefore, when motors are found in equipment that is wholly contained in another end use (such as process cooling and refrigeration), the energy is classified there rather than in machine drive.	*Energy*
Machine Language	Instructions that are written in binary form that a computer can execute directly. Also called object code and object language.	*General Engineering*
Machine runner	see Runner.	*Mining*
Machine vision	Optical systems in which video equipment is used to guide robotic or automated equipment during production operations; also, computerized visual inspection systems used for quality control.	*Quality*
Machine Welding	Welding with equipment which performs the welding operation under the observation and control of an operator. The equipment may or may not perform the loading and unloading of the work.	*Maintenance and Repair*
Machined surfaces	surfaces cleaned or otherwise altered by a power-driven machine	*Materials Process*
Machinery health monitoring (MHM)	See Condition Monitoring	*Reliability Engineering*
Machines, electric	Motors and generators are collectively referred to as "machines" or "electric machines." Motors are machines that convert electrical energy into mechanical work in the form of a rotating shaft, while generators convert the mechanical work of a rotating shaft into electricity.	*Electrical*
Machine-to-machine	Machine-to-mobile communications via wireless technologies such as cell phone network technologies, WLAN, Bluetooth, and RFID (radio frequency identification). Applications include automatic meter reading, fleet management, vending, monitoring and control, security and alarms, and telemedicine.	*Electrical Engineering*
Machine-to-machine	Machine-to-mobile communications via wireless technologies such as cell phone network technologies, WLAN, Bluetooth, and RFID (radio frequency identification). Applications include automatic meter reading, fleet management, vending, monitoring and control, security and alarms, and telemedicine.	*Electrical Engineering*
Machinists; International Association of (AFL-CIO)	the Machinists grew out of an organization originally formed in Atlanta, Georgia, on May 5, 1888, and which was known as the United Machinists and Mechanical Engineers of America.	*Industrial Relations*
Macnamaras	during the early part of the 20th century, the relations between the Bridge and Structural Iron Workers and the American Bridge Company became strained.	*Industrial Relations*
Macrohardness	The hardness of a coating as measured on a macroscopic scale, which shows the coatings bulk properties.	*Paint and Coatings*
Macromolecule	A huge molecule made up of thousands of atoms.	*Engineering Physics*
MACT	maximum achievable control technology	*Petro-Chemical Abbreviations*
MAD	mileage accumulation dynamometer	*Petro-Chemical Abbreviations*
Mad Cow Disease	Bovine spongiform encephalopathy.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Made available (vehicle)	A vehicle is considered "Made available" if it is available for delivery to dealers or users, whether or not it was actually delivered to them. To be "Made available", the vehicle must be completed and available for delivery; thus, any conversion to be performed by an original equipment manufacturer (OEM) Vehicle Converter or Aftermarket Vehicle Converter must have been completed.	*Energy*
Made Work	applied generally to attempts by government to provide employment for individuals, who are unemployed or on relief rolls, for the purpose not only of retaining their skills but also to maintain their self respect through the performance of work and services useful to the community.	*Industrial Relations*
Mafic	Igneous rocks composed mostly of dark, iron- and magnesium-rich minerals.	*Mining*
Maggie	an inferior or stoney coal; or an inferior sandy ironstone. (Scot.).	*Mining*
Maggie blaes	an inferior sulfurous ironstone. (Scot.).	*Mining*
Magma	Naturally occurring molten rock, generated within the earth and capable of intrusion and extrusion, from which igneous rocks are thought to have been derived through solidification and related processes. It may or may not contain suspended solids (such as crystals and rock fragments) and/or gas phases.	*Energy*
Magmatic segregation	An ore-forming process whereby valuable minerals are concentrated by settling out of a cooling magma.	*Mining*
Magna Carta	a code, document, or other pronouncement which is designed to provide security and protection for the freedoms of groups.	*Industrial Relations*
Magnehelic gauge	a sensitive differential pressure or vacuum gauge manufactured by Dwyer Instrument Co. that uses a precision diaphragm to measure pressure differences. This gauge is manufactured in specific pressure or vacuum ranges such as 0 to 2 inches of water column. Magnehelic gauges are typically used to measure SVE system vacuums.	*Chemical*
Magnesia	Magnesium oxide, MgO, a light earthy white substance made usually by heating magnesium hydroxide or carbonate, used as a filler.	*Material Process*
Magnesium (MgCO3)	Triagonal white crystals. A filler or modifier for phenolic resins and synthetic rubber.	*Material Process*
Magnesium alloy	Metal alloy composed of predominantly magnesium.	*Material Process*
Magnetic	A separator that uses a magnetic field to attract and hold ferromagnetic particles.	*Oil Analysis*
Magnetic ceramic	See ceramic magnet.	*Material Process*
Magnetic Blow-Out Switch	A switch that contains a small permanent magnet which provides a means of switching high DC loads. The magnet deflects arc to quench it.	*Electrical Engineering*
Magnetic Brake	A brake usually mounted on a motor shaft with means to engage automatically when the electric current is cut off or fails.	*Equipment*
Magnetic dipole	North south orientation of a magnet.	*Material Process*
Magnetic field	Region of physical attraction produced by an electrical current.	*Material Process*
Magnetic Field Strength	The intensity of an externally applied magnetic field.	*Engineering Physics*
Magnetic filter	A filter element that, in addition to its filter medium, has a magnet or magnets incorporated into its structure to attract and hold ferromagnetic particles.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Magnetic Flux Density	The magnetic field produced in a substance by an external magnetic field.	*Engineering Physics*
Magnetic flux line	Representation of the magnetic field.	*Material Process*
Magnetic gradient survey	A geophysical survey using a pair of magnetometers a fixed distance apart, to measure the difference in the magnetic field with height above the ground.	*Mining*
Magnetic Induction	See Magnetic Flux Density	*Engineering Physics*
Magnetic moment	Magnetic dipole associated with electron spin.	*Material Process*
Magnetic Particle Examination or Inspection	This is a nondestructive examination method to locate surface and subsurface discontinuities in ferromagnetic materials. The presence of discontinuities is detected by the use of finely divided ferromagnetic particles applied over the surface. Some of these magnetic particles are gathered and held by the magnetic leakage field created by the discontinuity. The particles gathered at the surface form an outline of the discontinuity and generally indicate its location, size, shape, and extent.	*Maintenance and Repair*
Magnetic particle inspection	A nondestructive method of detecting the presence of surface cracks and imperfections through use of fine iron particles in an electrical field. Abbreviated as MPI or MT.	*General Mechanical*
Magnetic particle testing	A type of nondestructive testing in which defects are observed by the presence of a fine powder of magnetic particles attracted to the magnetic leakage flux around the surface or near surface discontinuities.	*Material Process*
Magnetic plug	Strategically located in the flow stream to collect a representative sample of wear debris circulating in the system: for example, engine swarf, bearing flakes, and fatigue chunks. The rate of buildup of wear debris reflects degradation of critical surfaces.	*Oil Analysis*
Magnetic Seal	A seal that uses magnetic material (instead of springs or a bellows) to provide the closing force that keeps the seal faces together.	*Lubrication*
Magnetic separation	A process in which a magnetically susceptible mineral is separated from gangue minerals by applying a strong magnetic field; ores of iron are commonly treated in this way.	*Mining*
Magnetic Starter	An electrical device which controls the motor and also provides overload protection to the motor.	*Equipment*
Magnetic Stripe	Technology allowing the encoding of information on special labels with magnetism.	*Gears*
Magnetic survey	A geophysical survey that measures the intensity of the Earth's magnetic field.	*Mining*
Magnetic Susceptibility	The proportionality constant between the magnetization M and the magnetic field strength H.	*Engineering Physics*
Magnetic susceptibility	A measure of the degree to which a rock is attracted to a magnet.	*Mining*
Magnetism	The physical phenomenon associated with the attraction of certain materials, such as ferromagnets.	*Material Process*
Magnetite	The historically important ferrous compound (Fe3O4) with magnetic behavior.	*Material Process*
Magnetite	Black, magnetic iron ore, an iron oxide.	*Mining*
Magnetization	The total magnetic moment per unit volume of material. Also, a measure of the contribution to the magnetic flux by some material within an H field.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Magnetization	Parameter associated with the induction of a solid.	*Material Process*
Magnetometer	An instrument used to measure the magnetic attraction of underlying rocks.	*Mining*
Magnetoplumbite	Ceramic that is magnetically hard. Its hexagonal crystal structure and chemical composition are similar to those of the mineral of the same name.	*Material Process*
Magnetostriction	Slight changes in the dimensions of iron or steel components resulting from changes in the magnetic fields acting on these components.	*Reliability Engineering*
Magnetron Sputtering	See Sputtering. In this PVD process, the sputtering action is enhanced by intense magnetic fields.	*Paint and Coatings*
Magnitude	A scalar value having physical units.	*Engineering Physics*
Maiden country	an area of unworked coal, or an area of unexplored coal-bearing country side. (Som.), also maiden field and maiden ground. –see Virgin ground.	*Mining*
Mail Ballots	a procedure for conducting an election by governmental or private agencies such as the NLRB and State Labor Relations Boards where the membership of the union is not a single plant but is geographically distributed.	*Industrial Relations*
Main	A principal pipe or duct in a system used to distribute water, gas, etc.	*Civil Engineering*
Main and tail	a double drum reversible haulage system, the main rope pulls the loaded journey outbye with the tail rope attached to the rear. To take the empties inbye the roles are reversed (S. Staffs.).	*Mining*
Main bord gate	a heading that was driven to the rise side of the shaft. It was usually larger than an ordinary bord gate. (Yorks.).	*Mining*
Main buntons	strong buntons for hanging pumps in the shaft or for scaffolding.	*Mining*
Main entry	A main haulage road. Where the coal has cleats, main entries are driven at right angles to the face cleats.	*Mining*
Main fan	the principal mechanical ventilator installed at the surface usually exhausting air out of the mine via the upcast shaft. Sometimes ventilation was effected by blowing air in.	*Mining*
Main fan	A mechanical ventilator installed at the surface; operates by either exhausting or blowing to induce airflow through the mine roadways and workings.	*Mining*
Main gate	the principal roadway from a longwall face and main access to the face, along which coal is usually transported and is the intake roadway for the ventilation of the face. Also sometimes called the 'mother gate' or 'Loader gate'.	*Mining*
Main heating equipment	Equipment primarily used for heating ambient air in the housing unit.	*Energy*
Main heating fuel	The form of energy used most frequently to heat the largest portion of the floorspace of a structure. The energy source designated as the main heating fuel is the source delivered to the site for that purpose, not any subsequent form into which it is transformed on site to deliver the heat energy (e.g., for buildings heated by a steam boiler, the main heating fuel is the main input fuel to the boiler, not the steam or hot water circulated through the building.) Note: In commercial buildings, the heating must be to at least 50 degrees Fahrenheit.	*Energy*
Main mine	the main underground haulage road. (Scot.).	*Mining*
Main roads	see Winning headings.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Main suit	a large feeder of water (S. West.).	*Mining*
Maine-Anjou	A breed of beef cattle that originated in southern France. It is red with white spots. Registry is by the American Maine-Anjou Association.	*Agriculture*
Mainer	a set of runaway tubs. (Leics.).	*Mining*
Mains	A system of pipes for transporting gas within a distributing gas utility's retail service area to points of connection with consumer service pipes.	*Energy*
Maintainability	Maintainability is the probability that a failed component of system will be restored or repaired to a specified condition within a period of time when maintenance is performed according with prescribed procedures. The prescribed maintenance procedures include not only the manner in which repair is to be performed but also the availability of maintenance resources (people, spare parts, tools, and manuals), the preventive maintenance program, skill levels of personnel, and the number of people assigned to the maintenance crew. Restoration times are commonly characterized by the log normal distribution.	*Maintenance*
Maintainability Engineering	The Set Of Technical Processes That Apply Maintainability Theory To Establish System Maintainability Requirements, Allocate These Requirements Down To System Elements And Predict And Verify System Maintainability Performance.	*Plant Engineering*
Maintainability Improvement	A maintenance engineering activity that looks at the root cause of breakdowns and maintenance problems and designs a repair that prevents future breakdowns. Maintainability improvement places an emphasis on making equipment easier to maintain.	*Maintenance*
Maintainability Prediction	This is the measure of the ability of an item to be retained or restored to a specified condition when skilled personnel perform the maintenance.	*Reliability Engineering*
Maintained Contact Switch	A switch designed for applications requiring sustained contact after plunger has been released, but with provision for resetting.	*Electrical Engineering*
Maintenance	Maintenance in a steam system is critical to continued performance of the plant. For maintenance, plate heat exchangers need to be dissembled and cleaned periodically. Tubular heat exchangers can be cleaned by such methods as acid cleaning, sandblasting, high-pressure water jet, bullet cleaning, or drill rods. In large-scale cooling water systems for heat exchangers, water treatment such as purification, addition of chemicals, and testing, is used to minimize fouling of the heat exchange equipment. Other water treatment is also used in steam systems for power plants, etc. to minimize fouling and corrosion of the heat exchange and other equipment.	*Industrial*
Maintenance Activity	Maintenance activities are the specific actions defined in a Computerized Maintenance Management System (CMMS), taken to prevent or reduce the consequences of failure. For example, component replacement, lubricant analysis, or vibration monitoring are maintenance activities.	*Maintenance*
Maintenance Categories	Maintenance categories describe the primary function of the maintenance activity. Maintenance categories include the following: inspection, condition monitoring, non-destructive testing, overhauls, and fault finding.	*Maintenance*
Maintenance Contractor Expenses	Cost of labor and material for contracted maintenance services. This does not include contract labor for capital projects.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Maintenance Cost	All direct and indirect costs regarding maintenance activities. Direct costs are costs charged to a maintenance budget as fixed costs (e.g. personnel, materials, subcontractors, and overhead). Indirect costs are related to loss of revenue due to unavailability.	*Reliability Engineering*
Maintenance Engineering	A staff function whose primary responsibility is to ensure maintenance techniques are effective, equipment is designed and modified to improve maintainability, ongoing maintenance technical problems are investigated, and appropriate corrective and improvement actions are taken. Maintenance engineering is often used interchangeably with plant engineering or reliability engineering.	*Maintenance*
Maintenance expenses	That portion of operating expenses consisting of labor, materials, and other direct and indirect expenses incurred for preserving the operating efficiency and/or physical condition of utility plants used for power production, transmission, and distribution of energy.	*Energy*
Maintenance Job Plans or Procedures	A job plan is a detailed description of how to implement or undertake a maintenance activity. The term "procedure" is often used to describe job plans, and is commonly used within CMMS's to describe the individual instructions combined to form a maintenance task.	*Maintenance*
Maintenance Labor Expenses	Direct pay for maintenance labor including overtime premium.	*Maintenance*
Maintenance Management	All activities of the management that determine the maintenance objectives, strategies, and responsibilities, and implement them by means, such as maintenance planning, maintenance control and supervision, improvement of methods in the organization, including economical, environmental, and safety aspects (UTEK, 13306:1998 E).	*Maintenance*
Maintenance Material Expenses	All materials, spare parts, supplies, etc., consumed for maintaining equipment and facility including materials purchased for maintenance by contractors and excluding materials for capital projects.	*Maintenance*
Maintenance Objectives	Targets assigned and accepted for maintenance activities. Targets may include availability, cost reduction, product quality, environmental preservation, safety, etc.	*Maintenance*
Maintenance of boiler plant (expenses)	The cost of labor, material, and expenses incurred in the maintenance of a steam plant. Includes furnaces; boilers; coal, ash-handling, and coal-preparation equipment; steam and feed water piping; and boiler apparatus and accessories used in the production of steam, mercury, or other vapor to be used primarily for generating electricity. The point at which an electric steam plant is distinguished from an electric plant is defined as follows:	*Energy*
Maintenance of Dues	a proviso in a union contract which requires the check-off of union dues during the entire period of the agreement.	*Industrial Relations*
Maintenance of Membership	a form of union security devised by the public members of the National War Labor Board to resolve the conflict between the opposing positions of the labor and industry members of the Board.	*Industrial Relations*
Maintenance of structures (expenses)	The cost of labor, materials, and expenses incurred in maintenance of power production structures. Structures include all buildings and facilities to house, support, or safeguard property or persons.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Maintenance Plan	Structured set of tasks that include the activities, procedures, resources, and time scale required to carry out maintenance. See Maintenance Schedule.	*Maintenance*
Maintenance Policy	A Statement Of Principle Used To Guide Maintenance Management Decision Making	*Plant Engineering*
Maintenance Record	Part of maintenance documentation that contains all failures, faults, and maintenance information related to an asset. This record may also include maintenance cost, asset availability or uptime, and any other data where relevant.	*Maintenance*
Maintenance Schedule	A list of planned maintenance tasks to be performed during a given time period, together with the expected start times and durations of each task. Schedules apply to different time periods (e.g. daily schedule, weekly schedule, etc.), or to specific plant items (e.g. a machine manufacturer may supply a maintenance schedule with a new machine, related to which is a condition of warranty).	*Maintenance*
Maintenance Strategy	Management method that covers all aspects of maintenance activities, including firm action plans for achieving maintenance objectives.	*Maintenance*
Maintenance Strategy Review (MSR)	A systematic review of plant or equipment, evaluating the manner in which it fails within a given operational context, the consequences of failure and the identification of technically feasible and cost effective maintenance strategies to minimize the consequences and or frequency of failure.	*Maintenance*
Maintenance supervision and engineering expenses	The cost of labor and expenses incurred in the general supervision and direction of the maintenance of power generation stations. The supervision and engineering included consists of the pay and expenses of superintendents, engineers, clerks, other employees, and consultants engaged in supervising and directing the maintenance of each utility function. Direct supervision and engineering of specific activities, such as fuel handling, boiler room operations, generator operations, etc., are charged to the appropriate accounts.	*Energy*
Maintenance/Reliability Engineers	Employees with primary functions of analyzing and resolving maintenance problems, preventive and predictive maintenance, inspection and/or equipment reliability support.	*Reliability Engineering*
Mainway, the main passage or gate. (Yorks.)	Mainway, the main passage or gate. (Yorks.).	*Mining*
Major accident prevention document (MAPD)	This is a document used to demonstrate that the safety management system for a pipeline is adequate. It show s the risk assessment for the pipeline and also sates the hazards identified.	*Reliability Engineering*
Major Diameter	The largest diameter of a screw thread.	*Fastening*
Major Disputes	these are disputes under the Railway Labor Act which have to do with new or revised contract provisions.	*Industrial Relations*
Major electric utility	A utility that, in the last 3 consecutive calendar years, had sales or transmission services exceeding one of the following (1) 1 million megawatt hours of total annual sales; (2) 100 megawatt hours of annual sales for resale; (3) 500 megawatt hours of annual gross interchange out; or (4) 500 megawatt hours of wheeling (deliveries plus losses) for others.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Major energy sources	Fuels or energy sources such as electricity, fuel oil, natural gas, district steam, district hot water, and district chilled water. District chilled water is not included in any totals for the sum of major energy sources or fuels; all other major fuels are included in these totals.	*Energy*
Major fuels	Fuels or energy sources such as: electricity, fuel oil, liquefied petroleum gases, natural gas, district steam, district hot water, and district chilled water.	*Energy*
Major interstate pipeline company	A company whose combined sales for resale, including gas transported interstate or stored for a fee, exceeded 50 million thousand cubic feet in the previous year.	*Energy*
Major Union Contracts	the phrase applies to the list of important contracts, generally covering a thousand or more employees each, which are of prime interest in determining important changes in wages, hours, and working conditions.	*Industrial Relations*
Majority Rule	the NLRB and state labor relations acts, provide for holding elections to determine who should represent employees of a particular employer or group of employers for the purpose of collective bargaining.	*Industrial Relations*
Make Whole	the process of undoing a wrong against an individual who has been discriminated against by an employer, as through an unfair labor practice, such as discharge because of union membership.	*Industrial Relations*
Make-before-break	In a switching device, a configuration in which the new connection path is established before the previous contacts are opened. This prevents the switched path from ever seeing an open circuit. Example : That use relays or manual switches	*Electrical Engineering*
Make-before-break	In a switching device, a configuration in which the new connection path is established before the previous contacts are opened. This prevents the switched path from ever seeing an open circuit. Example - That use relays or manual switches	*Electrical Engineering*
Make-Ready Activities	preliminary or preparatory activities of employees prior to the performance of the actual job.	*Industrial Relations*
Make-up	Water added to the circulating water system to replace water lost from the system by evaporation, drift, blow-down, and leakage.	*Facility Engineering*
Make-up air	Air brought into a building from outside to replace exhaust air.	*Energy*
Make-Up Pay	generally applies to the procedure by which an employer pays a piece worker the difference between the amount he actually earned on piecework and the actual earnings to which he is entitles either under a statutory minimum.	*Industrial Relations*
Make-Work Practices	generally applies to those activities of unions or individual workers who either limit their production or create unnecessary work or jobs frequently in order to take up a slack in employment or to spread available work.	*Industrial Relations*
Making hole	Drilling.	*Petroleum Drilling*
Makings	small coals made when kirving or nicking. (N. East).	*Mining*
Malamine-Formaldehyde	Malamine-formaldehyde is used in many household goods, including dinnerware. This plastic is very easy to color and is very hard.	*Material Engineering*
Male thread	The external thread on pipe, fittings or valves used in making a connection with mating female (internal) threaded parts.	*Mechanical*

Term	Definition	*Industry*
Maleic anhydride	Colorless rhombic needles from chloroform. Reacts with polyhydric alcohols to form an alkyl resin. Also, used as an hardener in ureas, phenolics, alkyds, etc.	*Material Process*
Malleable Iron	Cast iron which has been heat-treated in an oven to relieve its brittleness. The process somewhat improves the tensile strength and enables the material to stretch to a limited extent without breaking.	*Maintenance and Repair*
Malleable iron	A traditional form of cast iron with modest ductility. It is first cast as white iron and then heat-treated to produce modular graphite precipitates.	*Material Process*
Malthusianism	this refers to the theory of the political economist T. R. Malthus that population tends to increase more rapidly than its means of subsistence can be made to do.	*Industrial Relations*
Man Camp	These are typically portable housing, RVs and travel trailers set up in a camp style arrangement for oilfield workers to live in. A shortage of housing in Eagle Ford Shale has led some oil and gas and construction companies to house their workers and temporary "man camps."	*Petroleum Drilling*
Man dook	a road used for transporting men. A travelling road. (Scot.).	*Mining*
Man hudge	a fore-runner of the cage. The man hudge was specifically designed for winding men in the shaft. Similar to the coal hudge the man hudge had a cover to protect the men from anything falling down the shaft and there was a hole cut in the side to allow the men to get in and out. (Som.), (Gloucs.).	*Mining*
Man lock	An air lock serving as a decompression chamber for workers.	*Civil Engineering*
Man trip	A carrier of mine personnel, by rail or rubber tire, to and from the work area.	*Mining*
Management	See Steam Trap Management	*Industrial*
Management	the term when used as a noun applies to an employer or to executives of a corporation who are accountable and responsible for the administration and direction of an enterprise and the functions of leadership.	*Industrial Relations*
Management Clause	a provision in the collective bargaining agreement which sets out the scope of management rights, functions, and responsibilities.	*Industrial Relations*
Management Development	an organized program for management personnel, usually at the top or middle level for the purpose of developing and improving managerial functions, including planning, organizing, motivating, and controlling the activities of an organization.	*Industrial Relations*
Management of change (MOC)	Management of change (MOC) Management to repair faults.	*Material Process*
Management oversight and risk tree	Management oversight and risk tree	*Material Process*
Management Prerogatives	sometimes referred to as management or employer rights or functions.	*Industrial Relations*
Managing Editor (previously known as Review Group Co-ordinator (RGC))	The key person in managing and supporting a Cochrane Review Group (CRG) on a day-to-day basis. Most CRGs have a full-time Managing Editors working in an editorial base. Responsibilities of a Managing Editor include: co-ordinating the activities of the CRG; fostering liaison and communication between editors and reviewers; setting up and maintaining a trials register; producing newsletters; providing reviewers with the relevant software (RevMan), manuals, and support to do their reviews; submitting reviews for inclusion in the Cochrane Database of Systematic Reviews. See also: Adminors Also called: Administrator (of a Cochrane Review Group)	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Manchester Data Encoding	Manchester encoding is a form of binary phase-shift keying (BPSK) that has gained wide acceptance as a modulation scheme for low-cost radio-frequency (RF) transmission of digital data. Its key characteristic is that it encodes data in a way that insures there will never be long strings of continuous zeros or ones. The guaranteed transitions means that the clock can be derived from the transmitted data, allowing the link to function with variable signal strengths from transmitters with imprecise, low-cost, data-rate clocks.	*Electrical Engineering*
Man-Days Idle	a term used in work stoppage statistics and applied to workers who are made idle for one shift or longer in the establishment or plant directly involved in a work stoppage.	*Industrial Relations*
Mandrel	1. Core around which fiberglass impregnated with plastic resin is wound as in filament winding. 2. The portion of an extrusion die that forms the hollow centre in an extruded tube.	*Metallurgy*
Mandrel (Balancing Arbor)	An accurately machined shaft on which work is mounted for balancing.	*General Engineering*
Mandrel (Balancing Arbor)	An accurately machined shaft on which work is mounted for balancing.	*Electronic Process*
Mandril	see Pike.	*Mining*
MANE-VU (Mid-Atlantic/ Northeast Visibility Union)	An organization formed by the Mid-Atlantic and Northeastern states, tribes, and federal agencies to coordinate planning activities to reduce haze (air pollution) in the region. The organization encourages a coordinated approach to meeting the requirements of EPA's Regional Haze Rules and reducing visibility impairment in major national parks and wilderness areas in the Northeast and Mid-Atlantic regions. http://www.otcair.org/manevu/aboutus.asp.	*Energy*
Manganese	a grayish white, usually hard and brittle metallic element found in steel that resembles iron but is not magnetic	*Materials Process*
Manhattan Project	The U.S. Government project that produced the first nuclear weapons during World War II. Started in 1942, the Manhattan Project formally ended in 1946. The Hanford Site, Oak Ridge Reservation, and Los Alamos National Laboratory were created for this effort. The project was named for the Manhattan Engineer District of the U.S. Army Corps of Engineers.	*Energy*
Manhole	A hole, usually with a cover, through which a person may enter a sewer, drain, steam boiler, etc., esp. one located in a city street.	*Civil Engineering*
Manhole	A safety hole constructed in the side of a gangway, tunnel, or slope in which miner can be safe from passing locomotives and car. Also called a refuge hole.	*Mining*
Man-Hour	this is a standard unit utilized quite widely in labor statistics and is equal to one person working for one hour.	*Industrial Relations*
Manifest	List of passengers or invoice of cargo.	*Agriculture*
Manifold	a pipe with several apertures for making multiple connections.	*Chemical*
Manifold	A filter assembly containing multiple ports and integral relating components which services more than one fluid circuit.	*Lubrication*
Manifold (Header)	A common pipe or chamber having several lateral outlets.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Manifold filter	A filter in which the inlet and outlet port axes are at right angles, and the filter element axis is parallel to either port axis.	*Oil Analysis*
Manifold valve mounting	The valve is mounted to a plate which provides multiple connection ports for one or more valves.	*Mechanical, Process, and Operations*
Manifold, Vented	A manifold which is open to the atmosphere and returns fluid to the reservoir. MANOMETER - An instrument (as a pressure gage) for measuring the pressure or fluids.	*Mechanical, Process, and Operations*
Manila resins or Manila copal	Natural gum resins obtained in the East Indies, including soft, semifossil, and fossil resin. They are spirit soluble, and used in varnishes.	*Material Process*
Manit	a contraction of "man minutes" which has been applied to various incentive programs.	*Industrial Relations*
Manned Hours	The manned hours represent the hours a production line is manned and planned to be open for production. In case the production is stopped because of unplanned breakdown, operator illness, etc., the hours are still to be counted as manned hours since it was planned to be run. In the case production is done in batches, also the time needed for resetting the production channels may be referred to as manned hours. For example, within SKF, the time needed to reset the bearing manufacturing channels is included in the manned hours planning.	*Maintenance*
Manning Scale	the system for determining the number of officers and men to be assigned to a ship.	*Industrial Relations*
Manning Table	the manning table concept was developed by the War Manpower Commission during World War II.	*Industrial Relations*
Man-of-war-pillars	small extra pillars of coal left in place when working a thick seam, usually where the coal is heavily faulted (S. Staffs.).	*Mining*
Manometer	an instrument for measuring fluid pressure. Typically a U-shaped tube in which opposing fluid pressures reach an equilibrium. The pressure is equal to the differences in the levels of the fluid on either side of the tube.	*Chemical*
Manpower	the term is generally applied to the human resources and skills of a people.	*Industrial Relations*
Manpower Administration, Department of Labor	Secretary of Labor W. Willard Writz on February 19, 1963, issued an administrative order creating a Manpower Administration within the Department of Labor.	*Industrial Relations*
Manpower Control	the control of the labor force may be achieved through limitations on emigration, freezing of employees to jobs, or requiring individuals to take only certain jobs.	*Industrial Relations*
Manrider	a locomotive or rope hauled train or conveyor belt used for transporting men.	*Mining*
Man-riding	men riding on the front tub of a set of tubs; or men riding in or out of the pit in a purpose-built train; or men riding on a conveyer belt to and from the face. At each end there would be a 'man-riding station'. When the cage is being used to wind men as opposed to coal it was said to be 'man riding'.	*Mining*
Manual Welding	Welding wherein the entire welding operation is performed and controlled by hand.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Manual and Motor Skill Tests	special aptitude tests which are designed to measure an individual's dexterity, his ability to coordinate, his speed of reaction, and other muscular skills.	*Industrial Relations*
Manual control	A control actuated by the operator, regardless of the means of actuation. Example; Lever or foot pedal control for directional valves.	*Mechanical, Process, and Operations*
Manual Dexterity	the ability to perform work with the hands.	*Industrial Relations*
Manual dimmer switches	These are like residential-style dimmer switches. They are not generally used with fluorescent and high-intensity discharge (HID) lamps.	*Energy*
Manual Mode	In manual mode, the user sets the output. See Mode.	*Process Control*
Manual Override	A button that allows the valve's state to be changed manually.	*General Mechanical*
Manual override	A means of manually actuating an automatically controlled device.	*Mechanical, Process, and Operations*
Manual Reset (Adjustment)	The adjustment on a proportioning controller which shifts the proportioning band in relationship to the set point to eliminate droop or offset errors.	*General Engineering*
Manual Reset (Adjustment)	The adjustment on a proportioning controller which shifts the proportioning band in relationship to the set point to eliminate droop or offset errors.	*Electronic Process*
Manual Reset (Switch)	The switch in a limit controller that manually resets the controller after the limit has been exceeded.	*General Engineering*
Manual Start Switch	A simple one direction switch used to turn the conveyor on or off.	*Manufacturing*
Manual Worker	applies generally to semi-skilled and unskilled workers who use their physical rather than their mental ability in the performance of certain jobs.	*Industrial Relations*
Manufactured gas	A gas obtained by destructive distillation of coal or by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, carbureted water gas. Btu content varies widely.	*Energy*
Manufacturer's Tolerance	The maximum variation from standard allowed by the manufacturer between products with the same catalog listing.	*Electrical Engineering*
Manufacturing	An energy-consuming subsector of the industrial sector that consists of all facilities and equipment engaged in the mechanical, physical, chemical, or electronic transformation of materials, substances, or components into new products. Assembly of component parts of products is included, except for that which is included in construction.	*Energy*
Manufacturing Cost	Includes quality-related costs, direct and indirect labor, equipment repair and maintenance, other manufacturing support and overhead, and other costs directly associated with manufacturing operations. It typically does not include purchased-materials costs or costs related to sales and other non-production functions.	*Maintenance*
Manufacturing cycle time	The time of actual production from when a customer order is released to the plant floor for a particular product through to the completion of all manufacturing, assembly, and testing for that specific product. (Does not include front-end order-entry time or engineering time spent on customized configuration of nonstandard items, or time in finished goods inventory.)	*Quality*

Term	Definition	*Industry*
Manufacturing division	One of 10 fields of economic activity defined by the Standard Industrial Classification Manual. The manufacturing division includes all establishments engaged in the mechanical or chemical transformation of materials or substances into new products. The other divisions of the U.S. economy are agriculture, forestry, fishing, hunting, and trapping; mining; construction; transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; personal, business, professional, repair, recreation, and other services; and public administration. The establishments in the manufacturing division constitute the universe for the MECS (an EIA survey).	*Energy*
Manufacturing establishment	An economic unit at a single physical location where mechanical or chemical transformation of materials or substances into new products are performed.	*Energy*
Manufacturing execution system (MES)	A software-based system that provides a link between planning and administrative systems and the shop floor. It can link MRP II-generated production schedules to direct process-control software. An element of computer-integrated manufacturing, MES encompasses such functions as planning and scheduling, production tracking and monitoring, equipment control, maintaining product histories (verifying and recording activities at each stage of production), and quality management.	*Quality*
Manufacturing Overhead	All costs associated with manufacturing except direct materials and direct labor.	*Procurement*
Manufacturing Process	The sequence of operations that are necessary to complete the manufacturing of a part or product.	*Reliability Engineering*
Manufacturing Resources Planning (MRP)	Software-based Manufacturing Resources Planning systems that translate forecasts into master production schedules, maintain bills of material (lists of product components), create work orders for each step in the production routing, track inventory levels, coordinate materials purchases with production requirements, generate "exception" reports identifying expected material shortages or other potential production problems, record shop-floor data, collect data for financial reporting purposes, and other tasks depending on the configuration of the software.	*Maintenance*
Manure	animal waste from stables or barnyards	*Agriculture*
Manway	An entry used exclusively for personnel to travel form the shaft bottom or drift mouth to the working section; it is always on the intake air side in gassy mines. Also, a small passage at one side or both sides of a breast, used as a traveling way for the miner, and sometimes, as an airway, or chute, or both.	*Mining*
MAOP	Maximum allowable operating pressure. Determined in accordance with piping codes, DOT regulations, etc.	*Mechanical*
Map of the PADD districts	Map of the PADD districts	*Energy*
MAPP	Mid-Continent Area Power Pool	*Energy*
Map-staking	A form of claim-staking practiced in some jurisdictions whereby claims are staked by drawing lines around the claim on claim maps at a government office.	*Mining*
MARAMA (Mid-Atlantic Regional Air Management Association, Inc.)	A voluntary, non-profit association of ten Mid-Atlantic state and local air pollution control agencies. http://www.marama.org/about-us.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Marble	A metamorphic rock derived from the recrystallization of limestone under intense heat and pressure.	*Mining*
Marbles	Bits of rubber scrubbed off of tires while cornering. These small balls collect on the outside of the turn, and if a car goes wide (into the marbles, or "the gray", referring to the lighter appearance of an area covered with marbles), then much adhesion is lost. In addition, this rubber debris will stick to the hot tires and cause poor traction for the next few corners until they are rubbed off the tire.	*NASCAR*
Marblette	A trade name for cast phenolic plastics.	*Material Process*
MaRC	See Monitoring and Registration Committee (MaRC)	*Quality Engineering*
Marcellus Shale	Shale is one of the most prolific types of sedimentary rock whose density and impermeability provide tight stores for hydrocarbon reserves below. Marcellus Shale is a rock formation running through about two-thirds of Pennsylvania, and areas of New York and West Virginia. Geologists estimate that there is a large enough natural gas reserve within the shale to power the United States for one to eight years.	*Petroleum Drilling*
March	a boundary. A line marking the limit of the workings underground. It could be a wall, a hedge or any other feature on the landscape. It was usual to follow the line of a fault, or it could be an imaginary line drawn on a map. (Scot.).	*Mining*
Margin	Cash deposited with a broker as partial payment of the purchase price for any type of listed stock. The stock is held by the broker as security for the loan.	*Mining*
Marginal cost	The change in cost associated with a unit change in quantity supplied or produced.	*Energy*
Marginal Cost	The cost to the utility or providing the next (marginal) kilowatt-hour of electricity, irrespective of sunk costs.	*Energy*
Marginal deposit	An orebody of minimal profitability.	*Mining*
Marginal land	Land that does not consistently produce a profitable crop because of infertility, drought, or other physical limitations such as shallow soils.	*Forestry*
Marginal Productivity Theory of Wages	part of the general theory of value applied to the four factors of production: land, labor, capital, and business enterprise.	*Industrial Relations*
Marginal well	A well that, for reasons of depletion or natural low productivity, is nearing the limits of viable production and profitability.	*Petroleum Engineering*
Marginal Worker	a worker the value of whose production equals his actual wage.	*Industrial Relations*
Margining	Margining is a test procedure that determines the "safety margin." A parameter is varied to determine the device's sensitivity or ability to perform given a range of inputs. A large number of parts can be characterized to determine a safe range for the specification, to guarantee performance and yield.	*Electrical Engineering*
Margining	Margining is a test procedure that determines the "safety margin." A parameter is varied to determine the device's sensitivity or ability to perform given a range of inputs. A large number of parts can be characterized to determine a safe range for the specification, to guarantee performance and yield.	*Electrical Engineering*
Marine Band	a distinctive thin layer or stratum with fossils of a marine affinity, used by mining geologists to correlate the coal measures.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Marine freight	Freight transported over rivers, canals, the Great Lakes, and domestic ocean waterways.	*Energy*
Maritime Labor Board	an agency established by Congress in 1938 to mediate labor disputes between companies and organized seamen and longshoremen, as well as to develop a general maritime labor policy.	*Industrial Relations*
Maritime Trades Department	one of the AFL-CIO trade and industrial union departments.	*Industrial Relations*
Marker Tape	A narrow strip of fabric, paper or plastic laid longitudinally within a cable; it bears printed information such as the specification to which the cable was made and the name of the cable's manufacturer.	*Electrical*
Marker Threads	Colored strings laid parallel and adjacent to the strands of an insulated conductor to reveal information such as the conductor's manufacturer, the specification to which it was made, or its thermal capability.	*Electrical*
Market	where products are sold and exchanged	*Agriculture*
Market clearing price	The price at which supply equals demand for the Day-ahead or hour-ahead markets.	*Energy*
Market Eligibility	The percentage of equipment still available for retrofit to the demand-side management measure. For example, if 20 percent of customers where demand controllers are feasible have already purchased demand controllers, then the eligible market eligibility factor is 80 percent.	*Energy*
Market order	An order to buy or sell at the best price available. In absence of any specified price or limit, an order is considered to be "at the market".	*Mining*
Market Participants	Any parties or agents who participate in the electrical energy marketplace through either the buying or selling of electrical energy or services.	*Energy*
Market Power	When one company owns a sufficiently large percentage of generation, transmission, or distribution capabilities in a region to allow it to influence the price of electricity by forcing the purchase of its own power.	*Energy*
Market price contract	A contract in which the price of uranium is not specifically determined at the time the contract is signed but is based instead on the prevailing market price at the time of delivery. A market price contract may include a floorprice, that is, a lower limit on the eventual settled price. The floorprice and the method of price escalation generally are determined when the contract is signed. The contract may also include a price ceiling or a discount from the agreed-upon market price reference.	*Energy*
Market price settlement (uranium)	The price paid for uranium delivery under a market-price contract. The price is commonly (but not always) determined at or sometime before delivery and may be related to a floor price, ceiling price, or discount.	*Energy*
Marketable coke	See Petroleum coke, marketable.	*Energy*
Market-based pricing	Prices of electric power or other forms of energy determined in an open market system of supply and demand under which prices are set solely by agreement as to what buyers will pay and sellers will accept. Such prices could recover less or more than full costs, depending upon what the buyers and sellers see as their relevant opportunities and risks.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Market-Based-Price	A price set by the mutual decisions of many buyers and sellers in a competitive market.	*Energy*
Marketed energy	An energy source that is commercially traded. Typically, this energy is sold by a producer, such as a petroleum refiner, through a transmission and distribution network (e.g., pipelines and trucks) to an end-use consumer (e.g., gasoline sold at the pump).	*Energy*
Marketed production	Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing plant operations.	*Energy*
Marketer	An agent for generation projects who markets power on behalf of the generator. The marketer may also arrange transmission, firming or other ancillary services as needed. Though a marketer may perform many of the same functions as a broker, the difference is that a marketer represents the generator while a broker acts as a middleman.	*Energy*
Marketing	The selling of timber or other forest resources based on skillful negotiation, knowledge of timber markets, and the aid of a competent broker or consultant.	*Forestry*
Marketing or Selling Costs	All costs necessary to secure customer orders and get the finished product or service into the hands of the customer.	*Procurement*
Marking	The physical process of selecting trees to be cut or left during a harvest accomplished normally by spraying a spot of bright paint on a prominent part of the tree.	*Forestry*
Marl	beds of hardened clay, frequently thick and unlaminated, free from calcareous matter, and specially suitable for brick and tile manufacture.	*Mining*
Marlhole	a quarry for the working of marl (N. Staffs.).	*Mining*
Marline Spike	Tapered steel pin used in splicing wire rope.	*Wire Rope & Cable*
Marrow or Marra	a mate, a butty or a partner. Pronounced 'marra'. (N. East).	*Mining*
Marsaut lamp	a lockable safety lamp made by Richard Johnson, Clapham and Morris.	*Mining*
Marsh Funnel Viscosity	Commonly called the funnel viscosity. It's reported as the number of seconds required for one quart of a given fluid to flow through the Marsh funnel.	*Petroleum Engineering*
Martempering	Heat treatment of a steel involving a slow cool through the martensitic transformation range to reduce stresses associated with that crystallographic change.	*Material Process*
Martensite	a metastable Fe-C composition consisting of supersaturated carbon in iron that is the product of a diffusionless (athermal) transformation from austenite.	*Metallurgy*
Martensite	Iron-carbon solid solution phase with an acicular, or needlelike, microstructure produced by a diffusionless transformation associated with the quenching of austenite.	*Material Process*
Martensitic stainless steel	Corrosion resistant ferrous alloy with a predominant martensitic phase.	*Material Process*
Martensitic transformation	Diffusionless transformation most commonly associated with the formation of martensite by the quenching of austenite.	*Material Process*
Martix	term used to describe the metal bond in diamond blades and bits.	*Petroleum Drilling*
Marxism	the doctrine or system developed around the theories of Karl Marx.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mash	a double-headed or two faced hammer used for setting props or breaking coal or stone. (Scot.).	*Mining*
Mash axe	a double-headed hammer with one side of the head forged into an axe. The mash axe was used for chopping out broken timber props on the coalface. -see also Radge. (Scot.).	*Mining*
Masking	using a material to produce intentionally ungalvanized areas, typically used in areas that are to be welded, on faying surfaces, or areas where the galvanized coating is not necessary for uniform corrosion protection	*Materials Process*
Masonite	A trade name for a lignin-type.	*Material Process*
Masonry	A general term covering wall construction using masonry materials such as brick, concrete block, stone, and tile that are set in mortar; also included is stucco. The category does not include concrete panels because concrete panels represent a different method of constructing buildings. Concrete panels are reported separately.	*Energy*
Masonry stove	A type of heating appliance similar to a fireplace, but much more efficient and clean burning. They are made of masonry and have long channels through which combustion gases give up their heat to the heavy mass of the stove, which releases the heat slowly into a room. Often called Russian or Finnish fireplaces.	*Energy*
Mass	A property of an object measured by the degree that it resists acceleration.	*Engineering Physics*
Mass	The property of a body that is a measure of its inertia, that is commonly taken as a measure of the amount of material it contains and causes it to have weight in a gravitational field, and that along with length and time constitutes one of the fundamental quantities on which all physical measurements are based. (See Kilogram.)	*Mechanical, Process, and Operations*
Mass balance	Method for calculating the relative amounts of the two or more systems. For example, method for calculating the relative amounts of the two phases in a binary microstructure.	*Material Process*
Mass burn facility	A type of municipal solid waste (MSW) incineration facility in which MSW is burned with only minor presorting to remove oversize, hazardous, or explosive materials.	*Energy*
Mass Flow Rate	Volumetric flowrate times density, i.e. pounds per hour or kilograms per minute.	*General Engineering*
Mass Flow Rate	Volumetric flowrate times density, i.e. pounds per hour or kilograms per minute.	*Electronic Process*
Mass Picketing	picketing is the procedure generally followed by workers during a strike.	*Industrial Relations*
Mass Production	modern production methods which require a highly developed use of machine technology and permit production of standardized products at low cost.	*Industrial Relations*
Mass spectrometer	An instrument used for sorting streams of electrified particles in accordance with their different masses by means of deflecting fields. The instrument can produce a photographic or graphic record of each compound and the percentage of the compound. Most commonly used in analyzing petroleum and steel products.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mass Storage	A device like a disk or magtape that can store large amounts of data readily accessible to the central processing unit.	*General Engineering*
Mass.	A physical property, dynamically computed as acceleration divided by force. Statically computed as W (which can be measured on a butcher scale) divided by the acceleration due to gravity. Ordinary structures are not pure masses as they contain reactive elements, *i.e*. springs and damping.	*Reliability Engineering*
Massachusetts Choice of Procedures	refers to legislation for the handling of labor-management disputes adopted in the state of Massachusetts.	*Industrial Relations*
MAST	Fruits or nuts used as a food source by wildlife.	*Forestry*
Master	A standard mold or pattern used for duplicating die cavities.	*Metallurgy*
Master	a master, whether he be a master mechanic or master electrician or master plumber, is a worker who has completed a full apprenticeship programs.	*Industrial Relations*
Master Modules	The master is set over the "slave" module, i.e. is able to control it. These are sometimes called "parent" modules.	*Control Engineering*
Master's coal	coal mined by a man who was paid by time as opposed to by the ton or the score.	*Mining*
Masterbatch	A concentrated blend of pigment, additives, filler, etc. in a base polymer. Masterbatch is added in small amounts to large volume of material (the same as or compatible with the base polymer) to produce the desired formulation.	*Engineering Physics*
Master-metering	Measurement of electricity or natural gas consumption of several tenants or housing units using a single meter. That is, one meter measures the energy usage for several households collectively.	*Energy*
Masterpiece	a piece of work submitted by a journeyman who wanted to qualify as a master under the guild system during the Middle Ages.	*Industrial Relations*
Master-Servant Relationship	a form of relationship between employers and employees developed during the industrial period, developed during the industrial period, generally between an apprenticeship and his master or between indentured servant and his master.	*Industrial Relations*
Mastic	A compound usually made up of asphalt and asbestos fiber with suitable solvents and fillers which can be used to seal joints and cracks against leakage of water.	*Facility Engineering*
Mat bonded	A sheet of fibers held together with a bonding agent. formaldehyde.	*Material Process*
Match	a piece of touch paper or lamp cotton twisted straight and oiled, fixed to one end of a straw or squib to light a blasting charge.	*Mining*
Matching	[In a case-control study:] Choosing one or more controls with particular matching attributes for each case. Researchers match cases and controls according to particular variables that are thought to be important, such as age and sex.	*Quality Engineering*
Material	to reduce corrosion often means isolating the metallic surface from the corrosive environment.	*Material Process*
Material Factor (MF)	Material factor is characteristic the heat of combustion of the main process material.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Material property dependency	the atoms present, the bonding between atoms, and the three-dimensional arrangement of atoms within the material	*Physics*
Material Safety Data Sheet (MSDS)	A publication containing health and safety information on a hazardous product (including petroleum). The OSHA Hazard Communication Standard requires that an MSDS be provided by manufacturers to distributors or purchasers prior to or at the time of product shipment. An MSDS must include the chemical and common names of all ingredients that have been determined to be health hazards if they constitute 1% or greater of the product's composition (0.1% for carcinogens). An MSDS also included precautionary guidelines and emergency procedures.	*Lubrication*
Material science and engineering	Methods for the materials studying and applications, and new materials production. General, label for the branch of engineering dealing with material.	*Material Process*
Material Science, 1st Fundamental Tenets of Material Science	The principles governing the behavior of materials are grounded in science and are understandable	*Physics*
Material Science, 2nd Fundamental Tenet of Material Science	The properties of a given material are determined by its structure. Processing can alter that structure in specific and predictable ways.	*Physics*
Material Science, 3rd Fundamental Tenet of Material Science	The properties of all materials change over time with use and exposure to environmental conditions.	*Physics*
Material Science, 4th Fundamental Tenet of Material Science	When selecting a material for a specific application, sufficient and appropriate testing must be performed to ensure that the material will remain suitable for its intended application throughout the reasonable life of the product.	*Physics*
Material Test Reports	Certificates provided by the steel manufacturer indicating the chemical analysis and mechanical properties of a specific batch of steel traced by sequentially assigned heat numbers or codes.	*Mechanical*
Material Test Reports	Certificates provided by the steel manufacturer indicating the chemical analysis and mechanical properties of a specific batch of steel traced by sequentially assigned heat numbers or codes.	*General Mechanical*
Material well	Space provided in a compression or transfer mold to provide for bulky molding materials.	*Material Process*
Materials in Solid Waste	Materials found in the various components of the solid waste stream. Generally, solid waste has several components, such as municipal solid waste (MSW), construction and demolition debris (C&D), and nonhazardous industrial waste. Under RCRA Section 6002, EPA considers materials recovered from any component of the solid waste stream when designating items containing recovered materials.	*Environmental Engineering*
Materials selection	Decision that is a critical component of the overall engineering design process.	*Material Process*
Materiel Manager	Director of Business Services, official responsible for Materiel Management functions, which generally includes purchasing, receiving, storehouse operations, and equipment management. As used in this guide the term includes Director of Materiel Management and designees of a Materiel Manager.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Maternity Leave	applies to the period of time generally granted by an employer for employees to undergo and recuperate from childbirth.	*Industrial Relations*
Matrix	The body constituent of a composite or two-phase alloy that completely surrounds the dispersed phase and gives the body its bulk form.	*Metallurgy*
Matrix	The portion of a composite material in which a phase is embedded. reinforcing, dispersed.	*Material Process*
Matte	Dull finish.	*Material Process*
Matter	the material which makes up something	*Agriculture*
Mature tree	A tree that has reached a desired size or age for its intended use.	*Forestry*
Maul or Mell	a large hammer. (N. East); or wedges for breaking up stone or hard rock in shaft sinking.	*Mining*
Maxim Tiny Network Interface	Formerly called TINI is Maxim's trademark for the industry's smallest web server. The MxTNI platform consists of a microcontroller that includes the facilities necessary to connect to the Internet. The platform is a combination of broad based I/O, a full TCP/IP stack and an extensible Java runtime environment that simplifies development of network-connected equipment.	*Electrical Engineering*
Maximum Allowable Operating Pressure (MAOP)	This refers to the wall strength of a pressurized cylinder such as a pipeline or storage tank and how much pressure the walls may safely hold in normal operation	*Reliability Engineering*
Maximum Allowable Working Pressure (MAWP)	The maximum gauge pressure permissible at the top of a vessel for a designated temperature. This is sometimes called the design pressure	*Reliability Engineering*
Maximum Bulk/Use Temperature	All fluids have a maximum recommended temperature to which they can be heated. Heating a fluid beyond this point will result in thermal degradation or "cracking." This is characterized by low boilers (or "light ends") coming off, lowering of flashpoint, increased vapor pressure and carbon build up.	*Lubrication*
Maximum Credible Accident Scenario (MCAS)	Maximum Credible Accident Scenario is used to evaluate failures (accidents) scenarios in a process system. The procedure introduces the concept of maximum credible scenarios as an alternative to current methodology based on the worst case scenario as recommended by many regulatory agencies. The developed failure scenarios are then screened to shortlist the ones that are more relevant to the system at hand. MCAS provides the criteria for this.	*Reliability Engineering*
Maximum deliverability	The maximum rate natural gas can be withdrawn from or injected into a storage field when filled to maximum capacity.	*Energy*
Maximum demand	The greatest of all demands of the load that has occurred within a specified period of time.	*Energy*
Maximum Demand	Highest demand of the load occurring within a specified period of time.	*Energy*
Maximum dependable capacity, net	The gross electrical output measured at the output terminals of the turbine generator(s) during the most restrictive seasonal conditions, less the station service load.	*Energy*
Maximum Elongation	The strain value where a deviation of more than ±5% occurs with respect to the mean characteristic (diagram of resistance change vs strain).	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Maximum Elongation	The strain value where a deviation of more than ±5% occurs with respect to the mean characteristic (diagram of resistance change vs strain).	*Electronic Process*
Maximum established site capacity (reactors)	The maximum established spent fuel capacity for the site is defined by DOE as the maximum number of intact assemblies that will be able to be stored at some point in the future (between the reporting date and the reactor's end of life) taking into account any established or current studies or engineering evaluations at the time of submittal for licensing approval from the NRC.	*Energy*
Maximum Excitation	The maximum value of supply voltage or current that can be applied to the sensor at room conditions without causing damage or performance degradation beyond specified tolerances.	*Electrical Engineering*
Maximum excursion	The maximum pressure deviation from the operating pressure after an abrupt disturbance.	*Mechanical, Process, and Operations*
Maximum Film Temperature	Heating elements and pipe walls get much hotter than the maximum bulk/use temperature of a system. A fluid's film temperature is always higher than its max bulk temperature and if exceeded will thermally degrade the fluid.	*Lubrication*
Maximum generator nameplate capacity	The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer.	*Energy*
Maximum hourly load	This is determined by the interval in which the 60-minute integrated demand is the greatest.	*Energy*
Maximum inlet pressure	The maximum rated pressure applied to the inlet port of a device.	*Mechanical, Process, and Operations*
Maximum Likelihood Estimation (MLE)	A method of parameter estimation involving the maximization of the likelihood equation. The best parameter estimates are obtained by determining the parameter values that maximize the value of the likelihood equation for a particular data set.	*Reliability Engineering*
Maximum Load Current	The maximum amount of current that can flow through a sensor and not cause sensor failure.	*Electrical Engineering*
Maximum Operating Temperature	The maximum temperature at which an instrument or sensor can be safely operated.	*Electrical*
Maximum Power Rating	The maximum power in watts that a device can safely handle.	*Electrical*
Maximum pressure valve	See relief valve.	*Mechanical, Process, and Operations*
Maximum streamflow	The maximum rate of water flow past a given point during a specified period.	*Energy*
Maximum Wage Laws	this phrase has little current usage. During the early colonial period, provision was found in some of the Massachusetts laws which prohibited excessive rates for workers.	*Industrial Relations*
Maxwell-Boltzmann distribution	Description of the relative distribution of molecular energies in a gas.	*Material Process*
Maxwell-Stefan equations	Set of equations that describe the diffusion of solutes and solvent in a concentrated solution. In such a solution, the solutes interact with each other and with the solvent.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Maxwell-Stefan equations	Set of equations that describe the diffusion of solutes and solvent in a concentrated solution. In such a solution, the solutes interact with each other and with the solvent.	*Chemical Engineering*
MB	Mercedes-Benz	*Petro-Chemical Abbreviations*
MBF	Abbreviation denoting one thousand board feet that is a typical unit of volume for saw logs and manufactured wood products.	*Forestry*
mboe	Million Barrels Oil Equivalent	*Petroleum Drilling*
MBOE	The M when used as a prefix for abbreviations such as "Barrels Of Oil Equivalent" refers to thousands, not millions of some people think. One barrel of oil is generally accepted to contain the same amount of energy content as 6,000 cubic feet of natural gas. The abbreviation MBOE is used by some oil companies and their investor reports to make it seem like wells are producing more oil than they really are, when in fact MBOE refers to a combination of oil, natural gas and natural gas liquids or NGL's.	*Petroleum Drilling*
mboe	Million Barrels Oil Equivalent.	*Petroleum Drilling*
MBOED	million barrels of oil equivalent per day	*Energy*
McClellan Committee	the popular name for the special Senate Select Committee on Improper Activities in the Labor or Management Field under the chairmanship of Senator John L. McClellan.	*Industrial Relations*
Mcf	one thousand cubic feet	*Energy*
Mcf	This abbreviation typically refers to 1000 cubic feet of natural gas. Again, because of the M, some people confuse this with 1,000,000 ft.^{3}. One million cubic feet would be abbreviated as MMCF. You could add "/d" to either of these abbreviations to indicate how much natural gas was being produced per day.	*Petroleum Drilling*
MCF	One thousand (1000) cubic feet.	*Petroleum Drilling*
MCP	Market Clearing Price	*Energy*
MCPE	Market Clearing Price for Energy	*Energy*
MCS	Management Command System. A kind of HMI.	*Control Engineering*
MD*	the measured depth along the planned well path that coincides with the point along the planned well path that minimizes the 3D distance between where the bottom hole location actually is, and where it is thus preferred. (feet or meters)	*Petroleum Drilling*
MDR	Acronym for Motorized Drive Roller.	*Equipment*
MDS	Material Data Sheet - The material data sheet defines the minimum requirements for the required materials, i.e., chemical requirements, manufacturing, qualification of supplier, mechanical testing and properties, non destructive examination, repair, marking, and certification.	*Mechanical*
Mealtime	the time set aside, frequently by contract, during which the employee is to take his food, whether lunch or dinner.	*Industrial Relations*
Mealy	soft and friable, as in 'a mealy roof'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mean	The arithmetic average of a set of values. A measure of central tendency of the distribution of a set of replicate results. Often abbreviated by an x with a bar over it.	*Quality*
Mean Cycles Before Failure (MCBF)	Mean Cycles Between Failures; the average number of equipment cycles between failures; total equipment cycles divided by the total number of failures during those cycles (includes both product and non-product cycles).	*Maintenance*
Mean difference	[In meta-analysis:] A method used to combine measures on continuous scales (such as weight), where the mean, standard deviation and sample size in each group are known. The weight given to the difference in means from each study (e.g. how much influence each study has on the overall results of the meta-analysis) is determined by the precision of its estimate of effect and, in the statistical software in RevMan and the Cochrane Database of Systematic Reviews, is equal to the inverse of the variance. This method assumes that all of the trials have measured the outcome on the same scale. See also: Standardized mean difference Also called: Weighted mean difference, WMD	*Quality Engineering*
Mean Downtime	The average time a system is unavailable for use, for example due to a failure. Mean downtime includes the mean repair time plus all delay time associated with a repairman arriving with the appropriate replacement parts.	*Reliability Engineering*
Mean filtration rating	A measurement of the average size of the pores of a filter medium.	*Mechanical, Process, and Operations*
Mean free path	The average distance that an electron wave can travel without deflection.	*Material Process*
Mean indoor temperature	The "usual" temperature. If different sections of the house are kept at different temperatures, the reported temperature is for the section where the people are. A thermostat setting is accepted if the temperature is not known.	*Energy*
Mean Ionic Activity Coefficient	See Activity coefficient.	*Electronic Process*
Mean ionic activity coefficient (f±) or the activity of a salt	on the other hand, can be measured by a variety of techniques such as freezing point depression and vapor pressure as well as paired sensing electrodes. It is the geometric mean of the individual ionic activity coefficients - f± = (f+n+f-n-)1/n	*Electronic Process*
Mean Life	This is a reliability measure that represents the expected value of the failure times for a failure distribution, also known as the average or central life value. While this represents a useful representative value of a distribution of failure times, it is often over-used as the sole reliability metric.	*Reliability Engineering*
Mean operating hours	The arithmetic average number of operating hours per building is the weighted sum of the number of operating hours divided by the weighted sum of the number of buildings.	*Energy*
Mean power output (of a wind turbine)	The average power output of a wind energy conversion system at a given mean wind speed based on a Raleigh frequency distribution.	*Energy*
Mean square feet per building	The arithmetic average square feet per building is the weighted sum of the total square feet divided by the weighted sum of the number of buildings.	*Energy*
Mean Temperature	The average of the maximum and minimum temperature of a process equilibrium.	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mean Temperature	The average of the maximum and minimum temperature of a process equilibrium.	*Electronic Process*
Mean Time Between Critical Failure (MTBCF)	A measure of system reliability, which includes the effects of any fault tolerance that exist. The average time between failures that cause a loss of a system function defined as "critical" by the customer.	*Maintenance*
Mean time between equipment failure	The mean (or average) time in hours expected between failures of a given device.	*Quality*
Mean Time Between Failure	The mean time expected between failures for repairable or replaced items, typically measured in hours. MTBF is meant to be the mean over an infinite period of time. It is the inverse of the failure rate. Mean time between failures is calculated from the total accumulated operating time divided by the number of failures during the same period	*Reliability Engineering*
Mean Time Between Failures	A Measure Of Equipment Reliability. Equal To The Number Of Failures In A Given Time Period, Divided By The Total Equipment Uptime In That Period.	*Plant Engineering*
Mean Time Between Failures (MTBF)	Mean time between failures is calculated from the total accumulated operating time divided by the number of failures during the same period. See also Mean Time To Failure (MTTF) for examples.	*Maintenance*
Mean Time Between Failures (MTBF)	An average time between machinery breakdowns.	*Reliability Engineering*
Mean Time Between Maintenance (MTBM)	A basic measure of reliability for repairable fielded systems. The average time between all system maintenance actions. Maintenance actions are for repair or preventive purposes.	*Reliability Engineering*
Mean time to failure	This is the mean time expected for the first failure of an item. Mean time to failure is calculated from the total elapsed time divided by the total number of failures. While MTBF excludes time that the equipment is not available or in use, MTTF includes the full period of time regardless of actual operation time. It is common for these two terms to be confused or misunderstood. Failure rates reported or collected from maintenance management systems tend to be in terms of MTTF	*Reliability Engineering*
Mean Time to Failure (MTTF)	Mean time to failure is calculated from the total elapsed time divided by the total number of failures. While MTBF excludes time that the equipment is not available or in use, MTTF includes the full period of time regardless of actual operation time. It is common for these two terms to be confused or misunderstood. Failure rates reported or collected from maintenance management systems tend to be in terms of MTTF.	*Maintenance*
Mean Time to Prepare (MTTP)	MTTP is the duration required to prepare for equipment restoration in the event of failure. This time should include all activities and preparations that can be carried out before physical repair activities begin, such as scaffolding, drawing spares from stores, locating tools, spares, and equipment at the job site. Preparation time should not include lead times required for ordering spares from suppliers. Spare part ordering lead times should be recorded separately to facilitate spares holding policy analysis and the easy identification of long lead times. Although closely related, spares analysis and evaluation is a distinctly different activity to maintenance strategy analysis.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mean Time To Repair	A Measure Of Maintainability. Equal To The Total Equipment Downtime In A Given Time Period, Divided By The Number Of Failures In That Period.	*Plant Engineering*
Mean Time to Repair (MTTR)	MTTR refers to the average total time duration required to physically repair or replace the failed item and to reinstate the operational functionality. Part of the system downtime may be due to time delays (spares, resources), which are not included in the MTTR.	*Maintenance*
Mean Time To Repair (MTTR)	After a machinery breakdown, it is the average time to repair that machine back to acceptable operating conditions.	*Reliability Engineering*
Mean Time to Restore (MTR)	MTR refers to the average (unplanned) system downtime including delays for maintenance and supply resources. This is an appropriate measure when maintenance and supply resources are included as requirement for the maintainability.	*Maintenance*
Mean Velocity of Flow	Under steady state of flow, the mean velocity of flow at a given cross section of pipe is equal to the rate of flow Q divided by the area of cross section A. It is expressed in feet per second or meters per second. where v = mean velocity of flow, in feet per second, ft/s (meters per second, m/s). Q = rate of flow, in cubic feet per second, ft3/s (cubic meters per second, m3/s) Q = rate of flow, in cubic feet per second, ft3/s (cubic meters per second, m3/s). A = area of cross section, in square feet, ft2 (square meters, m2)	*Maintenance and Repair*
Meanshift	The difference in tightening torque values produced by the same tightening tool on hard and soft joints. A hard joint typically gives a higher torque value than a soft joint. Generally speaking, the lower the meanshift of a tightening tool, the better it will be in achieving a specified torque value irrespective of the joint condition.	*Maintenance*
Mean-Time-Between-Failure (MTBF)	A basic measure of reliability for repairable items: The mean number of life units during which all parts of the item perform within their specified limits, during a particular measurement interval under stated conditions.	*Reliability Engineering*
Mean-Time-To-Failure	A basic measure of reliability for non-repairable items: The total number of life units of an item divided by the total number of failures within that population, during a particular measurement interval under stated conditions.	*Reliability Engineering*
Measurand	A physical quantity, property, or condition which is measured.	*General Engineering*
Measurand	A physical quantity, property or condition which is measured (e.g., pressure, acceleration).	*Electrical Engineering*
Measure head	a short heading or drift. -see also Crut.	*Mining*
Measure Life	The length of time that the demand-side management technology will last before requiring replacement. The measure life equals the technology life. These terms are used synonymously.	*Energy*
Measured coal resources	Coal for which estimates of the rank, quality, and quantity have been computed from sample analyses and measurements from closely spaced and geologically well-known sample sites, such as outcrops, trenches, mine workings, and drill holes. The points of observation and measurement are so closely spaced and the thickness and extent of coals are so well defined that the tonnage is judged to be accurate within 20 percent of true tonnage. Although the spacing of the points of observation necessary to demonstrate continuity of the coal differs from region to region according to the character of the coal beds, the points of observation are no greater than ½ mile apart. Measured coal is projected to extend as a ¼-mile wide belt from the outcrop or points of observation or measurement.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Measured Day Work	this is sometimes referred to as measured day rate.	*Industrial Relations*
Measured heated area of residence	The floor area of the housing unit that is enclosed from the weather and heated. Basements are included whether or not they contain finished space. Garages are included if they have a wall in common with the house. Attics that have finished space and attics that have some heated space are included. Crawl spaces are not included even if they are enclosed from the weather. Sheds and other buildings that are not attached to the house are not included. "Measured" area means the measurement of the dimensions of the home, using a metallic, retractable, 50-foot tape measure. "Heated area" is that portion of the measured area that is heated during most of the season. Rooms that are shut off during the heating season to save on fuel are not counted. Attached garages that are unheated and unheated areas in the attics and basements are also not counted.	*Energy*
Measured reserves	See Proved energy reserves.	*Energy*
Measured resources, coal	Coal resources for which estimates of the rank, quality, and quantity have been computed, within a margin of error of less than 20 percent, from sample analyses and measurements from closely spaced and geologically well known sample sites. Measured resources are computed from dimensions revealed in outcrops, trenches, mine workings, and drill holes. The points of observation and measurement are so closely spaced and the thickness and extent of coals are so well defined that the tonnage is judged to be accurate within 20 percent. Although the spacing of the points of observation necessary to demonstrate continuity of the coal differs from region to region, according to the character of the coalbeds, the point of observation are no greater than 1/2 mile apart. Measured coal is projected to extend as a belt 1/4 mile wide from the outcrop or points of observation or measurement.	*Energy*
Measurement	Same as "process variable."	*Process Control Engineering*
Measurement Systems Analysis	A method for ensuring product test measurements are reliable, robust, and of good statistical merit.	*Electrical Engineering*
Measures	strata of different kinds.	*Mining*
Measures of reliability	These are several calculated values used when performing reliability prediction analysis. They include; availability, mean time between failures, failure rates and reliability.	*Reliability Engineering*
Measuring Junction	The thermocouple junction referred to as the hot junction that is used to measure an unknown temperature.	*Electrical*
Measuring Junction	The thermocouple junction referred to as the hot junction that is used to measure an unknown temperature.	*Electronic Process*
MECA	Manufacturers of Emission Controls Association	*Petro-Chemical Abbreviations*
Mechanical Aptitude Tests	examinations for the purpose of measuring an individual's mechanical ability.	*Industrial Relations*
Mechanical Bonding	Usually represented by mechanical interlocking of the deposited particles with the rough heights on the substrate surface produced during grit blasting.	*Paint and Coatings*
Mechanical cleaning	removing residues or impurities from steel using mechanical force such as grinding or sand blasting	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mechanical control	Any control actuated by linkages, gears, screws, cams or other mechanical elements.	*Mechanical, Process, and Operations*
Mechanical draft water-cooling tower	A tower through which air movement is effected by one or more fans. There are two main types: Forced draft with fans located at the air inlet; Induced draft with fans located at the air exhaust.	*Facility Engineering*
Mechanical drivetrain	In the wind power industry, this term refers to the combination of the turbine's main rotor shaft and bearings, gearbox (if used) and generator.	*Electrical*
Mechanical equipment support	Members, which comprise the primary support for the fan, drive assembly. Normally steel or concrete.	*Facility Engineering*
Mechanical Failure	A malfunction consisting of cracking, excessive displacement, misalignment, loosening, etc	*Reliability Engineering*
Mechanical Hysteresis	The difference of the indication with increasing and decreasing strain loading, at identical strain values of the specimen.	*General Engineering*
Mechanical Hysteresis	The difference of the indication with increasing and decreasing strain loading, at identical strain values of the specimen.	*Electronic Process*
Mechanical impedance	The ratio of force to velocity, where the velocity is a result of that force only. Its reciprocal is called mobility.	*Reliability Engineering*
Mechanical integrity	An injection well has mechanical integrity if: (1) there is no significant leak in the casing, tubing, or packer (internal mechanical integrity) and (2) there is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection wellbore (external mechanical integrity).	*Petroleum Drilling*
Mechanical Integrity Test (MIT)	The act of setting a packer or retrievable bridge plug above the perforations in a wellbore and applying pressure to the annulus in order to ensure soundness of the casing.	*Petroleum Drilling*
Mechanical Integrity Test	The act of setting a packer or retrievable bridge plug above the perforations in a wellbore and applying pressure to the annulus in order to ensure soundness of the casing.	*Petroleum Drilling*
Mechanical Joint	A joint for the purpose of mechanical strength or leak resistance or both, where the mechanical strength is developed by threaded, grooved, rolled, flared, or flanged pipe ends or by bolts, pins, and compounds, gaskets, rolled ends, caulking, or machined and mated surfaces. These joints have particular application where ease of disassembly is desired.	*Maintenance and Repair*
Mechanical Life	The life of a switch with no (or a negligible) electrical load, and a specified combination of actuation, environment and criterion of failure. Mechanical life usually is limited by the life of the switch's flexing parts and bearing surfaces.	*Electrical Engineering*
Mechanical Pacing	usually refers to the operations of an assembly line, where the speed at which the machine is set determines the pace at which the individual operates.	*Industrial Relations*
Mechanical properties	the properties of a material that reveal its elastic and inelastic behavior when force is applied, thereby indicating its suitability for mechanical applications; for example, elasticity, tensile strength, elongation, hardness, and fatigue limit	*Materials Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mechanical seal	In a valve, a shut off that is accomplished by a mechanical means rather than with fluid or line pressure. The wedging action of a gate against the seats or the seat springs pushing the seat against the ball or gate are examples of mechanical seals in a valve.	*Mechanical*
Mechanical Seal	A device which works to join together systems or mechanisms in order to prevent leakage, contain pressure or exclude contamination.	*Reliability Engineering*
Mechanical stress	A source of corrosion in metals.	*Material Process*
Mechanization	a term of very broad meaning, but essentially dealing with changes in the processes of production which result in the displacement of human labor and human skills by machine operation.	*Industrial Relations*
Meco-Moore cutter loader	a coal cutter with an undercutting jib and a mechanically operated loader combined. The prototype was installed in 1934 in Chisnall Hall Colliery, Wigan Coal Corporation.	*Mining*
MECS	Manufacturing Energy Consumption Survey	*Energy*
Media	The substance that flows through the tubing, either a gas, liquid, powder or slurry.	*General Mechanical*
Media Compatibility	Ability to operate with a specified media carrying pressure (e.g., salt water).	*Electrical Engineering*
Media Independent Interface	A parallel digital bus used for 10Mbps and 100Mbps Ethernet.	*Electrical Engineering*
Media migration	Material passed into the effluent stream composed of the materials making up the filter medium.	*Oil Analysis*
Media Pressure	The pressure of the media inside the tubing.	*Mechanical*
Median	The middle number of a data set when the measurements are arranged in ascending (or descending) order.	*Energy*
Median Ranks	Measures used to obtain estimates of the unreliability. Median ranks are the values that the true probability of failure should have the jth failure out of a sample of N units, at a 50% confidence level, or the best estimate for the unreliability. This estimate is based on a solution of the binomial equation.	*Reliability Engineering*
Median streamflow	The middle rate of flow of water past a given point for which there have been several greater and lesser rates of flow occurring during a specified period.	*Energy*
Median water condition	The middle precipitation and run-off condition for a distribution of water conditions that have happened over a long period of time. Usually determined by examining the water supply record of the period in question.	*Energy*
Mediation	in current usage the terms "conciliation" and "mediation" are often used interchangeably.	*Industrial Relations*
Mediation Board	a group generally established to affect a settlement between labor and management in a particular dispute.	*Industrial Relations*
Mediator	the person who is a conciliator or mediator.	*Industrial Relations*
Medical Care	refers to particular plans in or subject to a collective bargaining agreement pr in a statement of company policy in non-union plants setting forth the specific health insurance or service program for the individuals covered under a plan.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Medical Care Plan	group insurance or service plans which generally provide hospital, surgical, and medical benefits on a group basis.	*Industrial Relations*
Medical decision level, decision level, Xc	A concentration of analyte where medical interpretation is critical for patient care. There may be several different medical decision levels for a particular analyte. Xc should provide guidance for selecting relevant estimates of stable imprecision, stable inaccuracy, and matrix inaccuracy. This is analogous to identifying a critical Target Value (TV) for assessing test performance and validating QC design.	*Quality*
Medical Examination	an evaluation of the medical condition of an individual.	*Industrial Relations*
Medically important errors	Used here to indicate errors that, when added to the inherent imprecision and inaccuracy of a measurement procedure, cause the quality requirement to be exceeded. Medically important random errors are those increases in the standard deviation of the measurement procedure that cause the error distribution to exceed the quality requirement (see critical random errors). Medically important systematic errors are those shifts in the mean of the error distribution that cause the error distribution to exceed the quality requirement (see critical systematic error).	*Quality*
Medium	The porous material that performs the actual process of filtration. The plural of this word is "media".	*Oil Analysis*
Medium Effect (f m)	For solvents other than water the medium effect is the activity coefficient related to the standard state in water at zero concentration. It reflects differences in the electrostatic and chemical interactions of the ions with the molecules of various solvents. Solvation is the most significant interaction.	*General Engineering*
Medium Effect (f m)	For solvents other than water the medium effect is the activity coefficient related to the standard state in water at zero concentration. It reflects differences in the electrostatic and chemical interactions of the ions with the molecules of various solvents. Solvation is the most significant interaction.	*Electronic Process*
Medium pressure	For valves and fittings, implies that they are suitable for working pressures between 125 to 175 pounds per square inch.	*Energy*
Medium range order	Structural ordering occurring over the range of a few nanomaterials in an otherwise noncrystalline material.	*Material Process*
Medium-temperature collector	A collector designed to operate in the temperature range of 140 degrees to 180 degrees Fahrenheit, but that can also operate at a temperature as low as 110 degrees Fahrenheit. The collector typically consists of a metal frame, metal absorption panels with integral flow channels (attached tubing for liquid collectors or integral ducting for air collectors), and glazing and insulation on the sides and back.	*Energy*
MEDLINE	An electronic database produced by the United States National Library of Medicine (NLM). It indexes millions of articles in selected journals, available through most medical libraries, and can be accessed on the Internet. See also: Key words	*Quality Engineering*
MeerKat	An Access-based database system (written for The Cochrane Collaboration) that can be used to manage a study-based register of trials.	*Quality Engineering*
Meet	the point in the shaft where cages pass each other or the place in a roadway where tubs pass (S. Staffs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Meetings	another word for underground roadway junctions; or where the cages pass in the shaft, or the tubs pass on a haulage.	*Mining*
Mega	Million	*Oil Analysis*
MegaBaud	RS-232 logic-level compatible data rates that are 1Mbps or higher.	*Electrical Engineering*
MegaBaud	RS-232 logic-level compatible data rates that are 1Mbps or higher.	*Electrical Engineering*
Megachips per Second	In a Direct-Sequence Spread Spectrum signal, a "chip" is an encoding element. Mcps is a measure of the speed at which chips can be generated by a circuit.	*Electrical Engineering*
Megachips per Second	In a Direct-Sequence Spread Spectrum signal, a "chip" is an encoding element. Mcps is a measure of the speed at which chips can be generated by a circuit.	*Electrical Engineering*
Megahertz	Measurement of frequency -- million cycles per second.	*Electrical Engineering*
Megasamples per second	A measure of speed in digitizing systems, samples per second dictates the maximum frequencies that can be accurately captured.	*Electrical Engineering*
Megavar (MVAr)	One million VAr (volt-ampere reactive).	*Electrical*
Megavoltampere (MVA)	One million VA (volt-ampere).	*Electrical*
Megavoltamperes (MVA)	Millions of voltamperes, which are a measure of apparent power. (See definition for apparent power.)	*Energy*
Megawatt (MW)	One million watts of electricity.	*Energy*
Megawatt (MW)	One million watts. One megawatt would be needed to light 10,000 one-hundred-watt light bulbs. If those bulbs were powered for 1 hour, 1 MWh of electrical power would be used. (See also Watt and Watt hour.)	*Electrical*
Megawatt electric (MWe)	One million watts of electric capacity.	*Energy*
Megawatt	One million watts.	*Energy*
Megawatt hour (MWh)	One thousand kilowatt-hours or 1million watt-hours.	*Energy*
Megawatt-hour (mWh)	1 million watts used for one hour. If you purchased a megawatt-hour of energy for a nickel per kilowatt-hour, it would cost you 1,000 nickels, or $50. Using a kWh your could burn one 100-watt incandescent for 24 hours a day for about 14 months, or 3 hours a day for over 9 years.	*Energy*
Megawatt-hour (MWh)	One thousand kilowatt-hours or one million-watt hours.	*Energy*
Mehaden oil	Fish oil.	*Material Process*
Melamine	which can be condensed with formaldehyde to form thermosetting resinous products, somewhat resembling urea resins. Can be produced easily from dicyanodiamide.	*Material Process*
Melamine plastics	Thermosetting plastics formed by melamine and formaldehyde.	*Material Process*
Melt	A thermoplastic stock which is in a molten state due to temperature.	*Metallurgy*
Melt Fracture	Is a phenomenon of melt extrudate in which the surface appears rough or wavy upon exit from the die. Melt fracture may appear uniformly or in certain sections only.	*Metallurgy*
Melt Index	The number of grams, of a thermoplastic resin which can be forced through a 0.0825 inch orifice when subjected to 2160 grams force in 10 minutes of 190°C.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	Industry
Melt Instability	An instability in the melt flow through a die that causes irregularities in the finished part.	*Metallurgy*
Melt Strength	The elastic strength of a polymer in the molten state.	*Metallurgy*
Melting Point	The temperature at which a solid substance changes to liquid state	*Chemical*
Melting point	Temperature at which a solid-to-liquid transformation occurs upon heating.	*Material Process*
Member System	An eligible customer operating as part of an agency composed exclusively of other eligible customers.	*Energy*
Membership in Good Standing	the term generally applies to individuals who are or have applied for membership in the union or who have come into the union through a union security provision in the collective bargaining agreement.	*Industrial Relations*
Membrane	The pH-sensitive glass bulb is the membrane across which the potential difference due to the formation of double layers with ion-exchange properties on the two swollen glass surfaces is developed. The membrane makes contact with and separates the internal element and filling solution from the sample solution.	*General Engineering*
Membrane Filtration	Membrane filtration is a pressure driven process that uses a semi-permeable (porous) membrane to separate particulate matter from soluble components in the carrier fluid such as water.	*Contamination Control*
Memorandum Of Understanding	A Memorandum of Understanding (MOU) may express mutual understanding of an issue without implying commitments by parties to the understanding.	*Procurement*
MEMS	Micro Electromechanical Structures. Extremely small devices utilizing both electrical and mechanical properties.	*Reliability Engineering*
Men-of-war	small additional coal pillars left to support the roof where necessary in 'square work' in the S. Staffs. Thick Coal.	*Mining*
Men's Jobs	the term has relatively little current use but on occasion has been applied to certain jobs which are either traditionally or frequently only performed by men.	*Industrial Relations*
Mensuration	The measurement and calculation of volume, growth, and development of individual trees or stands.	*Forestry*
Mer	The group of atoms that constitutes a polymer chain repeat unit.	*Engineering Physics*
Mercaptan	An organic chemical compound that has a sulfur like odor that is added to natural gas before distribution to the consumer, to give it a distinct, unpleasant odor (smells like rotten eggs). This serves as a safety device by allowing it to be detected in the atmosphere, in cases where leaks occur.	*Energy*
Merchant coke plant	A coke plant where coke is produced primarily for sale on the commercial (open) market.	*Energy*
Merchant facilities	High-risk, high-profit facilities that operate, at least partially, at the whims of the market, as opposed to those facilities that are constructed with close cooperation of municipalities and have significant amounts of waste supply guaranteed.	*Energy*
Merchant Gilds	trade groups active in the Middle Ages which attempted to control trade through regulations limiting the number of individuals entering the trade and keeping the group to a small but effective regulatory trade agency.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Merchant MTBE plants	MTBE (methyl tertiary butylether) production facilities primarily located within petrochemical plants rather than refineries. Production from these units is sold under contract or on the spot market to refiners or other gasoline blenders.	*Energy*
Merchant oxygenate plants	Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.	*Energy*
Merchantable height	The maximum stem length above which no other commercially valuable wood product can be manufactured.	*Forestry*
Mercon	Ford ATF specification	*Petro-Chemical Abbreviations*
Mercury Poisoning	a form of industrial disease frequent among workers in the period or early industrial development, particularly in the handling of chemical compounds.	*Industrial Relations*
Mercury vapor lamp	A high-intensity discharge lamp that uses mercury as the primary light-producing element. Includes clear, phosphor coated, and self-ballasted lamps.	*Energy*
Merger	A combining of companies or corporations into one, often by issuing stock of the controlling corporation to replace the greater part of that of the other.	*Energy*
Meridian	A surveying term that establishes a line of reference. The bearing is used to designate direction. The bearing of a line is the acute horizontal angle between the meridian and the line. Azimuths are angles measured clockwise from any meridian.	*Mining*
Merit	a term to reflect and measure the effectiveness of an individual's work performance on his job.	*Industrial Relations*
Merit Increase	a voluntary pay increase to an individual employee because of the quality of his work, or improved efficiency, or as a reward for increased production or improvement in attitude or quality of performance.	*Industrial Relations*
Merit Rating	a system used to measure periodically this relative work performance of employees.	*Industrial Relations*
Merit Review	the procedure set up unilaterally by the employers or under the terms of a contract to provide for an examination at regular intervals of the rating of the employees.	*Industrial Relations*
Merit System	the mechanism established to measure the efficient performance of individuals, usually for the purpose of effecting a promotion or transfer.	*Industrial Relations*
Merit Wage Adjustment	the adjustment following a merit review which shows that the subject employee has increased his efficiency or increased the quality of his performance.	*Industrial Relations*
Merrick Multiple-Piece Rate Plan	an incentive plan similar to that used by Frederick W. Taylor, known as the Taylor Differential Piece Rate Plan, which was established at the Midvale Steel Company.	*Industrial Relations*
Merry-go-round trains	trains specifically designed to deliver coal directly to the power stations from the coalmines. Some were loaded and unloaded automatically.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
MES	Management Execution System. By monitoring labor resources, process history and machine usage and failures, a MES will help various features such as preventive maintenance, employee time and attendance, quantity maintenance and operator data.	*Control Engineering*
Mesh	Size and number of openings in a screen , 4-mesh means, 4 openings from the center of a wire to the center of a wire 1 inch, from that point, ¼ inch mesh (the fractional part of an inch) means that the space between the wires is ¼ inch.	*Material Process*
MeSH headings (Medical Subject Headings)	Terms used by the United States National Library of Medicine to index articles in Index Medicus and MEDLINE. The MeSH system has a tree structure in which broad subject terms branch into a series of progressively narrower subject terms. See also: Key words	*Quality Engineering*
Mesityl oxide	A solvent –ether.	*Material Process*
Mesocoloid	A polymer intermediate between a hemicolloid and eucolloid, between degrees of polymerization of 100 and 1000.	*Material Process*
Messenger Wire	A metallic supporting member either solid or stranded which may also perform the function of a conductor.	*Electrical*
Met	An approximate unit of heat produced by a resting person, equal to about 18.5 Btu per square foot per hour.	*Energy*
Meta system	The meta system manages the selection, operation and communication of the integrated intelligent systems which have large knowledge environment and consist of several symbolic reasoning systems and numerical computation packages.	*Material Process*
Meta-analysis	The use of statistical techniques in a systematic review to integrate the results of included studies. Sometimes misused as a synonym for systematic reviews, where the review includes a meta-analysis.	*Quality Engineering*
Meta-anthracite	See Anthracite.	*Energy*
Metabolism	a term that encompasses all of the diverse reactions by which a cell processes food material to obtain energy and the compounds from which new cell components are made.	*Chemical*
Metacrylates	Term applied to polymerized esters of metacrylic acid, transparent, colorless, thermoplastic resins.	*Material Process*
Metacrylates	Metacrylates Term applied to polymerized esters of metacrylic acid, transparent, colorless, thermoplastic resins	*Material Process*
Metal	Brit. to pave or surface (a road) with broken stone.	*Civil Engineering*
Metal	Electrically conducting solid with characteristic metallic bonding.	*Material Process*
Metal Deactivators	Some metals used in the construction of heat transfer systems can actually react with the oil, causing premature breakdown. Metal deactivators ensure compatibility with any system, even those with copper lines, heat exchangers or fittings.	*Lubrication*
Metal drift	a heading driven in stone as opposed to coal. (Lancs.).	*Mining*
Metal halide lamp	A high-intensity discharge lamp type that uses mercury and several halide additives as light-producing elements. These lights have the best Color Rendition Index (CRI) of the high-intensity discharge lamps. They can be used for commercial interior lighting or for stadium lights.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Metal man	a man who repaired underground roadways. (Lancs.).	*Mining*
Metal matrix composite	Composite material in which the reinforcing phase is dispersed in the metal.	*Material Process*
Metal or Metal-stone	claystone and shale.	*Mining*
Metal Oxide Varistor	A Metal Oxide Varistor (MOV, or surge-suppressor) is a discrete electronic component that diverts excessive voltage to the ground and/or neutral lines.	*Electrical Engineering*
Metal Oxide Varistor	A Metal Oxide Varistor (MOV, or surge-suppressor) is a discrete electronic component that diverts excessive voltage to the ground and/or neutral lines.	*Electrical Engineering*
Metal Oxides	Oxidized ferrous particles which are very old or have been recently produced by conditions of inadequate lubrication. Trend is important.	*Lubrication*
Metal ridge or Metal rig	the floor of a mine forced up by the action of creep. (N. East).	*Mining*
Metal Trades Department	one of the AFL-CIO trade and industrial union departments.	*Industrial Relations*
Metalization	The metal pattern deposited on the sensor chip (usually outside the diaphragm area) to permit electrical connections to be made to the chip. Aluminum is usually used, but has potential contamination problems (known as the "purple plague"), if not protected. MICRO SWITCH uses gold, which is impervious to almost everything.	*Electrical Engineering*
Metalizing	forming a metallic coating by atomized spraying with molten zinc or by vacuum deposition; also called spray metalizing; applying an electrically conductive metallic layer to the surface of another material	*Materials Process*
Metallic	The metallic material composition of the collector's absorber system.	*Energy*
Metallic bond	Primary, chemical bond involving the nondirectional sharing of delocalized electrons.	*Material Process*
Metallic Bonding	the sharing of electrons among atoms in a metal, which gives excellent conducting properties because the electrons are free to move about the electron cloud around the atoms	*Physics*
Metallic magnet	Metal alloy with an engineering application predominantly based on its magnetic properties.	*Material Process*
Metallic soap	The compound of any metal with an organic acid such as naphthenic acids, or stearic acid used as driers, lubricants, etc..	*Material Process*
Metallocene Resins	The structure of the metallocene catalyst molecule and the environment around its catalytic site can be changed to build different polymeric structures with specific properties. Each metallocene catalyst consists of identical molecules, which behave in the same way, resulting, in polymer consistency because each polymer chain produced in uniform.	*Metallurgy*
Metallurgical	relating to the study of metals and their properties in bulk at the atomic level	*Materials Process*
Metallurgical bond	the bonding of iron/zinc intermetallic layers to the base steel	*Materials Process*
Metallurgical Bonding	Produced by diffusion or chemical bonding between the coating and substrate.	*Paint and Coatings*
Metallurgical coal	Coking coal and pulverized coal consumed in making steel.	*Energy*
Metallurgical coal	Coal used to make steel.	*Mining*
Metallurgical coal (or coking coal)	meets the requirements for making coke. It must have a low ash and sulfur content and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace. A blend of two or more bituminous coals is usually required to make coke.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Metallurgy	The study of extracting metals from their ores.	*Mining*
Metals	electropositive elements that usually have a shiny surface, are generally good conductors of heat and electricity, and can be melted or fused, hammered into this sheets, or drawn into wires; materials possessing atoms that share delocalized electrons	*Physics*
Metal-to-metal seal	The seal produced by metal-to-metal contact between the sealing face of the seat ring and the closure element, without benefit of a synthetic seal.	*Mechanical*
Metalworking Lubricant	Any lubricant, usually petroleum-based, that facilitates the cutting or shaping of metal. Basic types of metalworking lubricants are: cutting and tapping fluids, drawing compounds, etc.	*Lubrication*
Metamorphic Rocks	Any rock derived from preexisting rocks by mineralogical, chemical, and/or structural changes in response to marked changes in temperature, pressure, shearing stress, and chemical environment, generally at depth in the earth's crust.	*Petroleum Engineering*
Metamorphic rocks	Rocks which have undergone a change in texture or composition as the result of heat and/or pressure.	*Mining*
Metamorphism	A pronounced change in the constitution of rock effected by pressure, heat, and water that results in a more compact and more highly crystalline condition.	*Mining*
Meta-regression	[In meta-analysis:] A technique used to explore the relationship between study characteristics (e.g. concealment of allocation, baseline risk, timing of the intervention) and study results (the magnitude of effect observed in each study) in a systematic review. See also: Logistic regression	*Quality Engineering*
Metastable	Nonequilibrium state that may persist for a very long time	*Engineering Physics*
Metastable	A state that is stable with time, although it does not represent true equilibrium.	*Material Process*
Metastyrene	Another name for polystyrene resin.	*Material Process*
Meter	A unit of length, 1 meter=39.37 inches. METER - To regulate the amount or rate of fluid flow.	*Mechanical, Process, and Operations*
Meter Belts	One or more in-line conveyors used to provide controlled material discharge.	*Equipment*
Meter Constant	This represents the ratio between instrument transformers (CTs, PTs) and the meter. It is used as a multiplier of the difference between meter readings to determine the kWh used. The meter constant is also used as a multiplier of the demand reading to determine the actual demand.	*Energy*
Meter prover	A system used to check or "prove" a flow meter. A close fitting sphere is launched into a pipe of known inside diameter. The flow medium pushes the sphere thru a measured length of pipe between two sphere detection devices. Knowing the transit time and the exact volume between the two stations, a flow rate is calculated and compared with the meter reading.	*Mechanical*
Meter run	A section of pipeline in which a meter is installed to measure the volume of fluid passing thru the line.	*Mechanical*
Meter, Flow	A device which indicates either flow rate, total flow, or a combination of both. METER-IN - To regulate the amount of fluid flow into an actuator system.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Metered data	End-use data obtained through the direct measurement of the total energy consumed for specific uses within the individual household. Individual appliances can be submetered by connecting the recording meters directly to individual appliances.	*Energy*
Metered peak demand	The presence of a device to measure the maximum rate of electricity consumption per unit of time. This device allows electric utility companies to bill their customers for maximum consumption, as well as for total consumption.	*Energy*
Metering Zone	The final zone of an extruder barrel, in which the melt is conveyed at a uniform rate to the breaker plate or die.	*Metallurgy*
Meter-out	To regulate the flow of the discharge fluid from an actuator or system.	*Mechanical, Process, and Operations*
Meters	see Instrumentation.	*Electrical*
Methane	The most prevalent and common component of most natural gas produced in British Columbia.	*Petroleum Engineering*
Methane (CH4)	A colorless, flammable, odorless hydrocarbon gas which is the major component of natural gas. It is also an important source of hydrogen in various industrial processes. Methane is a greenhouse gas. See also Greenhouse gases.	*Energy*
Methane drainage	the capture and drainage of gas out of the mine by means of boreholes and suction.	*Mining*
Methane monitor	An electronic instrument often mounted on a piece of mining equipment, that detects and measures the methane content of mine air.	*Mining*
Methane or Marsh gas (CH4)	Colorless gas. The simplest aliphatic hydrocarbon, starting point for many organic syntheses.	*Material Process*
Methane	A potentially explosive gas formed naturally from the decay of vegetative matter, similar to that which formed coal. Methane, which is the principal component of natural gas, is frequently encountered in underground coal mining operations and is kept within safe limits through the use of extensive mine ventilation systems.	*Mining*
Methanogenic	referring to the formation of methane by certain anaerobic bacteria during the process of anaerobic fermentation.	*Chemical*
Methanogens	Bacteria that synthesize methane, requiring completely anaerobic conditions for growth.	*Energy*
Methanol	methanol	*Energy*
Methanol (CH_3OH)	A light, volatile alcohol eligible for gasoline blending.	*Energy*
Methanol blend	Mixtures containing 85 percent or more (or such other percentage, but not less than 70 percent) by volume of methanol with gasoline. Pure methanol is considered an "other alternative fuel."	*Energy*
Methanometer	a hand-held instrument for testing for methane, firedamp.	*Mining*
Methanotrophs	Bacteria that use methane as food and oxidize it into carbon dioxide.	*Energy*

Term	Definition	*Industry*
Method development	Refers to the process of formulating the materials, conditions, and protocol for measuring an analyte. Method development is mainly carried out by industry. Laboratories may make minor modifications to methods to improve performance, in which case, the modified methods should be subject to more rigorous testing and evaluation by the laboratory.	*Quality*
Method of Correction	A procedure whereby the mass distribution of a rotor is adjusted to reduce unbalance, or vibration due to unbalance, to an acceptable value. Corrections are usually made by adding material to, or removing it from, the rotor.	*General Engineering*
Method selection	The process of defining the laboratory requirements and choosing an analytical method which has the desired characteristics. Application and methodology characteristics must be carefully considered when selecting the method.	*Quality*
Method Study	the term is occasionally used interchangeably with th emotion study.	*Industrial Relations*
Method validation	The process of testing a measurement procedure to assess its performance and to validate that performance is acceptable. The magnitudes of the analytical errors are experimentally determined and their acceptability for the application of the method is judged versus defined requirements for quality in the form of maximum allowable errors.	*Quality*
Methodological quality	See Bias prevention	*Quality Engineering*
Methodology characteristics	Those properties of a method which in principle should contribute to the best analytical performance in the measurement of the analyte of interest. Characteristics such as the specificity of the chemical reaction, optimization of the reaction conditions, etc.	*Quality*
Methodology expert	A person who assists reviewers in conducting systematic reviews by using their statistical or other methodological expertise.	*Quality Engineering*
Methods Analysis	essentially this is the same as the motion and time study, being concerned with the various techniques and methods for increasing production.	*Industrial Relations*
Methods Group (MG) (formerly known as Methods Working Group [MWG])	Develop methodology and advise The Cochrane Collaboration on how the validity of Cochrane Reviews can be improved. In addition to conducting methodological research, they provide policy advice, training, and support. They help to monitor the quality of systematic reviews prepared within the Collaboration, and serve as a forum for discussion.	*Quality Engineering*
Methoxy ethyl oleate (C8H17CH (CH2)7 COOC2H4OCH3)	A plasticizer. Also, called Kapsol, Methyl Cellosolve oleate.	*Material Process*
Methyl aceto-acetate	A solvent ester.	*Material Process*
Methyl n-amyl ketone	A solvent ketone.	*Material Process*
Methyl acetate	A solvent ester. A colorless liquid.	*Material Process*
Methyl acrylate (CH2CHCOOCH3)	Colorless liquid. A monomer which polymerizes to a clear, colorless, light, tough, thermoplastic resin.	*Material Process*
Methyl alcohol	A solvent-alcohol.	*Material Process*
Methyl chloroform (trichloroethane)	An industrial chemical (CH_3CC_{l3}) used as a solvent, aerosol propellant, and pesticide and for metal degreasing.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Methyl cyclohexanol	A solvent – alcohol.	*Material Process*
Methyl dioxolane	A solvent – ether.	*Material Process*
Methyl ethyl ketone	A solvent – ketone.	*Material Process*
Methyl formate	A solvent – ester.	*Material Process*
Methyl isobutyl ketone	A solvent – ketone.	*Material Process*
Methyl lactae	A solvent ester.	*Material Process*
Methyl phthalyl ethyl glycolate (CH 3OCOC6H4 COOCH2COOC2H5)	Methyl phthalyl ethyl glycolate (CH 3OCOC6H4COOCH2COOC2H5) Colorless liquid. An important plasticizer. Also called Santicizer M-17.	*Material Process*
Methylene chloride	A colorless liquid, nonexplosive and practically nonflammable. Used as a refrigerant in centrifugal compressors, a solvent for organic materials, and a component in nonflammable paint removers.	*Energy*
Methyl-o-benzyl benzoate (C6 H5CO (C6 H4COOCH3)	A plasticizer.	*Material Process*
Metric conversion factors (for floorspace)	Floorspace estimates may be converted to metric units by using the relationship, 1 square foot is approximately equal to .0929 square meters. Energy estimates may be converted to metric units by using the relationship, 1 Btu is approximately equal to 1,055 joules. One kilowatt hour is exactly 3,600,000 joules. One gigajoule is approximately 278 kilowatt hours (kWh).	*Energy*
Metric system	A decimal system based on the meter and kilogram, which varies somewhat between countries (See SI Metric System).	*Mechanical, Process, and Operations*
Metric ton	2,204.6 pounds. For many commodities this is the standard measure for international trade. It is commonly used in FAS reports. However, domestic shipments usually are reported in short tons.	*Agriculture*
Metric Ton	Equivalent to 1000 kilos, 2204.61 lbs.; 7.5 barrels.	*Petroleum Drilling*
Metric ton (mt)	A unit of weight equal to 2,204.6 pounds.	*Energy*
Metric ton	Equivalent to 1000 kilos, 2204.61 lbs.; 7.5 barrels.	*Petroleum Drilling*
Metrics	Things to measure in order to better understand performance levels.	*Reliability Engineering*
Metropolitan	Located within the boundaries of a metropolitan area.	*Energy*
Metropolitan area	A geographic area that is a metropolitan statistical area or a consolidated metropolitan statistical area as defined by the U.S. Office of Management and Budget.	*Energy*
Metropolitan statistical area (MSA)	A county or group of contiguous counties (towns and cities in New England) that has (1) at least one city with 50,000 or more in habitants; or (2) an urbanized area of 50,000 inhabitants and a total population of 100,000 or more inhabitants (75,000 in New England). These areas are defined by the U.S. Office of Management and Budget. The contiguous counties or other jurisdictions to be included in an MSA are those that, according to certain criteria, are essentially metropolitan in character and are socially and economically integrated with the central city or urbanized area.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
MGO	Manual Gear Operator - A gear operator that is operated manually (with a handwheel). See illustration, pages 34 & 35.	*Mechanical*
Mica	A transparent mineral used as window material in high-temperature ovens.	*Electrical*
Mica	A transparent mineral used as window material in high-temperature ovens.	*Electronic Process*
Mica specks	Small mica like spots on the surface of a plastic due to presence of volatile matter during injection.	*Material Process*
Micarta	A trade name for phenolic laminated material.	*Material Process*
Micro	Millionth	*Oil Analysis*
Micro Energy Cell	A Micro Energy Cell (MEC) is a small, rechargeable, very long life, energy storage device used in energy harvesting applications. An example is the THINERGY MEC from Infinite Power Solutions.	*Electrical Engineering*
Micro Motion Study	a refinement of time and motion study which utilizes the facilities of a motion picture camera which is able to show very small or microscopic motion.	*Industrial Relations*
Micro Switch	A type of digital position sensor that is mechanically linked to a valve.	*Mechanical*
Microaerophilic	obligate aerobes that function best under conditions of low oxygen concentration.	*Chemical*
Microamp	One millionth of an ampere, 10-6 amps, μA.	*General Engineering*
Microcircuit	Microscopic scale electrical circuit produced on a semiconductor substrate by controlled diffusion.	*Material Process*
Microcomputer	A computer which is physically small. It can fit on top of or under a desk; based on LSI circuitry, computers of this type are now available with much of the power currently associated with minicomputer systems.	*General Engineering*
Microcosm	a diminutive, representative system analogous to a larger system in composition, development, or configuration. As used in biodegradation treatability studies, microcosms are typically constructed in glass bottles or jars.	*Chemical*
Microcrystalline wax	Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics penetration at 77 degrees Fahrenheit (D1321)-60 maximum; viscosity at 210 degrees Fahrenheit in Saybolt Universal Seconds (SUS); (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum; oil content (D721)-5 percent minimum.	*Energy*
Microelectromechanical systems	Systems that combine mechanical and electrical components and are fabricated using semiconductor fabrication techniques. Common examples are pressure and acceleration sensors which combine the sensor and amplification or conditioning circuitry. Other applications include switches, valves, and waveguides.	*Electrical Engineering*
Microfiltration (MF)	A size-exclusion, pressure-driven membrane process that operates at ambient temperature. It is usually considered an intermediate between ultrafiltration and multi-media granular filtration. It is an effective barrier for particles, bacteria and protozoan cysts. The systems operate at pressures between 5 and 45 pounds per square inch.	*Contamination Control*
Micrograph	Produced when a section of the coating is taken, polished to show the particulate layers and then photographed through a microscope.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Microgrid	A microgrid is a small-scale power network that comprises generating units and consumers. Often including renewable power sources such as wind turbines and solar panels, microgrids may also be connected to the larger-scale grids from which they can draw power if locally generated supplies fail to meet demand.	*Electrical*
Microgroove	A small groove scribed into the surface of a solar photovoltaic cell which is filled with metal for contacts.	*Energy*
Microhardness	The hardness of a coating as measured on a microscopic scale. Can show the hardness of individual phases within the coating and avoid the effects of porosity.	*Paint and Coatings*
Microinch	One millionth of an inch, 0.000001".	*Paint and Coatings*
MicroLAN	A 1-Wire network. A low-cost network in which PCs or microcontrollers communicate digitally over twisted-pair cable using 1-Wire components.	*Electrical Engineering*
Micrometer (μm)	One millionth of a meter, 0.001 mm.	*Paint and Coatings*
Micrometer (or Micron)	One-millionth of a meter. It can also be expressed as 10-6 meter.	*Energy*
Micrometer	See Micron.	*Lubrication*
MicroMonitor	A device that monitors three conditions vital to processor-controlled systems: power supply, software execution, and external override.	*Electrical Engineering*
MicroMonitor	A device that monitors three conditions vital to processor-controlled systems - power supply, software execution, and external override.	*Electrical Engineering*
Micron	One millionth of a meter, 10¨C6 meters.	*Electrical*
Micron	A unit of length equal to .001 millimeter (0.00003937 inch).	*Engineering Physics*
Microorganism	An organism that is too small to be studied without the aid of a microscope.	*Chemical Engineering*
Microorganisms	tiny living things that can only be seen with a microscope	*Agriculture*
Microorganisms	microscopic organisms including bacteria, protozoans, yeast, fungi, mold, viruses, and algae.	*Chemical*
Microphone	An instrument which converts a relatively small dynamic pressure change into an electrical signal. See **transducer.**	*Reliability Engineering*
Microporous Membrane	A thin film that has pores passing through it. The size of these holes is related to the pore size rating of the membrane (0.01 μm to 10 μm). Membranes can be used in the separation or filtration of suspended matter from liquids and gases.	*Contamination Control*
Microprocessor Supervisor	A device that monitors a host microprocessor or microcontroller's supply voltage and, in some cases, its activity. It monitors for a fault condition and takes appropriate action, usually issuing a reset to the microprocessor.	*Electrical Engineering*
Microscope Method	A method of particle counting which measures or sizes particles using an optical microscope.	*Oil Analysis*
Microscopic -	Particles whose diameter is below the threshold of normal vision, below forty micrometers for most individuals.	*Mechanical, Process, and Operations*
Microscopic-scale-architecture	Microscopic-scale-architecture Structural arrangement of the various phases in an engineering material.	*Material Process*

Term	Definition	*Industry*
Microsoft Access	general database software that ships with Professional (or better) Editions of Microsoft Office.	*Petroleum Drilling*
Microsoft Excel	general spreadsheet software that ships with Professional (or better) Editions of Microsoft Office.	*Petroleum Drilling*
Microstructural development	Changes in the composition and distribution of the phases in a material's microstructure as a result of thermal history.	*Material Process*
Microstructure	The structural features of an alloy that are subject to observation under a microscope.	*Engineering Physics*
Microtrack	A device for measuring powder particle size distributions.	*Paint and Coatings*
Microturbine	A small turbine generator of 30 - 250 kilowatts (kW) generating capacity, which can be located near a customer load.	*Electrical*
Microvolt	One millionth of a volt, 10¨C6 volts.	*Electrical*
Microvolt	One millionth of a volt, 10-6 volts.	*Electronic Process*
Microwave oven	A household cooking appliance consisting of a compartment designed to cook or heat food by means of microwave energy. It may also have a browning coil and convection heating as additional features.	*Energy*
Mid stone	a layer of stone separating two coal seams, often so thin that the two seams could be classed as one.	*Mining*
Middle Atlantic	New Jersey, New York, and Pennsylvania;	*Energy*
Middle distillates	A general classification of refined petroleum products that includes distillate fuel oil and kerosene.	*Energy*
Middle Management	a term used to describe a group of company officers whose position is between top management and the front line supervisors.	*Industrial Relations*
Middle sets	props set down the middle of a roadway for additional support. Also called 'catch props'.	*Mining*
Middles	In a compound seam of coal or ironstone consisting of three separate portions, the middle layer is usually termed the 'middles'.	*Mining*
Middlings	In coal preparation, this material called mid-coal is neither clean nor refuse; due to their intermediate specific gravity, middlings sink only partway in the washing vessels and are removed by auxiliary means.	*Energy*
Middorsal	In the middle of the upper side or dorsum.[1]	*Forestry*
Midgies	an open-flame lamp used in restricted areas of the mine. (N. East).	*Mining*
Midgrade gasoline	Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude.	*Energy*
Mid-size passenger car	A passenger car with between 110 and 119 cubic feet of interior passenger and luggage volume.	*Energy*
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.	*Energy*
Midwest Region	Consists of the Illinois and Michigan Coal Basins. The following comprise the Midwest Region: Illinois, Indiana, Michigan, and western Kentucky.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Migmatite	Rock consisting of thin, alternating layers of granite and schist.	*Mining*
Migration	When manufacturers produce new products they usually provide a migration path whereby their existing clients can upgrade their systems without total replacement. Rival manufacturers also provide migration paths away from the systems of others' in order to gain market share.	*Control Engineering*
Migration	The loss of plasticizer from a plastic, usually due to heat or aging. It is undesirable since it will make the plastic hard and brittle. It is also called leaching.	*Electrical*
Migration, Contact Material	A net transfer of material from one contact to the mating contact as a result of switching an electrical load. It usually takes the form of a needle, cone or mound or one contact face and a corresponding pit in the surface of the mating contact.	*Electrical Engineering*
Migratory Worker	the term is used almost exclusively to describe an individual processing work who moves or "migrates" with the job opportunities available to him.	*Industrial Relations*
Mil	One thousandth of an inch (0.001").	*General Engineering*
Mil	Unit of measure equal to 1/1000 of an inch.	*Electrical*
Miles per gallon (MPG)	A measure of vehicle fuel efficiency. Miles per gallon or MPG represents "Fleet Miles per Gallon. "For each subgroup or "table cell," MPG is computed as the ratio of the total number of miles traveled by all vehicles in the subgroup to the total number of gallons consumed. MPGs are assigned to each vehicle using the EPA certification files and adjusted for on-road driving.	*Energy*
MIL-HDBK	States Military Handbook	*Plant Engineering*
Military	Kerosene-type jet fuel intended for use in military aircraft.	*Energy*
Military Leave	a provision incorporated into a collective bargaining agreement or statement of company personnel policy protecting an employee's seniority and other rights while in military service and providing for his reinstatement upon his return from the service.	*Industral Relations*
Military use	Includes sales to the Armed Forces, including volumes sold to the Defense Fuel Supply Center (DFSC) for use by all branches of the Department of Defense (DOD).	*Energy*
Milk Stone	Calcium deposits on dairy or ice cream equipment.	*Chemistry*
Milk Wagon Drivers' Case	a case involving the milk wagon drivers and the Meadow-Moor Dairies, Inc. of Illinois.	*Industrial Relations*
Milk	Consumers buy milk by the pint, quart or gallon, but farmers sell it by the pound, usually expressed in hundredweight. A gallon of milk weighs approximately 8.6 pounds.	*Agriculture*
Milking	Sometimes called IRONING, it is the progressive movement of strands along the axis of the rope, resulting from the rope's movement through a restricted passage such as a tight sheave.	*Wire Rope & Cable*
Mill	a machine used to grind grain for food	*Agriculture*
Mill capital	Cost for transportation and equipping a plant for processing ore or other feed materials.	*Energy*

Term	Definition	*Industry*
Mill certificates	Certificates, provided by the steel mill, indicating the chemical analysis and physical properties of a specific batch of steel. "Mill Certs" are usually required only for pressure containing parts and the customer's need for such "Certs" must be made known at the time an order is first placed, otherwise traceability of a vale part, back to the mill, is not possible. See "Heat Analysis."	*Mechanical*
Mill feed	Uranium ore supplied to a crusher or grinding mill in an ore-dressing process.	*Energy*
Mill heads	The average grade of ore fed into a mill.	*Mining*
Mill lacquer	organic protective coating applied to steel parts, usually pipes or tubes, to protect the parts during shipping; this material cannot be removed by the usual galvanized cleaning methods	*Materials Process*
Mill Run	A test of quality of ore after reduction.	*Mining*
Mill scale	a heavy, imbedded iron oxide layer formed during hot fabrication or heat-treatment of steels	*Materials Process*
Mill tests	All tests required by the material specification. Usually includes both the heat analysis (chemical) and the physical properties. Sometimes also impact tests.	*Mechanical*
Mill	One mill is equal to one-thousandth of a dollar.	*Energy*
Milldam	A dam built in a stream to furnish a head of water for turning a mill wheel.	*Civil Engineering*
Miller Act	a statute passed in August 1935 which applies to contracts over $2,000 for the construction, alteration, or repair of any public building or public work in the United States.	*Industrial Relations*
Miller Bravais indices	Four digit set of integers used to characterize a crystalline plane in the hexagonal system.	*Material Process*
Miller indices	Set of integrals used to characterized a crystalline plane.	*Material Process*
Miller-Bravis Indices	A set of four integers that designate crystallographic planes in hexagonal crystals.	*Metallurgy*
Milli	Thousandth	*Oil Analysis*
Milliamp	One thousandth of an amp, 10¨C3 amps, symbol mA.	*Electrical*
Millimeter	One thousandth of a meter, symbol mm.	*Electrical*
Millimeter	One thousandth of a meter, symbol mm.	*Electronic Process*
Milling	The grinding or crushing of ore, concentration, and other beneficiation, including the removal of valueless or harmful constituents and preparation for market.	*Energy*
Milling capacity	The maximum rate at which a mill is capable of treating ore or producing concentrate.	*Energy*
Milling of uranium	The processing of uranium from ore mined by conventional methods, such as underground or open-pit methods, to separate the uranium from the undesired material in the ore.	*Energy*
Milling ore	Ore that contains sufficient valuable mineral to be treated by milling process.	*Mining*
Milling ore	Ore that contains sufficient valuable mineral to be treated by milling process.	*Mining*
Million British Thermal Units	MMBtu. See Btu.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Millivolt	Unit of electromotive force. It is the difference in potential required to make a current of 1 milliampere flow through a resistance of 1 ohm; one thousandth of a volt, symbol mV.	*Electrical*
Millivolts	A measure of the voltage of an electric current, specifically, one-thousandth of a volt.	*Mining*
Millpond	A pond for supplying water to drive a mill wheel.	*Civil Engineering*
Millrace	The channel in which the current of water driving a mill wheel flows to the mill.	*Civil Engineering*
Millrace	The channel in which the current of water driving a mill wheel flows to the mill.	*Civil Engineering*
MIL-STD	States Military Standard	*Plant Engineering*
MIL-STD-721C offers	(1) The duration or probability of failure-free performance under stated conditions. If you want to be complete, add (2) The probability that an item can perform its intended function for a specified interval under stated conditions. (For non-redundant items this is equivalent to definition (1). For redundant items this is equivalent to definition of mission reliability.)	*Reliability Engineering*
Mimicking symptoms	Symptoms similar to those caused by pollutants but induced by other abiotic or biotic causal agents.[1]	*Forestry*
Mimosa	Machinery Information Management Open Systems Alliance. MIMOSA advocates open exchange of equipment condition related information between condition assessment, process control and maintenance information systems through published, consensus, conventions. This to gain greatest value by combining vital condition information from multiple sources for collective evaluation, reaching accurate determinations of current condition and projected lifetime and communicating results in a useful, understandable form. MIMOSA is committed to preserving the advantages, effectiveness and rich detail contained in specialized applications such as vibration, temperature, lubricating oil and electric motor monitoring and analysis systems within an integrated enterprise information structure. See: http://www.mimosa.org	*Maintenance*
Minable	Capable of being mined under current mining technology and environmental and legal restrictions, rules, and regulations.	*Energy*
Minable reserves	Ore reserves that are known to be extractable using a given mining plan.	*Mining*
Mine capital	Cost for exploration and development, pre-mining stripping, shaft sinking, and mine development (including in-situ leaching), as well as the mine plant and its equipment.	*Energy*
Mine car	a modern version of the old coal tubs with a capacity up to 6 tons. The mine car is usually hauled underground by a locomotive.	*Mining*
Mine count	The number of mines, or mines collocated with preparation plants or tipples, located in a particular geographic area (state or region). If a mine is mining coal across two counties within a state, or across two states, then it is counted as two operations. This is done so that EIA can separate production by state and county.	*Energy*
Mine development	The term employed to designate the operations involved in preparing a mine for ore extraction. These operations include tunneling, sinking, cross-cutting, drifting, and raising.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mine dust	The fine dust or powder of calcined ironstone which is left on the calcining ground and which cannot be used in the blast-furnace unless briquetted or otherwise solidified (N. Staffs.).	*Mining*
Mine earth	an early term used for ironstone (N. Staffs.).	*Mining*
Mine mouth electric plant	A coal burning electric-generating plant built near a coal mine.	*Mining*
mine or adit	Day hole, a drift mine or adit, especially one driven into a hillside. Also called a 'Tail end' in Yorks. Also known as a 'day drift' or a 'grove'.	*Mining*
Mine rucks	heaps of raw ironstone, (usually 200 feet by 100 feet by 6½ feet high), prepared on the surface for calcination in the open air (N. Staffs.).	*Mining*
Mine Type	See Surface Mine and Underground Mine.	*Energy*
Miner	One who is engaged in the business or occupation of extracting ore, coal, precious substances, or other natural materials from the earth's crust.	*Mining*
Miner	The larval stage of an insect which makes galleries or burrows between the upper and lower surfaces of leaf tissue.	*Forestry*
Mineral	Any of the various naturally occurring in organic substances, such as metals, salt, sand, stone, sulfur, and water, usually obtained from the earth. Note For reporting on the Financial Reporting System the term also includes organic non-renewable substances that are extracted from the earth such as coal, crude oil, and natural gas.	*Energy*
Mineral	A naturally occurring homogeneous substance having definite physical properties and chemical composition and, if formed under favorable conditions, a definite crystal form.	*Mining*
Mineral lease	An agreement wherein a mineral interest owner (lessor) conveys to another party (lessee) the rights to explore for, develop, and produce specified minerals. The lessee acquires a working interest and the lessor retains a non-operating interest in the property, referred to as the royalty interest, each in proportions agreed upon.	*Energy*
Mineral oil	Oil derived from a mineral source, such as petroleum, as opposed to oils derived from plants and animals.	*Oil Analysis*
Mineral resin	Term sometimes applied to such mineral to such mineral resin like materials as gilsonite.	*Material Process*
Mineral rights	The ownership of the minerals beneath the earth's surface with the right to remove them. Mineral rights may be conveyed separately from surface rights.	*Energy*
Mineral Seal Oil	A distillation fraction between kerosene and gas oil, widely used as a solvent oil in gas adsorption processes, as a lubricant for the rolling of metal foil, and as a base oil in many specialty formulations. Mineral seal oil takes its name – not from any sealing function – but from the fact that it originally replaced oil derived from seal blubber for use as an illuminant for signal lamps and lighthouses.	*Lubrication*
Mineral-insulated Thermocouple	A type of thermocouple cable which has an outer metal sheath and mineral (magnesium oxide) insulation inside separating a pair of thermocouple wires from themselves and from the outer sheath. This cable is usually drawn down to compact the mineral insulation and is available in diameters from 0.375 to 0.010 inches. It is ideally suited for high temperature and severe-duty applications.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mineral-insulated Thermocouple	A type of thermocouple cable which has an outer metal sheath and mineral (magnesium oxide) insulation inside separating a pair of thermocouple wires from themselves and from the outer sheath. This cable is usually drawn down to compact the mineral insulation and is available in diameters from .375 to .010 inches. It is ideally suited for high-temperature and severe-duty applications.	*Electronic Process*
Mineralization	the release of inorganic chemicals from organic matter in the process of aerobic or anaerobic decay.	*Chemical*
Mineralized Water	Water containing in excess of 6000 milligrams per liter total dissolved solids, or 500 milligrams per liter chlorides, or 500 milligrams per liter sulfates.	*Petroleum Engineering*
Mineral-matter-free basis	Mineral matter in coal is the parent material in coal from which ash is derived and which comes from minerals present in the original plant materials that formed the coal, or from extraneous sources such as sediments and precipitates from mineralized water. Mineral matter in coal cannot be analytically determined and is commonly calculated using data on ash and ash-forming constituents. Coal analyses are calculated to the mineral matter free basis by adjusting formulas used in calculations in order to deduct the weight of mineral matter from the total coal.	*Energy*
Miners' Prospecting	1880s Vein - Aggregations of mineral matter in fissures of rocks.	*Mining*
Minge or Mingy coal	coal of a tender nature or friable; or dirty coal, often fusainous.	*Mining*
Mingles	an old name for the framework that carried the pulleys of the headgear (Scot.).	*Mining*
Minimization	A method of allocation used to provide comparison groups that are closely similar for several variables. The next participant is assessed with regard to several characteristics, and assigned to the treatment group that has so far had fewer such people assigned to it. It can be done with a component of randomisation, where the chance of allocation to the group with fewer similar participants is less than one. Minimization is best performed centrally with the aid of a computer program to ensure concealment of allocation. See also: Stratified randomisation	*Quality Engineering*
Minimum Ignition Energy (MIE)	Minimum ignition energy is just sufficient to ignite the most readily ignitable dust-air mixture at atmospheric pressure and room temperature.	*Material Process*
Minimum Ignition Temperature (MIT)	The minimum ignition temperature is the lowest temperature of a hot surface at which a dust-air mixture is ignited on contact.	*Material Process*
Minimum Life	An exact term only when applied to a specific group of tested switches. It then means the lowest life figure obtained from the test of that group of switches.	*Electrical Engineering*
Minimum Plant Rate	the lowest hourly rate paid for unskilled work at a plant.	*Industrial Relations*
Minimum Pressure Accumulating Conveyor	A type of conveyor designed to minimize build-up of pressure between adjacent packages or cartons. (138-ACC - 190-ACC)	*Manufacturing*
Minimum Pressure Accumulation Conveyor	A type of conveyor designed to minimize build-up of pressure between adjacent packages or cartons.	*Equipment*
Minimum Rates	the two most frequently used minimum rates are those which apply to the job and those that apply to the plant.	*Industrial Relations*
Minimum streamflow	The lowest rate of flow of water past a given point during a specified period.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Minimum Wage	the term generally applies to the wage rate set under the Fair Labor Standards Act of 1938, although minimum wages are established not only through law, as under the Fair Labor Standards Act, but through the collective bargaining process.	*Industrial Relations*
Minimum Wage Determination	the Secretary of Labor is authorized under the Walsh-Healey Public Contracts Act to determine prevailing minimum wages in an industry on the basis of standards provided in the Act.	*Industrial Relations*
Minimum Work	generally referred to as minimum call-in pay.	*Industrial Relations*
Mining	An energy-consuming subsector of the industrial sector that consists of all facilities and equipment used to extract energy and mineral resources.	*Energy*
Mining Cable	A flame retardant cable especially constructed to withstand rough handling and exposure to moisture for underground use in the environment of a mine or tunnel, or surface use where exposed to sunlight and extremes of temperature.	*Electrical*
Mining Engineer	A person qualified by education, training, and experience in mining engineering. A trained engineer with knowledge of the science, economics, and arts of mineral location, extraction, concentration and sale, and the administrative and financial problems of practical importance in connection with the profitable conduct of mining.	*Mining*
Mining operation	One mine and/or tipple at a single physical location.	*Energy*
Minings	very soft coal. (Lancs.).	*Mining*
Minivan	Small van that first appeared with that designation in 1984. Any of the smaller vans built on an automobile-type frame. Earlier models such as the Volkswagen van are now included in this category.	*Energy*
Minnesota Plan	in 1933 during the height of the depression, most unemployment benefit plans were depleted.	*Industrial Relations*
Minor crops	The most frequent use of this term is in the context of registration of pesticides that may be used on them. Most crops grown in America are classified as minor crops for this purpose. Combined, minor crops account for more than $31 billion in annual sales. But individually, they don't generate enough sales of pesticides to make it profitable for chemical companies to do the research necessary to obtain Environmental Protection Agency registration for the application of chemicals to them. Wheat, corn, cotton, rice, soybeans and oats are the only crops classified as major.	*Agriculture*
Minor Diameter	The smallest diameter of a screw thread.	*Fastening*
Minor Disputes	disputes involving the interpretation or application of existing contract provisions.	*Industrial Relations*
Minor Scale Division	On an analog scale, the smallest indicated division of units on the scale.	*General Engineering*
Minority Business Enterprise (MBE)	Any legal entity, organized to engage in commercial transactions, that is at least 51 percent owned and controlled by one or more minority persons. Ownership interest in the firm must be real, substantial, and continuing.	*Procurement*
Minority carrier	A current carrier, either an electron or a hole, that is in the minority in a specific layer of a semiconductor material; the diffusion of minority carriers under the action of the cell junction voltage is the current in a photovoltaic device.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Minority Groups	although the term has broad and general implications in the sociological and political field, its usage here is primarily to groups which constitute less than a majority in a particular company or bargaining unit and to their rights under the collective bargaining agreement.	*Industrial Relations*
Minority Representation	in the political field this term applies to various forms of proportional representation in which efforts are made to provide representation to all points of view in roughly the proportion of the number of supporters which each group has in the community.	*Industrial Relations*
Minority Union	by definition, a union which does not enjoy exclusive bargaining or majority status.	*Industrial Relations*
Minus Sieve	The portion of a powder sample which passes through a standard sieve of specified number e.g. -140 mesh +325 mesh. (See plus sieve)	*Paint and Coatings*
MIRA	Motor Industry Research Association (UK)	*Petro-Chemical Abbreviations*
Miracle, a fossils	Miracle, a fossils.	*Mining*
MIS	Management Information System	*Control Engineering*
Miscellaneous petroleum products	Includes all finished products not classified elsewhere (e.g., petrolatum lube refining by products (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feed stocks, and specialty oils).	*Energy*
Miscellaneous reserves	A supply source having not more than 50 billion cubic feet of dedicated recoverable salable reserves and that falls within the definition of Supply Source.	*Energy*
Miscible	Mutually soluble.	*Material Process*
Misfire	The complete or partial failure of a blasting charge to explode as planned.	*Mining*
Mismatch	Misalignment of forging at flash line caused by die or cavity positioning. (Mismatch should not exceed allowable tolerances.)	*Metallurgy*
Miss the tow	to be late in getting to the shaft and missing the last man riding draw before the beginning of coal winding time. If a man arrived late at the pit he would be sent home and lose a day's work.	*Mining*
Missile	The missile is comprised of a low-pressure side and a high pressure side, and is the manifold through which the frac fluid flows to the pressurization trucks, and into the wellbore to frac the rock.	*Petroleum Drilling*
Missile Sites Commission	a tripartite commission established in 1961 by executive order of the President, headed by the Secretary of Labor.	*Industrial Relations*
Mission Profile	A time-phased description of the events and environments an item experiences from initiation to completion of a specified mission, to include the criteria or mission success or critical failures.	*Reliability Engineering*
Mission reliability	The measure of the ability of an item to perform its required function for the duration of a specified mission profile. Mission reliability defines the probability that the system will not fail to complete the mission, considering all possible redundant modes of operation.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mission Statement	"The Cochrane Collaboration is an international organization that aims to help people make well-informed decisions about health care by preparing, maintaining, and promoting the accessibility of systematic reviews of the effects of healthcare interventions. It is a not-for-profit organization, established as a company, limited by guarantee, and registered as a charity in the UK (number 1045921)."	*Quality Engineering*
Missionary	a term used in the labor relations field assigned to a "spy: whose primary work is to spread anti-union propaganda or to lay the foundation for anti-strike action.	*Industrial Relations*
Mistress	a cover for the sinkers in a wet shaft; or a cover for a sinkers lamp when working in a wet shaft. (Scots); or an oblong box with the upper half of the front opened. There was a round hole in the base for a candle. The candle could then be raised as it burned down. The mistress allowed the candle to be carried in a strong current of air. (N. East).	*Mining*
MIT	Mechanical Integrity Test	*Petroleum Drilling*
MITE(S)	Small, often minute, arthropods in the order Acarina of the class Arachnida, which includes spiders, scorpions, and related forms. Mites have four pairs of legs vs. three pairs in insects.	*Forestry*
Miter	Two or more straight sections of pipe matched and joined on a line bisecting the angle of junction so as to produce a change in direction.	*Maintenance and Repair*
Mitergate	In a canal or the like, a lock gate having two leaves so made as to close at an angle pointing upstream.	*Civil Engineering*
MITI	Ministry of International Trade and Industry (Japan)	*Petro-Chemical Abbreviations*
Mitochondria	The location in cells where respiration occurs. Mitochondria are surrounded by two membranes.	*Agriculture*
Mixed bond character	Having more than one type of atomic bonding, for example, covalent and secondary bonding in polyethylene.	*Material Process*
Mixed Dislocation	a dislocation that has both edge and screw components.	*Metallurgy*
Mixed dislocation	Dislocation with both edge and screw character.	*Material Process*
Mixed Film	A type of lubrication that features a combination of full-film and thin-film elements.	*Lubrication*
Mixed load	Shipping two or more commodities, or two or more types of packages, in one truck or railcar. In some shipping districts, a premium is charged for mixed loads.	*Agriculture*
Mixed stand	A timber stand in which less than 80 percent of the trees in the main canopy are of a single species.	*Forestry*
Mixed waste	Waste containing both radioactive and hazardous constituents.	*Energy*
Mixed Weibull Distribution	A variation of the Weibull distribution used to model data with distinct subpopulations that may represent different failure characteristics over the lifetime of a system. Each subpopulation has separate Weibull parameters calculated and the results are combined in a mixed Weibull distribution to represent all the subpopulations in one function.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
MM Million (106)	**MM:** Million (10^6).	*Energy*
MMbbl/d	One million (10^6) barrels of oil per day.	*Energy*
MMBOE	Two letter M's, from Roman numerals, refer to one million. In this case "MMBOE" refers to one million barrels of oil equivalent.	*Petroleum Drilling*
MMBtu	One million (10^6) British thermal units.	*Energy*
MMBTU or MBTU	These can both mean 1 million BTUs. (MBTU can also stand for 1000 BTUs, so context is important.) A BTU is the British Thermal Unit. It is the amount of heat needed to increase the temperature of a pint of water by one degree Fahrenheit. An MMBTU is roughly comparable to 1000 cubic feet of natural gas.	*Petroleum Drilling*
MMcf	One million (10^6) cubic feet.	*Energy*
MMCF	One million cubic feet.	*Petroleum Drilling*
mmcfd	Millions of cubic feet per day (of gas).	*Petroleum Drilling*
mmcfd	Millions of cubic feet per day (of gas).	*Petroleum Drilling*
MMgal/d	One million (10^6) gallons per day.	*Energy*
MMI	Man-Machine Interface. Also known as Human Machine Interface (HMI).	*Control Engineering*
MMmt	One million (10^6) metric tons.	*Energy*
MMst	One million (10^6) short tons.	*Energy*
MMT	methylcyclopentadienyl manganese tricarbonyl	*Petro-Chemical Abbreviations*
MO	Motor Operated - See "Power Operator"; "EMO."	*Mechanical*
MOA	memorandum of agreement	*Petro-Chemical Abbreviations*
Moat	to puddle, to make a seal using wet clay.	*Mining*
Moat or Mote	a straw filled with black powder and used as a fuse.	*Mining*
Mobby	a leather girdle and chain used by the drawer for pulling the tubs. (Staffs).	*Mining*
Mobile	On-Road Emission Factor Model (EPA-US)	*Petro-Chemical Abbreviations*
Mobile home	A housing unit built on a movable chassis and moved to the site. It may be placed on a permanent or temporary foundation and may contain one room or more. If rooms are added to the structure, it is considered a single-family housing unit. A manufactured house assembled on site is a single-family housing unit, not a mobile home.	*Energy*
Mobile substation	A substation that can be transported, usually by truck, to temporarily replace equipment at the site of a failure or in the event of planned maintenance.	*Electrical*
MOD	Ministry of Defense (UK)	*Petro-Chemical Abbreviations*
Modal analysis	The process of breaking complex structural motion into individual vibration modes. Resembles frequency domain analysis that breaks complex vibration down to component frequencies.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mode	Auto, manual, or remote. In auto mode the controller calculates the output based its calculation using the error signal (difference between setpoint and PV). In manual mode, the user sets the output. In remote, the controller is actually in auto but gets its setpoint from another controller.	*Process Control*
Model	Brass, wood, plaster, etc., form which serves as a pattern for cutting the die.	*Metallurgy*
Model	Model is a symbol which is similar phenomena which is considered. In science, models have logical and epistemiological functions.	*Material Process*
Model Agreement	a collective bargaining agreement sometimes recommended or initiated by an employer organization or an international union to serve as a standard or pattern for a geographic area or industry.	*Industrial Relations*
Model predictive control (MPC)	The online control of an industrial process (such as oil refining) that uses a virtual model of the process, which allows a computer to predict appropriate control settings.	*Electrical*
Model Work Order	A Work Order Stored In The CMMS Which Contains All The Necessary Information Required To Perform A Maintenance Task. (See Also Standard Job)	*Plant Engineering*
Modeling	Modeling is the bridge between real system and a model. Modeling method started with system, and their interrelations definition according to goal state	*Material Process*
Modem	Modulator/Demodulator. A device that transforms digital signals into audio tones for transmission over telephone lines, and does the reverse for reception.	*General Engineering*
Moderate complexity tests	A CLIA category of tests that includes about 75% of all tests performed by healthcare laboratories, including most automated analytical systems. This category has more stringent requirements than for "waived tests" or "provider performed microscopy."	*Quality*
Moderator	A material, such as ordinary water, heavy water, or graphite, used in a reactor to slow down high-velocity neutrons, thus increasing the likelihood of further fission.	*Energy*
Modification	Any Activity Carried Out On An Asset Which Increases The Capability Of That Asset To Perform Its Required Functions.	*Plant Engineering*
Modified Cash Refund Annuity	a contract which provides that an individual will receive an annual income which begins at retirement and continues for life.	*Industrial Relations*
Modified Closed Shop	any contract which requires a closed shop but exempts certain groups of employees from the union membership requirement.	*Industrial Relations*
Modified Gompertz Model	A reliability growth model that models based on variation of the Gompertz model.	*Reliability Engineering*
Modified Parabolic	A flow characteristic that lies somewhere between linear and equal percentage. It provides fine throttling at low flow capacity and an approximately linear characteristic at higher flow capacities.	*Industrial Engineering*
Modified Union Shop	any union-shop agreement which deviates from the general standard requiring that all employees become members of the union after a certain period of time following their employment.	*Industrial Relations*
Modified-atmosphere packaging	A sealed package injected with an atmospheric mix of gases that provides optimal storage for the packaged commodity. Technique is used to slow ripening.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Modulated Light Source (MLS) Control	A photoelectric control that operates on modulated (pulsed) infrared radiation, and responds only to that frequency rather than steady light intensity. Modulated LED controls offer a high rejection of troublesome ambient light.	*Electrical Engineering*
Modulation	The process, or result of the process, whereby some characteristic of one wave is varied in accordance with some characteristic of another wave.	*Process Control*
Module	Ration of the pitch diameter to the number of teeth. Ordinarily, module is understood to mean ration of pitch diameter in millimeters to the number of teeth. The English Module is a ratio of the pitch diameter in inches to the number of teeth.	*Mechanical Engineering*
Module Manager (ModMan)	Software developed by The Cochrane Collaboration to allow Collaborative Review Groups to assemble and manage their edited Protocols and Cochrane Reviews. ModMan also contains information about the Collaborative Review Group. ModMan is used by Managing Editors to edit and update modules that are submitted, at quarterly intervals, for publication in The Cochrane Library.	*Quality Engineering*
Modules	Photovoltaic cells or an assembly of cells into panels (modules) intended for and shipped for final consumption or to another organization for resale. When exported, incomplete modules and unencapsulated cells are also included. Modules used for space applications are not included.	*Energy*
Modulus of elasticity	The proportional constant between stress and strain for material with linear elastic behavior: calculated as stress divided by strain. Modulus of elasticity can be interpreted as the slope of the stress-strain graph. It is usually denoted as E, sometimes known as Young's Modulus Y, or E-Modulus.	*Engineering Physics*
Modulus of elasticity	The quotient obtained by dividing the stress per squares inch by the elongation in 1 inch caused by this stress. Slope of the stress strain curve in the elastic region.	*Material Process*
Modulus of elasticity in bending	See Flexural modulus.	*Material Process*
Modulus of elasticity (coefficient of elasticity)	The ratio between a force per unit area (stress) which acts to deform a body and the corresponding fractional deformation (strain) produced by the stress.	*Mechanical*
Modulus of Elasticity E (static)	The initial slope of the stress vs strain curve, where Hooke's Law applies, before the elastic limit is reached. Typical values are 30,000,000 pounds/square inch for steel and about 10,000,000 for aluminum.	*Reliability Engineering*
Modulus of rigidity	See Shear modulus	*Material Process*
Modulus of rupture	See Flexural strength.	*Material Process*
MOE	Ministry of Energy (UK)	*Petro-Chemical Abbreviations*
Moggies	In Lancashire 'moggies' was the miners name for mice that infested the mines.	*Mining*
Moh's scale	A scale of hardness devised by Moh's, being a relative measure of the hardness of surface by resistance to the scratching of various minerals having increasing degrees of hardness as follows: Talc, Gypsum, Calcite, Fluorite, Opatite, Orthoclase, Quartz, Topaz, Corundum, Diamond.	*Material Process*
Mohawk Valley Formula	an elaborate plan developed by the Remington Road Corporation and its then president, James H. Rand, Jr., to combat union organizational efforts in a number of plants.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Moist (coal) basis	Moist coal contains its natural inherent or bed moisture, but does not include water adhering to the surface. Coal analyses expressed on a moist basis are performed or adjusted so as to describe the data when the coal contains only that moisture that exists in the bed in its natural state of deposition and when the coal has not lost any moisture due to drying.	*Energy*
Moisture absorption	The percentage by weight of water absorbed by a sample impressed in water. The rate of absorption depends on the relationship of weight and area.	*Material Process*
Moisture Absorption	The amount of water that an insulation or jacket, which is initially dry, will absorb under specified conditions. It is expressed as the percentage ration of the absorbed water's weight to the weight of the jacket or insulation alone.	*Electrical*
Moisture content	the amount of water lost from a soil upon drying to a constant weight, expressed as the weight per unit weight of dry soil or as the volume of water per unit bulk volume of the soil. For a fully saturated medium, moisture content equals the porosity.	*Chemical*
Moisture Vapor Transmission	The rate of permeation of water through a material at a specific temperature and relative humidity rate.	*Metallurgy*
MOL	Ministry of Labor (Japan)	*Petro-Chemical Abbreviations*
Molality	A measure of concentration expressed in mols per kilogram of solvent.	*General Engineering*
Molality	A measure of concentration expressed in mols per kilogram of solvent.	*Electronic Process*
Mold	Metal or hard substance with impressions for forming plastics articles.	*Material Process*
Mold	A woolly growth, produced by a fungus.	*Chemistry*
Mold (release) Lubricant	A compound, often of petroleum origin, for coating the interiors of molds for glass and ceramic products. The mold lubricant facilitates removal of the molded object from the mold, protects the surface of the mold, and reduces or eliminates the need for cleaning it.	*Lubrication*
Mold marks	A defect in the mold imparted to the material.	*Material Process*
Mold Shrinkage	The immediate shrinkage of a molded article when removed from a mold and cooled down to room temperature.	*Material Process*
Molding	The shaping of a plastic in a mold, by the application of pressure, and usually of heat.	*Material Process*
Molding cycle	The complete time including the heating, curing, and discharge of the mold in making a piece.	*Material Process*
Mole	A massive structure, esp. of stone, set up in the water, as for a breakwater or a pier. An anchorage or harbor protected by such a structure.	*Civil Engineering*
Mole	A massive structure, esp. of stone, set up in the water, as for a breakwater or a pier. An anchorage or harbor protected by such a structure.	*Civil Engineering*
Mole	Avogadro's number of atoms or irons in the compositional unit of a compound, for example, mole of Al2O3 contains 2 moles Al3+ ions and 3 moles of O2-ions.	*Material Process*
Molecular beam epitaxy (MBE)	A highly controlled ultrahigh-vacuum deposition process.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Molecular diffusion	process whereby molecules of various gases tend to intermingle and eventually become uniformly dispersed.	*Chemical*
Molecular length	Length of polymeric molecule expressed in one of two ways.	*Material Process*
Molecular weight	the amount of mass in one mole of molecules of a substance as determined by summing the masses of the individual atoms which make up the molecule.	*Chemical*
Molecular Weight (MW)	The sum of the atomic weights of all atoms in a molecule.	*Metallurgy*
Molecular Weight Cutoff (MWCO)	Referred to as the molecular weight above which a certain percentage (e.g., 90 percent) of the solute in the feed solution is retained by the membrane, it is typically expressed in units called Daltons and used as a measure of the nominal pore size of ultrafiltration and nanofiltration membranes.	*Contamination Control*
Molecular Weight Distribution (MWD)	The relative amounts of polymers of different molecular weights (MW that makes up a specific polymer.	*Metallurgy*
Molecule	The smallest unit or particle into which a substance can be divided and still retain all of the chemical identity of that substance. Group of atoms joined by primary bonding, usually covalent.	*Material Process*
Molluscicide	A material that will kill molluscs.	*Chemical Engineering*
Molly Maguires	a secret ring of workers which flourished in the anthracite coal field during the 1860's and 1870's.	*Industrial Relations*
Molt	To cast off the outgrown skin or cuticle in the process of insect development; changing from one instar to the next.	*Forestry*
Moly	Molybdenum disulfide, a solid lubricant and friction reducer, colloidally dispersed in some oils and greases.	*Lubrication*
Molybdenium oxide (Mo2O3)	Black crystals. A catalyst.	*Material Process*
Molybdenum Disulfide	A black, lustrous powder (MoS2) that serves as a dry-film lubricant in certain high-temperature and high-vacuum applications. It is also used in the form of pastes to prevent scoring when assembling press-fit parts, and as an additive to impart residual lubrication properties to oils and greases. Molybdenum disulfide is often called moly or molysulfide.	*Lubrication*
Molybdenum Disulphide (Moly)	A solid lubricant that acts as a high pressure resistant film. Can be used by itself as a dry lubricant as well as in with other solid lubricants and in oils and greases. Used in threads, such lubricants act as a separating film to prevent corrosion formation on the thread surface (even under adverse temperature and environmental conditions) ensuring the release of the threaded connection. Such films can also act as friction stabilizers.	*Maintenance*
Moment	The resultant of a system of forces causing rotation without translation. A moment can be expressed as a couple	*Engineering Physics*
Moment of inertia	Moment of inertia has two distinct but related meanings: 1) it is a property of a an object relating to the magnitude of the moment required to rotate the object and overcome its inertia. 2) A property of a two dimensional cross section shape with respect to an axis, usually an axis through the centroid of the shape. Moment Release: see pin connection. Moment resisting-connection: see fixed connection.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Moment Resisting-Connection	see fixed connection.	*Metallurgy*
Momentary Short Circuit Protection	Output circuit protection designed to protect the output device from damage due to a temporary (1-3 sec.) short circuit or until an external fuse can interrupt current.	*Electrical Engineering*
MON	motor octane number	*Petro-Chemical Abbreviations*
Money Wage	same as nominal wage.	*Industrial Relations*
Monitor	An apparatus fitted with a nozzle and used to direct water under high pressure in order to remove overburden or to break down gold-bearing gravels in order to sluice them. Also known as a "giant".	*Mining*
Monitoring	Monitor Service - A field procedure whereby two valves – usually regulators – are installed in series and adjusted in such a manner that, should the primary regulator fail, the standby regulator will automatically take over at a slightly higher pressure setting.	*Mechanical*
Monitoring and Registration Committee (MaRC)	Monitoring and Registration Committee (MaRC) - The Monitoring and Registration Committee (MaRC) is a sub-group of the Cochrane Collaboration Steering Group. It is responsible for establishing and implementing processes for monitoring and registering entities, and for making recommendations to the full Steering Group about de-registration of an entity. Also called: MaRC	*Quality Engineering*
Monkey	Any of various mechanical devices, as the ram of a pile driver.	*Civil Engineering*
Monkey clip	a clip with a tongue that bites on the haulage rope. It has a screw with a pin that is used to tighten the screw onto the rope. This prevents the tubs from slipping back or running away. It was used on overhead haulage ropes in conjunction with a dog clip. The dog clip was at the front of a run and the 'monkey clip' was at the rear. (Scot.).	*Mining*
Monkeyboard	Platform several meters above the rig floor where the Derrickhand works. *	*Petroleum Drilling*
Monkeyboard	A working platform for the derrickhand in the derrick or mast.	*Petroleum Drilling*
monoaromatic	aromatic hydrocarbons containing a single benzene ring.	*Chemical*
Monobutyl diamyamine	A solvent – amine.	*Material Process*
Monochlorbenzene	A solvent halogenated compound. Monoethanol amine A solvent – amine.	*Material Process*
Monochromatic	A single wave length of radiation.	*Material Process*
Monocoque	A type of boat, aircraft, or rocket construction in which the shell carries most of the stresses.	*Civil Engineering*
Monocoque	A type of boat, aircraft, or rocket construction in which the shell carries most of the	*Civil Engineering*
Monocot	Seeds that have one cotyledon.	*Agriculture*
Monoculture	planting the same crop in a field year after year with no crop rotation	*Agriculture*
Mono-isopropanolamine	A solvent – amine.	*Material Process*
Monolithic reactor	Catalytic reactor made of one single piece of solid material. Incorporates a catalytic structure in its often porous structure.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Monomer	A molecule consisting of a single mer.	*Engineering Physics*
Monomer	A single molecule which can join with another monomer or molecule to form a polymer or molecular chain.	*Engineering Physics*
Monopoly	The only seller with control over market sales.	*Energy*
Monopsony	The only buyer with control over market purchases.	*Energy*
Monotomy	a state during work in which the employee's interest is low and during which he manifests listlessness and boredom.	*Industrial Relations*
Monotonic	A sequence increases monotonically if for every n, Pn + 1 is greater than or equal to Pn. Similarly, a sequence decreases monotonically if for every n, Pn + 1 is less than or equal to Pn.	*Electrical Engineering*
Monovalent	An ion with a single positive or negative charge (H+, C1-).	*General Engineering*
Montan wax	A natural wax from peat and brown coal, used as a die lubricant in admixture with plastics composition.	*Material Process*
Monte Carlo Simulation	A method of generating values from a known distribution for the purpose of experimentation. This is accomplished by generating uniform random variables and using them in an inverse reliability equation to produce failure times that would conform to the desired input distribution	*Reliability Engineering*
Montreal protocol	The Montreal Protocol on Substances that Deplete the Ozone Layer (1987). An international agreement, signed by most of the industrialized nations, to substantially reduce the use of chlorofluorocarbons (CFCs). Signed in January 1989, the original document called for a 50-percent reduction in CFC use by 1992 relative to 1986 levels. The subsequent London Agreement called for a complete elimination of CFC use by 2000. The Copenhagen Agreement, which called for a complete phase out by January 1, 1996, was implemented by the U.S. Environmental Protection Agency.	*Energy*
Moon pool	An air-filled chamber open to the water below.	*Petroleum Drilling*
Mooney-Billings Case	a famous case in the history of labor warfare which is resulted from the 1916 San Francisco Preparedness Day bombings.	*Industrial Relations*
Moonpool	An aperture in the center of a drillship or semi-submersible drilling rig, through which drilling and diving operations can be conducted.	*Petroleum Drilling*
Moonpool	An aperture in the center of a drillship or semi-submersible drilling rig, through which drilling and diving operations can be conducted.	*Petroleum Drilling*
Moore's law	During much of the history of the integrated circuit, the number of transistors produced in a single chip has roughly doubled every two years.	*Material Process*
Mooring Lines	Galvanized wire rope, usually 6x12, 6x24, or 6x37 class for holding ships to dock.	*Wire Rope & Cable*
Mopping	the burring or fuzzing of the ends of tapered props due to the strata pressure.	*Mining*
Moraine	A mound, ridge, or other distinct accumulation of unsorted, unstratified glacial drift, or till, consisting of clay, sand, gravel, and boulders intermingled; deposited chiefly by direction action of glacier ice.	*Petroleum Engineering*
Morale Survey	a procedure used by some companies, sometimes with the assistance of qualified industrial psychologists or personnel men, to determine the morale within a particular group of employees in the plant.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Morality Table	a statistical table based on actual experience of individuals of certain common characteristics such as occupational groups, sex, and so on, showing how many individuals beginning as of a certain age will be alive at each succeeding age.	*Industrial Relations*
Morbidity	Illness or harm. See also: Comorbidity	*Quality Engineering*
More Favorable Terms Agreement	these are collective bargaining agreements generally with employer associations where the union agrees that it will not sign contracts with other employers under more favorable terms.	*Industrial Relations*
Morehead v. Tipaldo	a case involving the New York Minimum Wage statute passed in 1933.	*Industrial Relations*
Morgan	A breed of horse that originated in West Springfield, Massachusetts, in 1789. The Morgan was popular with pioneers as a multi-purpose saddle, driving and light work horse. Morgans were used to pull stages and city freight wagons, once were popular harness racing horses and were prized during the Civil War as dependable cavalry mounts and artillery horses. U. S. General Philip Sheridan's famous charger, Winchester, was a Morgan.	*Agriculture*
Morpholine ethanol ethyl ether	A solvent- amine.	*Material Process*
Morphology	Pertaining to structure and form.	*Lubrication*
MORT	Operation management over a risk tree.	*Material Process*
Mortality	Death.	*Quality Engineering*
MOSAIC	A diseased condition where different portions of a leaf vary in amounts of chlorophyll, thus giving the leaf a mottled appearance; usually caused by viruses.	*Forestry*
MOSFET	Metal-oxide-silicon field effect transistor, an integrated circuit element.	*Engineering Physics*
Mosh	to crumble, to break down. Coal which was nesh or tender was liable to 'mosh down' if treated roughly during transportation, or left exposed to the weather. (Leics.).	*Mining*
Moss box	a cast iron open-topped box or ring which was set in water-logged ground when sinking a shaft using the 'Kind-Chaldron' system of sinking. The box filled with dry moss was lowered into the pit with, or suspended from the tubbing. The weight of the tubbing settled down and compressed the moss to form a perfect watertight seal. Mother of coal, a smutty, spongy, soft type of coal usually found underlying the coal on top of the seatearth. Known in Somerset as 'motheram' and in the North East as 'dant'. Mother of coal could be used for polishing tin and burnishing copper and brass.	*Mining*
Most-Favored-Customer Clause	Price protection clauses in a contract which specify that the seller will not offer a lower price to other buyers unless seller agrees to extend such lower price to buyer.	*Procurement*
Most-significant bit	In a binary number, the MSB is the most weighted bit in the number. Typically, binary numbers are written with the MSB in the left-most position; the LSB is the furthest-right bit.	*Electrical Engineering*
Most-significant bit	In a binary number, the MSB is the most weighted bit in the number. Typically, binary numbers are written with the MSB in the left-most position; the LSB is the furthest-right bit.	*Electrical Engineering*
MOT	Ministry of Transport (UK)	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mother Jones	a very colorful campaigner for social justice and an active and frequent participant in numerous strikes in the United States.	*Industrial Relations*
Mother Lode	Where the gold is trapped inside veins of quartz on mountain sides. The erosion of land causes the gold to break away from this source and eventually wash down into the river.	*Mining*
Motherboard	The pc board of a computer that contains the bus lines and edge connectors to accommodate other boards in the system. In a microcomputer, the motherboard contains the microprocessor and connectors for expansion boards.	*General Engineering*
Mothergate	the continuation of the rolleyway beyond the flat into the workings. At a later time these could be converted into a rolleyway. (N. East). -see also Double unit face and Main gate.	*Mining*
Motherlode	The starting place or origin of a metal. A vein which contains the original metal "in place".	*Mining*
Motion Economy	a technique used in motion study to obtain increases in output through reduction of the number of motions required to perform and single task.	*Industrial Relations*
Motion Study	the study and observation of the movements of machinery and materials as they relate to the actual motion of the individual worker.	*Industrial Relations*
Motivation	in the positive sense, those factors and forces, whether physical, psychological, or other, which influences or encourage individuals to act, to undergo hardship, or to choose more difficult tasks which permit them to achieve their particular goals or objectives.	*Industrial Relations*
Motor	A machine which transforms electric energy into mechanical energy. Standard motors are dual voltage and operate at 1725 RPM.	*Manufacturing*
Motor	A device which converts fluid power into mechanical force and motion. It usually provides rotary mechanical motion.	*Lubrication*
Motor (hydraulic)	A device for converting fluid energy into mechanical force and motion - usually rotary motion. Basic design types include gear, vane, and piston units.	*Mechanical, Process, and Operations*
Motor Bearing	A bearing which supports the crankshaft in an internal-combustion engine. It is a support or guide by means of which a moving part is positioned with respect to the other parts of a mechanism.	*Lubrication*
Motor Carriers Act	a statute passed by Congress in 1935 which brings commercial motor vehicles operating in interstate and foreign commerce within scope of the interstate.	*Industrial Relations*
Motor gasoline (finished)	A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit at the 90 percent recovery point. Motor Gasoline includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Motor gasoline blending	Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).	*Energy*
Motor gasoline blending components	Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blend stock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note Oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.	*Energy*
Motor Oil	Oil that is used to lubricate the moving components of an internal-combustion engine.	*Lubrication*
Motor rated horsepower	Horsepower rating inscribed on name-plate of the motor driving the fan. (See Rated Horsepower.) Unit: hp.	*Facility Engineering*
Motor speed	The number of revolutions that the motor turns in a given time period (i.e. revolutions per minute, rpm).	*Energy*
Motorized Drive Roller	A hollow roller with a brushless DC motor inside.	*Equipment*
Motorized Pulley	A drive unit consisting of a motor, gears, pulley and shaft combination wherein the pulley face (rim) is the rotating member. The shaft is stationary and the gears and motor windings are within the pulley enclosure.	*Equipment*
Motorman	Responsible for maintaining all equipment on the rig to ensure smooth operation and minimal downtime.	*Petroleum Drilling*
Mottle	Desired or accidental mixture of colors or shades of a color giving more or less distinct or complicated pattern on specks, spots, or streaks of color.	*Material Process*
Mottle	Irregular, diffuse patterns of chlorotic areas interspersed with normal green leaf tissue.	*Forestry*
Motty	a pay 'check' or token. (Lancs.), (Yorks.). -see Check, Tally and Token.	*Mining*
MOU	memorandum of understanding	*Petro-Chemical Abbreviations*
MOU/MOA	Memorandums Of Understanding/Agreement	*Petroleum Drilling*
MOU/MOA	Memorandums Of Understanding/Agreement	*Petroleum Drilling*
MOU Municipally Owned Utility	MOU: Municipally Owned Utility	*Energy*
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming;	*Energy*
Mountain Pacific Case	a decision of the United States Supreme Court involving Local 357 of the Teamsters Union and the Los Angeles-Seattle Motor Express which set aside the NLRB Mountain Pacific Case rule of 1958 on hiring-hall agreements which do not contain the Board-prescribed safeguards.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mountaintop mining	sometimes considered a variation of contour mining, refers to the mining of a coalbed that underlies the top of a mountain. The overburden, which is the mountaintop, is completely removed so that all of the coal can be recovered. The overburden material is later replaced in the mined-out area. This method leaves large plateaus of level land.	*Energy*
Mounting (dis-)	Fixing, setting, arranging a component in its intended position. Trained maintenance personnel generally use special, professional equipment for mounting. The mounting tools are based on mechanical, hydraulic, or (induction) heating methods. Dismounting refers to removing the component from its position.	*Maintenance*
Mounting Error	The error resultant from installing the transducer, both electrical and mechanical.	*General Engineering*
Mounting kit	A mechanical bracket that attaches a positioner to an actuator. The mounting kit is a vital part of the valve assembly because the position of the positioner relative to the actuator directly affects the performance of the system.	*Mechanical*
Mounting Position	The position of a device relative to physical surroundings.	*Process Control*
Mousehole	A hole drilled under the rig floor and temporarily cased. This hole is used to hold the next joint of pipe that will be added to the drill string. *	*Petroleum Drilling*
Mousehole	Shallow bores under the rig floor, usually lined with pipe, in which joints of drill pipe are temporarily suspended for later connection to the drill string.	*Petroleum Drilling*
Mouth	the surface opening of a shaft, adit or drift.	*Mining*
Mouthing	an entrance to a seam partway down a shaft.	*Mining*
Movable Platen	The large back platen of an injection molding machine to which the back half of the mold is secured during operation. This platen is moved either by a hydraulic ram or a toggle mechanism.	*Metallurgy*
Moving Allowances	provisions in collective bargaining agreements or company policy which provide funds to permit employees to offset some or all of their costs of transportation, either to a new company site or to another facility when a particular plant is shut down.	*Industrial Relations*
MPG	See Miles Per Gallon	*Energy*
MPG shortfall	The difference between actual on-road MPG and EPA laboratory test MPG. MPG short fall is expressed as gallons per mile ratio (GPMR).	*Energy*
mph	Miles per hour	*General*
MRO	Maintenance, Repair, and Operations (MRO) products.	*Maintenance*
MRO Supplier Alliances	Formal negotiated agreements with vendor to supply additional services such as reduced prices, timely delivery, vendor stocking, quality standards, etc.	*Maintenance*
MRP	Material Requirements Planning	*Gears*
MRP II	Software-based Manufacturing Resources Planning systems that translate forecasts into master production schedules, maintain bills of material (lists of product components), create work orders for each step in the production routing, track inventory levels, coordinate materials purchases with production requirements, generate "exception" reports identifying expected material shortages or other potential production problems, record shop-floor data, collect data for financial reporting purposes, and other tasks depending on the configuration of the MRP II package.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
MRP II	Manufacturing Resource Planning	*Gears*
MRPII	Manufacturing Resource Planning 2.	*Control Engineering*
MSA	See Metropolitan Statistical Area	*Energy*
msAD	abbreviation for azimuthal deviation; see table. (degrees)	*Petroleum Drilling*
MSAT	mobile source air toxic	*Petro-Chemical Abbreviations*
MSD (Most-Significant Digit)	The leftmost digit of the display.	*General Engineering*
MSDS	material safety data sheet	*Petro-Chemical Abbreviations*
MSHA	Mine Safety and Health Administration	*Energy*
MSHA ID number	Seven (7)-digit code assigned to a mining operation by the Mine Safety and Health Administration.	*Energy*
MSHA	Mine Safety and Health Administration; the federal agency which regulates coal mine health and safety.	*Mining*
msHD	abbreviation for horizontal deviation; see table. (feet or meters)	*Petroleum Drilling*
msID	abbreviation for inclinational deviation; see table. (degrees)	*Petroleum Drilling*
MSS	Manufacturers Standardization Society of the Valve and Fitting Industry - A technical association of valve, fitting and actuator manufacturers that writes standards and practices for the valve and fittings industry. Recommendations of this society are advisory only.	*Mechanical*
msVD	abbreviation for vertical deviation; see table. (feet or meters)	*Petroleum Drilling*
MSW	See Municipal Solid Waste	*Energy*
MT	metric ton	*Petro-Chemical Abbreviations*
MTAC	Multiple Test Acceptance Criteria	*Petro-Chemical Abbreviations*
MTBCF	See Mean Time Between Critical Failure.	*Maintenance*
MTBE	Methyl Tertiary Butyl Ether	*Energy*
MTBE (methyl tertiary butyl ether) (CH3)3COCH3	An ether intended for gasoline blending as described in **"Oxygenates."**	*Energy*
MTBF	See Mean Time Between Failures	*Plant Engineering*
MTBF	Abbreviation for Mean (or average) time between failures.	*Reliability Engineering*
MTBM	See Mean Time Between Maintenance.	*Maintenance*
MTTF	See Mean Time To Failure.	*Maintenance*
MTTP	See Mean Time To Prepare.	*Maintenance*
MTTR	See Mean Time To Repair.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
MTU	Master Telemetry Unit	*Control Engineering*
Muck sample	A representative piece of ore that is taken from a muck pile and then assayed to determine the grade of the pile.	*Mining*
Muck	Ore or rock that has been broken by blasting.	*Mining*
Muck-Raker	a general term applied to writers and other publicists who call attention to social and economic conditions which are offensive and unsocial in order to bring about social change or legislation.	*Industrial Relations*
Mud	Slang term for drilling fluid. A "mud man" is the drilling fluids technician responsible for formulating the mud, while a "mud logger" checks mud cuttings from the drill bit for traces of rock or oil and gas that provide a picture of conditions downhole.	*Petroleum Drilling*
Mud	Liquid that is circulated through the wellbore in rotary drilling and workover operations.	*Petroleum Drilling*
Mud cap	A charge of high explosive fired in contact with the surface of a rock after being covered with a quantity of wet mud, wet earth, or sand, without any borehole being used. Also termed adobe, dobie, and sandblast (illegal in coal mining).	*Mining*
Mud Cross	Refer to 'Drilling Spool'.	*Petroleum Engineering*
Mud or drilling mud	Also referred to as drilling fluid, drilling mud is the oil- or water-based liquid compound used to lubricate and cool working drills. The specific ingredients vary according to company and drill site. As with fracking fluids, exploration and production companies are not required to publish the ingredients or their specific formulas.	*Petroleum Drilling*
Mud Pit	An open pit dug into the ground to hold drilling fluid or waste materials discarded after mud drilling treatment.	*Petroleum Drilling*
Mud Tank	An open tank generally made of steel plate through which the drilling mud is cycled to remove sand and other sediments.	*Petroleum Drilling*
Mud	A mixture of base substance and additives used to lubricate the drill bit and to counteract the natural pressure of the formation.	*Petroleum Drilling*
Muda	A Japanese term for something that is wasteful, unproductive and does not add value.	*Reliability Engineering*
Mudds	small nails used for pinning brattice cloth. (N. East).	*Mining*
Mudstone	claystone and siltstone.	*Mining*
Mueller Bridge	A high-accuracy bridge configuration used to measure three-wire RTD thermometers.	*Electrical*
Mueller Bridge	A high-accuracy bridge configuration used to measure three-wire RTD thermometers.	*Electronic Process*
Muffler	A device for reducing gas glow noise. Noise is decreased by back pressure control of gas expansion.	*Mechanical, Process, and Operations*
Muffs	Cylindrical steel sleeves used for the physical protection of lagging insulation around steam pipelines.	*Industrial*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Mule	A hybrid animal resulting from crossing a mare (female horse) and a jack (male donkey). All male mules and most female mules are sterile. Although mules aren't a breed, the American Donkey and Mule Society registers mules through one of its three books, the American Mule Registry, The American Racing Mule Registry or the Zebra/Exotic Bloodstock & Hybrid Registry. Registry helps keep track of progeny for breeding stock. Mules must be registered to compete in sanctioned mule races.	*Agriculture*
Muller v. Oregon	a decision of the Supreme Court of the United States in 1908 which upheld the Constitutionality of the Oregon Ten Hour Law as a health measure.	*Industrial Relations*
Multi-arm trial	A trial with more than two arms.	*Quality Engineering*
Multicentre trial	A trial conducted at several geographical sites. Trials are sometimes conducted among several collaborating institutions, rather than at a single institution - particularly when very large numbers of participants are needed.	*Quality Engineering*
Multi-Craft Union	a labor organization which has within its jurisdiction more than one craft or occupation.	*Industrial Relations*
Multi-Employer Units	collective bargaining units in which a single union deals with a number employer units.	*Industrial Relations*
Multigrade Oil	Engine or gear oil that meets the requirements of more than one SAE viscosity grade classification, and that can be used over a wider temperature range than a single grade oil.	*Lubrication*
Multipass or recirculation test	Filter performance tests in which the contaminated fluid is allowed to recirculate through the filter for the duration of the test. Contaminant is usually added to the test fluid during the test. The test is used to determine the Beta-Ratio (q.v.) of an element.	*Oil Analysis*
Multipath	In radio transmission, multipath refers to the simultaneous reception of two copies of the signal, that arrive via separate paths with different delays. A common example is when a signal bounces off a building or other object and is received along with the direct (unbounced) signal. In television reception, this causes "ghosting" -- one sees a faded echo on the screen horizontally displaced from the main image. Another common example is in radio (especially AM radio), where the signal bounces off the ionosphere and one receives that delayed signal along with the directly transmitted signal.	*Electrical Engineering*
Multi-Plant Bargaining	collective bargaining between an employer and a union representing workers and a union representing workers in more than one of the plants of that employer.	*Industrial Relations*
Multi-Plant Unit	a bargaining unit which includes a number of plants of a single employer.	*Industrial Relations*
Multiple comparisons	The performance of multiple analyses on the same data. Multiple statistical comparisons increase the probability of making a Type I error, i.e. attributing a difference to an intervention when chance is a reasonable explanation. See also: Sub-group analysis	*Quality Engineering*
Multiple completion well	A well equipped to produce oil and/or gas separately from more than one reservoir. Such wells contain multiple strings of tubing or other equipment that permit production from the various completions to be measured and accounted for separately. For statistical purposes, a multiple completion well is reported	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	as one well and classified as either an oil well or a gas well. If one of the several completions in a given well is an oil completion, the well is classified as an oil well. If all of the completions in a given well are gas completions, the well is classified as a gas well.	
Multiple cropping	A system of growing several crops on the same field in one year.	*Energy*
Multiple Input, Multiple Output	A Multiple Input, Multiple Output (MIMO) system has multiple antennas and multiple radios. It takes advantage of multipath effects, where a transmitted signal arrives at the receiver through a number of different paths. Each path can have a different time delay, and the result is that multiple instances of a single transmitted symbol arrive at the receiver at different times. Usually multipath is a source of interference, but MIMO systems use the fact that data will arrive at the receiver at different times through different paths to improve the quality of the data link. Example: Rather than relying on a single antenna path to receive an entire message, the message can be pieced together based on fragments received at the various antennas. This can act to either increase the data rate at a given range, or increase system range for a given data rate.	*Electrical Engineering*
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Multiple Management	a technique developed in the early 1930's as a means of strengthening communication between middle management and top management through the establishment of various junior boards of directors.	*Industrial Relations*
Multiple purpose project	The development of hydroelectric facilities to serve more than one function. Some of the uses include hydroelectric power, irrigation, water supply, water quality control, and/or fish and wildlife enhancement.	*Energy*
Multiple purpose reservoir	Stored water and its usage governed by advanced water resource conservation practices to achieve more than one water control objective. Some of the objectives include flood control, hydroelectric power development, irrigation, recreation usage, and wilderness protection.	*Energy*
Multiple Shift	a working arrangement or schedule which utilizes more than one shift or tour in the plant.	*Industrial Relations*
Multiple-age stand	A forest stand composed of trees of different ages and sizes.	*Forestry*
Multiple-use Management	Management of land or forest for more than one purpose.	*Forestry*
Multiplex	A technique which allows different input (or output) signals to use the same lines at different times, controlled by an external signal. Multiplexing is used to save on wiring and I/O ports.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Multiplicative model	A statistical model in which the combined effect of several factors is the product of the effects produced by each in the absence of the others. For example, if one factor multiplies risk by a% and a second factor by b%, the combined effect of the two factors is a multiplication by (a x b)%. See also: Additive model	*Quality Engineering*
Multiplied Strike	a labor dispute which involves individuals who walk out in sympathy with the individuals on strike and thereby multiply the number of individuals already engaged in striking.	*Industrial Relations*
Multiplier, Theory of	a theory of economic analysis which is designed to establish a relationship between changes in investment and changes in total production.	*Industrial Relations*
Multi-rule quality-control procedure	A control procedure that uses two or more control rules for testing control measurements and determining control status. At least one rule is chosen for its ability to detect random errors and one to detect systematic errors.	*Quality*
Multitasking	The ability of a computer to handle more than two programs at the same time.	*Control Engineering*
Multiterminal	An HVDC transmission with more than two stations, which enables either to tap off power in a station (or stations) in the middle or to feed in more power in the middle of the transmission link.	*Electrical*
Multi-Union Bargaining	collective bargaining in which the employer negotiates and bargains with more than one union.	*Industrial Relations*
Multivariate analysis	Measuring the impact of more than one variable at a time while analyzing a set of data, e.g. looking at the impact of age, sex, and occupation on a particular outcome. Performed using regression analysis.	*Quality Engineering*
Municipal Electric Utility	A power utility system owned and operated by a local jurisdiction.	*Energy*
Municipal solid waste	Residential solid waste and some nonhazardous commercial, institutional, and industrial wastes.	*Energy*
Municipal Solid Waste	A Biomass resource that can be used to produce energy by the process of incineration.	*Energy*
Municipal Utility	Also known as a municipally owned electric system) A provider of utility services owned and operated by a municipal government. A municipal utility is owned and operated by a city. In most cases, municipal utility rates are set at the city level, either by the municipal administration or by a local utility board or commission. In some limited circumstances, state-level regulations apply. Municipal utilities often have access to low-cost power from federal hydroelectric projects and can obtain low interest loans, and they are exempt from income and other taxes at the federal and state levels. These factors contribute to lower financing costs for plant and equipment. Municipal utilities serve roughly 14 percent of the nation's electric customers.	*Energy*
Municipal waste	As defined in the Energy Security Act (P.L. 96-294; 1980) as "any organic matter, including sewage, sewage sludge, and industrial or commercial waste, and mixtures of such matter and inorganic refuse from any publicly or privately operated municipal waste collection or similar disposal system, or from similar waste flows (other than such flows which constitute agricultural wastes or residues, or wood wastes or residues from wood harvesting activities or production of forest products)."	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Municipal waste to energy project or plant	A facility that produces fuel or energy from municipal solid waste.	*Energy*
Municipality	A village town, city, county, or other political subdivision of a State.	*Energy*
Municipalization	The process by which a municipal entity assumes responsibility for supplying utility service to its constituents. In supplying electricity, the municipality may generate and distribute the power or purchase wholesale power from other generators and distribute it.	*Energy*
Municipally Owned Utility (Muni)	A non-profit utility that is owned and operated by the municipality it serves.	*Energy*
Muriatic	Commercial name given to hydrochloric acid.	*Chemistry*
Murray Grey	A breed of beef cattle that originated in Australia from the cross of a Shorthorn cow and a Black Angus bull, which produced a silver-grey animal.	*Agriculture*
Mush	the crumbled, crushed or weathered fragments of shale beds (N. Staffs.).	*Mining*
Mushy coal	a soft, sooty type of coal; or when the coal is crushed. (Lancs.); or soft and friable coal and shale found near a fault. (N. East).	*Mining*
Music at Work	a phrase which describes the efforts by some employers to introduce a degree of relaxation and variety at the plant.	*Industrial Relations*
Mussel band or bed	a band containing, or chiefly composed of, mussel-like shells. The mussel bands give valuable information in the correlation of the Coal Measures, or strata. –see Cockle bed.	*Mining*
Mussels	typically brackish-water lamellibranches of the genera: Carbonicola, Anthracomya and Naiadites. – see 'Mussel band'.	*Mining*
Must be held well below the yield strength of the material	must be held well below the yield strength of the material.	*Mechanical*
Mustang	A word derived from the Spanish word 'mesteno,' which means stray or wild. Not a distinct breed of horse.	*Agriculture*
Mutual Benefit Associations	associations frequently sponsored by employers in which both employer and employees seek to set up fraternal organization to provide relief for disability, death, or sickened not protected under state laws.	*Industrial Relations*
Mutual Strike Aid	sometimes referred to as employer strike insurance. A procedure developed by a number of industries, mostly in the public service area, including the airlines, in which efforts are made to share the impact of a strike.	*Industrial Relations*
Mutual Survival	a theory developed by Dr. E. Wright Bakke which holds that in th long run industrial relations will be more highly developed when parties recognize the need to understand and respect each other's survival needs.	*Industrial Relations*
Mutualism	a social theory which advocates the organization of groups based on common ownership and effort and designed to support mutual help and brotherhood.	*Industrial Relations*
MUX	Multiplexer. A device that selects multiple inputs into an aggregate signal.	*Reliability Engineering*
MVEG	Motor Vehicle Emissions Group	*Petro-Chemical Abbreviations*

Term	Definition	Industry
MVMA	Motor Vehicle Manufacturers Association	*Petro-Chemical Abbreviations*
MW	See Megawatt	*Energy*
MWD	Measure While Drilling equipment uses "real time" sensing equipment that is placed near the drill bit in the drilling assembly. It monitors the angle and azimuth (compass direction) that the well is being drilled in. MWD technicians can take periodic surveys (usually when a connection is made) to give the directional driller information on how the well is being directed.	*Petroleum Drilling*
Mwe	See Megawatt electric	*Energy*
MWh	See Megawatt hour	*Energy*
MWP	Maximum Working Pressure or CWP (Cold Working Pressure) - The maximum working pressure (pounds per square inch) at which a valve can be operated. The maximum working pressures for various pressure classes.	*Mechanical*
MY	model year	*Petro-Chemical Abbreviations*
MY	Model year - the year of manufacture for the vehicle.	*Mechanical, Process, and Operations*
Mycelium	A mass or aggregate of hyphae; vegetative stage of fungi.	*Forestry*
Mysteries of the Craft	the ancient craft guilds were frequently known as "mysteries".	*Industrial Relations*
--N--	--N--	*Petroleum Drilling*
n	the number of periods.	*Energy*
N of 1 randomized trial	A randomized trial in an individual to determine the optimum treatment for that individual. The individual is given repeated administrations of experimental and control interventions (or of two or more experimental treatments), with the order of the treatments being randomized.	*Quality Engineering*
N*	planned well bore North (+) / South (-) Cartesian coordinate at MD*. (feet or meters)	*Petroleum Drilling*
N/C (No Connection)	A connector point for which there is no internal connection.	*General Engineering*
n-1 (n minus one)	is the operating standard to which European transmission system operators are obliged to work. It refers to a system that can maintain normal operations despite the loss of any single component. In the case of a power network, a component may be a transmission line, a generating unit of a power station, etc.	*Electrical*
N_2O	Nitrous Oxide	*Energy*
NAAQS	National Ambient Air Quality Standards	*Energy*
Nabarro-Herring Creep	a form of diffusion controlled creep. In N-H creep atoms diffuse through the lattice causing grains to elongate along the stress axis. For Nabarro-Herring creep k is related to the diffusion coefficient of atoms through the lattice, Q = Qself diffusion, m=1, and b=2. Therefore N-H creep has a weak stress dependence and a moderate grain size dependence, with the creep rate decreasing as grain size is increased.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
NACE	National Association of Corrosion Engineers.	*Industrial Engineering*
NACE MR-01 75	A standard produced by the 'National Association of Corrosion Engineers' (N.A.C.E) defining the chemistry, hardness and microstructure of Materials used to make equipment to contain or control well production and transmission line fluids that include specified levels of hydrogen sulfide.	*Petroleum Engineering*
NAFTA	North American Free Trade Agreement	*Petro-Chemical Abbreviations*
Nagar	a term used in the Bristol area for a hand drill or 'jumper'.	*Mining*
Nagative Strikes	strikes to maintain standards, wages, hours, or working conditions, where the employer is attempting to have employees give up conditions which previously that have enjoyed.	*Industrial Relations*
NAICS	The North American Industry Classification System (NAICS) is a coding system of the U.S., Mexican, and Canadian governments that identifies specific economic sectors. It replaces the U.S. Standard Industrial Classification (SIC) system. Coding for most manufacturers encompasses the 6-digit subsets of numbers 31 through 33.	*Quality*
NAICS (North American Industry Classification System)	A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes.	*Energy*
Naked	Larva devoid of body hairs or setae; pupa not enclosed in a cocoon or other covering.[1]	*Forestry*
Naked lights	an unprotected light. An open oil lamp or a candle.	*Mining*
Name plate	A metal tag attached to a machine or appliance that contains information such as brand name, serial number, voltage, power ratings under specified conditions, and other manufacturer supplied data.	*Energy*
Name plate capacity	See Generator name plate capacity (installed).	*Energy*
NAMVECC	North American Motor Vehicle Emissions Control Conference	*Petro-Chemical Abbreviations*
n-Amyl acetate or banana oil CH3 COO(CH2) CH3	A colorless, fragrant liquid, solvent for nitrocellulose. Used extensively in lacquers.	*Material Process*
n-Amyl alcohols	The amyl alcohols are colorless liquid occurring in fusel oil.	*Material Process*
NAND DEVICE	A control device which has its output in the logical 0 state if and only if all the control signals assume the logical 1 state.	*Mechanical, Process, and Operations*
Nannies	natural cracks, joints or slips, in the coal measures. (Yorks.).	*Mining*
Nanofiltration	Filtration that removes both particles and small dissolved molecules and ions. Finer than ultrafiltration, not as fine as reverse osmosis.	*Contamination Control*
Nanotesla	The international unit for measuring magnetic flux density.	*Mining*
Nanovolt	Unit of measure. A billionth of a volt.	*Electrical Engineering*
Naphtha	A generic term applied to a refined or partially refined petroleum fraction with an approximate boiling range between 122 degrees and 400 degrees Fahrenheit.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Naphtha	less than 401 degrees Fahrenheit: See Petrochemical feedstocks.	*Energy*
Naphthalene (C10H8)	Colorless monoclinic crystals. A coal-tar product from which a resin can be prepared. Naphthalene may also be used as a plasticizer and as a modifier or active ingredient in various synthetic resins or rubber compositions.	*Material Process*
Naphthas	Refined or partly refined light distillates with an approximate boiling point range between 122 and 400 degrees Fahrenheit. Blended further or mixed with other materials, they make high-grade motor gasoline or jet fuel. Also, used as solvents, petrochemical feedstocks, or as raw materials for the production of town gas.	*Energy*
Naphtha-type jet fuel	A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20% to 90% distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds. Note: Beginning with January 2004 data, naphtha-type jet fuel is included in Miscellaneous Products.	*Energy*
Naphthenes	Hydrocarbons (cycloalkanes) with the general formula CnH2n, in which the carbon atoms are arranged to form a ring.	*Petroleum Engineering*
Naphthenic	A type of petroleum fluid derived from naphthenic crude oil, containing a high proportion of closed-ring methylene groups.	*Lubrication*
Nappling	large lumps of coal left over after screening.	*Mining*
Naps	calcareous nodules occurring in the red Etruria Marl (N. Staffs.).	*Mining*
Narrow board	an excavation of the same length as a wide board, but driven two yards wide.	*Mining*
Narrow work	a stall 3yds. in width or under was classed as 'narrow work' for which an extra price per yard above the hewing rate would be paid. The system was used extensively, but not exclusively, in Yorkshire to prevent roof weight from crushing the pillars before they could be worked. A modified pillar and stall system applied to seams with a tender roof.	*Mining*
Narrows	see Head-ways.	*Mining*
NARUC	See National Association of Regulatory Utility Commissioners.	*Energy*
NAS	National Aerospace Standard	*Lubrication*
NASA	National Aeronautics and Space Administration	*Lubrication*
Nash "Golden Rule"	for many years the A. Nash Clothing Company of Cincinnati maintained a form of unionization similar to the company union.	*Industrial Relations*
NASS	National Agricultural Statistics Service, an agency of the USDA.	*Agriculture*
NATC	net additive treat cost	*Petro-Chemical Abbreviations*
Natch	a 'sneck' or joint in the tub rails; or a small 'hitch' or fault in the strata. (Scot.).	*Mining*
National Union	Generally, the organization which brings together many local unions within an industry or craft.	*Industrial Relations*
National Academy of Arbitrators	a private organization consisting of individuals actively engaged in the arbitration process or supporting the use of arbitration in the field of labor-management relations.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
National Agricultural Statistics Service, (NASS)	An agency of the USDA. In addition to the national office, NASS maintains state agricultural statistics services in cooperation with state departments of agriculture.	*Agriculture*
National and International Unions	a complete listing of all of the National and International Unions to be found.	*Industrial Relations*
National Association for Labor Legislation	this was an organization consisting of a number of European countries who is prime purpose was to hold meetings and to establish working conditions by agreements among the various countries	*Industrial Relations*
National Association of Regulatory Utility Commissioners (NARUC)	An affiliation of the public service commissioners to promote the uniform treatment of members of the railroad, public utilities, and public service commissions of the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the territory of the Virgin Islands.	*Energy*
National Board of Jurisdictional Awards	an organization established in 1919 by the Building Trades Department of the AFL, contractors, and architects to resolve jurisdictional disputes.	*Industrial Relations*
National Child Labor Committee	following the growth of trade unions toward the end of the 19th century and the public concern over labor by children under the age of 14, substantial public opinion was mobilized for federal and state legislation.	*Industrial Relations*
National Consumers League	an organization which was largely responsible for obtaining the first minimum wage law in the United States, in the state of Massachusetts in 1912.	*Industrial Relations*
National Defense Authorization Act	The federal law, enacted in 1994 and amended in 1995, that required the Secretary of Energy to prepare the Baseline Report.	*Energy*
National Defense Mediation Board	by executive order the President on March 19, 1941, created a National Defense Mediation Board whose prime concern was the resolution of disputes in defense industries.	*Industrial Relations*
National Emergency Provisions	refers to the language in the Railway Labor Act and the Taft-Hartley Act which established procedures to be followed when an emergency is deemed to exist under either of the statutes.	*Industrial Relations*
National Emergency Strikes	what constitutes a national emergency strike depends on the determination of the court in its application of Sections 206-210 of the Taft-Hartley Act.	*Industrial Relations*
National Erectors' Association	an organization formed in 1903 which has been considered one of the belligerent employers associations because of its campaigns in opposition to organized labor.	*Industrial Relations*
National Founders' Association	an employer organization established in the machine foundry industry whose major function was to eliminate strikes or, where they occurred, to assist the employer in dealing with them.	*Industrial Relations*
National Income	an index developed and published by the United States Department of Commerce to assist in business forecasting and budgeting.	*Industrial Relations*
National Independent Union Council	an independent labor federation.	*Industrial Relations*
National Industrial Conference Board	a private organization established in 1916 by a number of anti-union employer associations.	*Industrial Relations*
National Industrial Recovery Act	a major piece of legislation under the Roosevelt Administration, designed to establish self-government of industry through codes of fair competition.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
National Industrial Recovery Act, Section 7a	the section which gave trade unions the basis for organizing and declared the right of employees to form unions of their own choosing.	*Industrial Relations*
National Institute of Labor Education	(NILE) a private organization concerned with labor education, including off-campus programs with an emphasis on a liberal education.	*Industrial Relations*
National Labor Board	an agency established by Presidential order in August 1933 to interpret and apply Section 7a of the National Industrial Recovery Act.	*Industrial Relations*
National Labor Relations Act	this statute, also known as the Wagner-Connery Act, but generally as the Wagner Act, was passed July 5, 1935, approximately two months after the United States Supreme Court declared unconstitutional the National Industrial Recovery Act and Section 7a which protected the rights of employees to organize without employer interference.	*Industrial Relations*
National Labor Relations Board	the tribunal provided for under the Act, whose members are appointed by the President with the consent of the Senate.	*Industrial Relations*
National Labor Union	an organization formed in 1866.	*Industrial Relations*
National Labor-Management Panel	a group of 12 members appointed by the President, six from management and six from labor, with three year terms, whose function it is to advise the Director of the Federal Mediation and Conciliation Service on the voluntary adjustment of controversies affecting the general welfare of the country.	*Industrial Relations*
National Mediation Board	an independent agency in the executive branch of the government, established in June 1934, to implement the Railway Labor Act amendments which abolished the Board of Mediation, assigned those functions of to the National Mediation Board, and established the responsibilities of the National Board of Mediation.	*Industrial Relations*
National priorities list	The Environmental Protection Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The list is based primarily on the score a site receives from the Environmental Protection Agency Hazard Ranking System. The Environmental Protection Agency is required to update the National Priorities List at least once a year.	*Energy*
National Railroad Adjustment Board	the agency which, under the Railway Labor Act, has the responsibility to decide grievances arising out of interpretation or application of agreements entered into between employers and unions in so-called minor disputes.	*Industrial Relations*
National Recovery Administration	the administrative agency established under the National Industrial Recovery Act.	*Industrial Relations*
National Right to Work Committee	a national organization of individuals and groups which opposes "compulsory unionism" that is, the requirement--as under the union-shop contract--that in order to continue employment a worker must join a union.	*Industrial Relations*
National Rural Electric Cooperative Association (NRECA)	A national organization dedicated to representing the interests of cooperative electric utilities and the consumers they serve. Members come from the 46 states that have an electric distribution cooperative.	*Energy*
National Safety Council	a private cooperative association of employers established prior to WWI to promote safety procedures and the dissemination of safety information, not only in the plant, but also at home.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
National Steel Labor Relations Board	a board established by Executive Order of President Roosevelt on June 28, 1934, in order to avert a strike by the Amalgamated Association of Iron, Steel and Tin Workers (AF of L).	*Industrial Relations*
National Uranium Resource Evaluation (NURE)	A program begun by the U.S. Atomic Energy Commission (AEC) in 1974 to make a comprehensive evaluation of U.S. uranium resources and continued through 1983 by the AEC's successor agencies, the Energy Research and Development Administration (ERDA), and the Department of Energy (DOE). The NURE program included aerial radiometric and magnetic surveys, hydrogeochemical and stream sediment surveys, geologic drilling in selected areas, geophysical logging of selected bore holes, and geologic studies to identify and evaluate geologic environments favorable for uranium.	*Energy*
National Urban League	an organization started in 1918 which is interested primarily in finding solutions to problems of the Negro worker.	*Industrial Relations*
National Wage Stabilization Board	during the period of the Korean War 1950-1952, Congress provided in the Defense Production Act for the control of wages and salaries.	*Industrial Relations*
National War Labor Board	the title applies both to the agency established in 1918 during WWI and the one established in January 1942 during WWII.	*Industrial Relations*
National Women's Trade Union League	an organization developed prior to WWI, which as early as 1914 created leadership schools for women workers.	*Industrial Relations*
National Youth Administration	an agency established in June 1935 in the Works Progress Administration (WPA) and later put under the jurisdiction of the Federal Security Agency.	*Industrial Relations*
Native Americans	American Indians, Eskimos, Aleuts, and native Hawaiians.	*Procurement*
Native gas	Gas in place at the time that a reservoir was converted to use as an underground storage reservoir in contrast to injected gas volumes.	*Energy*
Native load (electric)	The end-use customers that the Load-Serving Entity is obligated to serve. NERC definition	*Energy*
Native Load Customers	The wholesale and retail customers on whose behalf the Transmission Provider, by statute, franchise, regulatory requirements, or contract, has undertaken an obligation to construct and operate the Transmission Provider's system to meet the reliable electric needs of such customers.	*Energy*
Native Load Customers	Wholesale and retail customers that the transmission provider constructs and operates a system to provide electric needs.	*Energy*
Native metal	A metal occurring in nature in pure form, uncombined with other elements.	*Mining*
Nattle, a slightly increased action of creep. -see Fissle	Nattle, a slightly increased action of creep. -see Fissle.	*Mining*
Natural	For meat and poultry products, "natural" signifies that a product contains no added colorings nor artificial ingredients and was minimally processed. "Natural does not mean organic and is not a USDA certified standard for produce.	*Agriculture*
Natural draft water-cooling tower	One in which air movement is dependent upon the difference in density between the entering air and internal air. As the heat of the water is transferred to the air passing through the tower, the warmed air tends to rise and draw in fresh air at the base of the tower. (See Hyperbolic Tower.)	*Facility Engineering*

Term	Definition	*Industry*
Natural environments	Conditions occurring in nature, not caused by any equipment; effects are observed whether an equipment is at rest or in operation.	*Reliability Engineering*
Natural frequency	The frequency of an undamped system's free vibration; also, the frequency of any of the normal modes of vibration.	*Reliability Engineering*
Natural gas	natural gas	*Energy*
Natural Gas	Gas, occurring naturally, and often found in association with crude petroleum.	*Petroleum Drilling*
Natural gas field facility	A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.	*Energy*
Natural gas gross withdrawals	Full well-stream volume of produced natural gas, excluding condensate separated at the lease.	*Energy*
Natural gas hydrates	Solid, crystalline, wax-like substances composed of water, methane, and usually a small amount of other gases, with the gases being trapped in the interstices of a water-ice lattice. They form beneath permafrost and on the ocean floor under conditions of moderately high pressure and at temperatures near the freezing point of water.	*Energy*
Natural gas lease production	Gross withdrawals of natural gas minus gas production injected on the lease into producing reservoirs, vented, flared, used as fuel on the lease, and nonhydrocarbon gases removed in treating or processing operations on the lease.	*Energy*
Natural Gas Liquids	Hydrocarbons found in natural gas which may be extracted or isolated as liquefied petroleum gas and natural gasoline.	*Petroleum Drilling*
Natural Gas Liquids (NGL)	A group of hydrocarbons including ethane, propane, normal butane, isobutane, and natural gasoline. Generally include natural gas plant liquids and all liquefied refinery gases except olefins.	*Energy*
Natural gas liquids production	The volume of natural gas liquids removed from natural gas in lease separators, field facilities, gas processing plants, or cycling plants during the report year.	*Energy*
Natural gas marketed production	Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring, nonhydrocarbon gases removed in treating and processing operations, and quantities vented and flared.	*Energy*
Natural gas marketer	A company that arranges purchases and sales of natural gas. Unlike pipeline companies or local distribution companies, a marketer does not own physical assets commonly used in the supply of natural gas, such as pipelines or storage fields. A marketer may be an affiliate of another company, such as a local distribution company, natural gas pipeline, or producer, but it operates independently of other segments of the company. In States with residential choice programs, marketers serve as alternative suppliers to residential users of natural gas, which is delivered by a local distribution company.	*Energy*
Natural gas plant liquids (NGPL)	Those hydrocarbons in natural gas that are separated as liquids at natural gas processing, fractionating, and cycling plants. Products obtained include ethane, liquefied petroleum gases (propane, normal butane, and isobutane), and natural gasoline. Component products may be fractionated or mixed. Lease	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	condensate and plant condensate are excluded. **Note: Some EIA publications categorize NGPL production as field production, in accordance with definitions used prior to January 2014.**	
Natural gas plant liquids (NGPL) production	The extraction of gas plant liquids constituents such as ethane, propane, normal butane, isobutane, and natural gasoline, sometimes referred to as extraction loss. Usually reported in barrels or gallons, but may be reported in cubic feet for purposes of comparison with dry natural gas volumes.	*Energy*
Natural Gas Policy Act of 1978 (NGPA)	Signed into law on November 9, 1978, the NGPA is a framework for the regulation of most facets of the natural gas industry.	*Energy*
Natural Gas Policy Act Of 1978	Enacted on November 9, 1978 and became effective December 1, 1978. The Act has been amended, and it replaced or amended the Natural Gas Act. Refer to 15USC 3301-3432.	*Petroleum Drilling*
Natural gas processing plant	Facilities designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. These facilities control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.	*Energy*
Natural gas production	See Dry natural gas production.	*Energy*
Natural Gas Used for Injection	Natural gas used to pressurize crude oil reservoirs in an attempt to increase oil recovery or in instances where there is no market for the natural gas. Natural gas used for injection is sometimes referred to as repressuring.	*Energy*
Natural gas utility demand-side management (DSM) program sponsor	A DSM (demand-side management) program sponsored by a natural gas utility that suggests ways to increase the energy efficiency of buildings, to reduce energy costs, to change the usage patterns, or to promote the use of a different energy source.	*Energy*
Natural gas	Gas, occurring naturally, and often found in association with crude petroleum.	*Petroleum Drilling*
Natural gas or gas	A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases in porous formations beneath the Earth's surface, often in association with petroleum. The principal constituent is methane.	*Petroleum Drilling*
Natural gas, "dry"	See Dry natural gas.	*Energy*
Natural Gas, Dry	The marketable portion of natural gas production, which is obtained by subtracting extraction losses, including natural gas liquids removed at natural gas processing plants, from total production.	*Energy*
Natural Gas, Wet	A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentanes. Typical non-hydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen. Under reservoir conditions, natural gas and the liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with oil and are not distinguishable at the time as separate substances.	*Energy*
Natural gasoline	A commodity product commonly traded in NGL markets that comprises liquid hydrocarbons (mostly pentanes and hexanes) and generally remains liquid at ambient temperatures and atmospheric pressure. Natural gasoline is equivalent to pentanes plus.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Natural Gasoline and Isopentane	A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C_5H_{12}), obtained by fractionation of natural gasoline or isomerization of normal pentane.	*Energy*
Natural levee	A deposit of sand or mud built up along, and sloping away from, either side of the flood. Plain of a river or stream. Also called "levee."	*Civil Engineering*
Natural Monopoly	A natural monopoly arises when there are very large "economies of scale", so that the larger the quantity that a single factory produces, the cheaper the average costs per unit get. This might occur when production requires extremely large initial capital investments to enter the market but additional output requires only very modest additional outlays beyond the fixed initial investment. Under such circumstances, the firm with the largest share of the market is in a position to price its output at a level below its competitors' costs of production and still make a profit while driving them out of the business - and the larger its market share gets, the lower its unit costs become, until a monopoly position is finally obtained. (It is often argued that local telephone service, natural gas supply, and electrical power distribution fall into this category because of the heavy initial investments in networks of telephone lines, electrical lines and gas lines that are involved.). According to economic theory, a public monopoly governed by regulation is justified when an industry exhibits natural monopoly characteristics.	*Energy*
Natural parting	a plane in layers of coal or between the coal and the floor or roof, or in the strata, where they will separate easily, also called an 'easy parting'.	*Mining*
Natural regeneration	A stand of trees grown from natural seed fall or sprouting.	*Forestry*
Natural reservoir pressure	The energy within an oil or gas reservoir that causes the oil or gas to rise (unassisted by other forces) to the earth's surface when the reservoir is penetrated by an oil or gas well. The energy may be the result of "dissolved gas drive," "gas cap drive," or "water drive." Regardless of the type of drive, the principle is the same: the energy of the gas or water, creating a natural pressure, forces the oil or gas to the well bore.	*Energy*
Natural resins	Resins produced directly by or from the products of plants or animals.	*Material Process*
Natural streamflow	The rate of flow of water past a given point of an uncontrolled stream or regulated streamflow adjusted to eliminate the effects of reservoir storage or upstream diversions at a set time interval.	*Energy*
Natural uranium	Uranium with the U-235 isotope present at a concentration of 0.711 percent (by weight), that is, uranium with its isotopic content exactly as it is found in nature.	*Energy*
Natural ventilation	Ventilation of a mine without the aid of fans or furnaces.	*Mining*
Natural work team	A team of employees, often hourly personnel, who share a common workspace and have responsibility for a particular process or process segment.	*Quality*
Naturally occurring radioactive materials	All radioactive elements found in the environment, including long-lived radioactive elements such as uranium, thorium, and potassium and any of their decay products, such as radium and radon.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Naturally-Developed Well	A well in which the screen is placed in direct contact with the aquifer materials. No filter pack is used.	*Petroleum Engineering*
Navier–Stokes equations	Equations for the momentum balances coupled to the equation of continuity for a Newtonian incompressible fluid.	*Chemical*
NBS	National Bureau of Standards.	*Electrical*
n-Butanol or Butyl alcohol $CH_3 (CH_2)_2$	n-Butanol or Butyl alcohol $CH_3 (CH_2)_2$	*Material Process*
NC	Numerical Controller	*Control Engineering*
NCAT	non-catalyst equipped vehicle	*Petro-Chemical Abbreviations*
NCDT	New Category Development Team (API/EMA)	*Petro-Chemical Abbreviations*
NCET	New Category Evaluation Team (API/EMA)	*Petro-Chemical Abbreviations*
N-channel metal-oxide semiconductor	nMOS transistor is one in which n-type dopants are used in the gate region (the "channel"). A positive voltage on the gate turns the device on.	*Electrical Engineering*
N-channel metal-oxide semiconductor	nMOS transistor is one in which n-type dopants are used in the gate region (the "channel"). A positive voltage on the gate turns the device on.	*Electrical Engineering*
NCM	National Comite Motorproeven (Netherlands)	*Petro-Chemical Abbreviations*
NCP	Non-Conformance Penalties	*Petro-Chemical Abbreviations*
NCRP	National Cooperative Research Program	*Petro-Chemical Abbreviations*
NCWM	National Conference on Weights and Measures	*Petro-Chemical Abbreviations*
NDE	Non-Destructive Examination. A collective term used to describe non-intrusive examination techniques such as radiographic and ultrasonic examination.	*Industrial Engineering*
NDE	Non-Destructive Examination - See "Non-Destructive Tests."	*Mechanical*
NDOCP	non-dispersant olefin copolymer	*Petro-Chemical Abbreviations*
NDT	See Non-Destructive Testing	*Plant Engineering*
NDTC	net delivered treat cost	*Petro-Chemical Abbreviations*
Near-month contract for energy futures	The near-month contract, a term used in energy futures and options trading and other transactions, is the active contract with the shortest time to maturity. It is the contract that will expire first (often, but not always, within the next month). The near month is also called the prompt month, the front month, the lead month, and the first nearby.	*Energy*
Near-net-shape processing	Material processing with the goal of minimizing any final shaping operation.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
NEB	National Environmental Board (Thailand)	*Petro-Chemical Abbreviations*
Neb, break (N. East)	Neb, break (N. East).	*Mining*
NEC	National Electric Codes.	*Electrical*
Neck-In	In extrusion coating, the difference between the width of the extrusion die opening and the width of the coating on the substrate.	*Metallurgy*
Necking	The localizing reduction in cross-section which may occur in a material when deformed. (ASTM D-883-65T). This phenomenon can occur in extrusion under certain conditions as the extrudate leaves the die, but the term most often refers to the cold drawing of fibers at temperatures below their melting points. Fibers of crystalline and some crystalline thermopolastics, e.g. polyethylene, exhibit necking at a critical stress near the yield point.	*Metallurgy*
NEDO	New Energy and Technology Development Organization (Japan)	*Petro-Chemical Abbreviations*
Needle	to set one end of a wooden bar into the coal face as a temporary support.	*Mining*
Needle Bearing	A rolling type of bearing containing rolling elements that are relatively long compared to their diameter.	*Lubrication*
Needle Blow	A specific blow molding technique where the blowing air is injected into the hollow article through a sharpened hollow needle which pierces the parison.	*Metallurgy*
Needle coal	see Lignite.	*Mining*
Needle valve	A type of small valve, used for flow metering, having a tapered needle-point plug or closure element and a seat having a small orifice. See illustration page 49.	*Mechanical*
Needs Test	a determination, by welfare officials, that a person or family does not have adequate private resources to meet his needs or the needs of his family.	*Industrial Relations*
NEFI	New England Fuel Institute	*Petro-Chemical Abbreviations*
Negative charge carrier	Charge carrier with a negative electrical charge.	*Material Process*
Negative association	See Association	*Quality Engineering*
Negative Crowned Pulley	A pulley with raised areas set equally in from each end. This crown is used on tail pulleys 24 in. OAW and wider and aids in belt tracking.	*Manufacturing*
Negative predictive value	[In screening/diagnostic tests:] A measure of the usefulness of a screening/diagnostic test. It is the proportion of those with a negative test result who do not have the disease, and can be interpreted as the probability that a negative test result is correct. It is calculated as follows: NPV = Number with a negative test who do not have disease/Number with a negative test.	*Quality Engineering*
Negative study	A term often used to refer to a study with results that either do not indicate a beneficial effect of treatment or that have not reached statistical significance. The term can generate confusion because it can refer to either statistical significance or the direction of effect. Studies often have multiple outcomes, the criteria for classifying studies as 'negative' are not always clear and, in the case of studies of risk or undesirable effects, 'negative' studies are ones that do not show a harmful effect.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Negative Temperature Coefficient	A decrease in resistance with an increase in temperature.	*General Engineering*
Negotiating Ranges	the negotiating range is the minimum and maximum set by the bargainers and within which the bargaining takes place.	*Industrial Relations*
Negotiation	the process whereby the representatives of employees and the employer meet for the purpose of reaching agreement on wages, hours and conditions of employment for those in the appropriate bargaining unit, and methods for administering the agreement.	*Industrial Relations*
Negotiator	a person who has the responsibility to represent an employer or union in reaching a collective bargaining agreement.	*Industrial Relations*
"Neither" Vote	the National Labor Relations Act establishes procedures for workers to determine the organization they want to represent them. In order to provide an opportunity for the employee to indicate opposition to any organization where two organizations are listed, provision is made for a "neither" vote where the employee may reject both of the organizations.	*Industrial Relations*
NEMA	National Electrical Manufacturers Association	*Oil Analysis*
NEMA	National Electrical Manufacturers Association - An association which has set up guidelines for the manufacture of electrical equipment. Generally applicable to specifications for switches, etc., for electric operators.	*Mechanical*
NEMA Ratings	National Electrical Manufacturers Association ratings of an enclosure's ability to provide a degree of protection against contact with equipment and against specified environmental conditions.	*Electrical Engineering*
NEMA Standards	Property values adopted as standard by the National Electrical Manufacturers Association.	*Electrical*
NEMA-12	A standard from the National Electrical Manufacturers Association, which defines enclosures with protection against dirt, dust, splashes by non-corrosive liquids, and salt spray.	*Electrical*
NEMA-4	A standard from the National Electrical Manufacturers Association, which defines enclosures intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose-directed water.	*Electrical*
NEMA-7	A standard from the National Electrical Manufacturers Association, which defines explosion-proof enclosures for use in locations classified as Class I, Groups A, B, C or D, as specified in the National Electrical Code.	*Electrical*
NEMA-Size Case	An older US case standard for panel meters, which requires a panel cutout of 3.93 x 1.69 inches.	*Electronic Process*
Neoprene	A trade name for a rubber substitute prepared from chloroprene.	*Material Process*
Neoprene	Trade name for polychloroprene, used for jacketing (See Polychloroprene).	*Electrical*
Nepotism	an employment practice whereby relatives are hired in preference to other job applicants and receive special favors because of their familial connections.	*Industrial Relations*
NERC	See North American Electric Reliability Corporation.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nernst Equation	A mathematical description of electrode behavior: E is the total potential, in millivolts, developed between the sensing and reference electrodes; Ex varies with the choice of electrodes, temperature, and pressure: 2.3RT/nF is the Nernst factor (R and F are constants, n is the charge on the ion, including sign, T is the temperature in degrees Kelvin), and ai is the activity of the ion to which the electrode is responding.	*General*
Nernst Equation	A mathematical description of electrode behavior - E is the total potential, in millivolts, developed between the sensing and reference electrodes; Ex varies with the choice of electrodes, temperature, and pressure - 2.3RT/nF is the Nernst factor (R and F are constants, n is the charge on the ion, including sign, T is the temperature in degrees Kelvin), and ai is the activity of the ion to which the electrode is responding.	*Electronic Process*
Nernst Factor (S, Slope)	The term 2.3RT/nF is the Nernst equation, which is equal (at T = 25°C) to 59.16 mV when n = 1 and 29.58 mV when n - 2, and which includes the sign of the charge on the ion in the term n. The Nerst factor varies with temperature.	*Electronic Process*
Nernst-Planck equation	Equation that describes the flux of an ion through diffusion, convection, and migration in an electric field. The equation is valid for diluted electrolytes.	*Chemical*
Nerve	Tendency of a distorted sample of rubber or elastomer to return to its original shape when the distorting force is removed.	*Material Process*
NESCAUM	Northeast States for Coordinated Air Use Management	*Petro-Chemical Abbreviations*
Nesh, very fragile (N. Staffs.)	Nesh, very fragile (N. Staffs.).	*Mining*
Nest plate	Retainer plate with a depressed area for cavity blocks used in injection molding.	*Material Process*
Net	Gross acreage adjusted to reflect the percentage of ownership in the working interest in the acreage.	*Energy*
Net actual interchange (electric)	The algebraic sum of all metered interchange over all interconnections between two physically Adjacent Balancing Authority Areas. NERC definition	*Energy*
Net Additive Treating Cost (NATC)	The cost of additive in one unit of finished product including base fluid credit, but not shipping costs.	*Lubrication*
Net calorific value	The net calorific value indicates the amount of heat that is released when the fuel is burned without taking into account the heat that is released as water vapor together with the flue gases.	*Thermal Management*
Net Capability	Maximum load carrying ability of the equipment, excluding station use.	*Energy*
Net cell shipments	Represents the difference between cell shipments and cell purchases.	*Energy*
Net Delivered Treating Cost (NDTC)	The cost of additive in one unit of finished product including base fluid credit and shipping costs.	*Lubrication*
Net Earnings	in determining back pay awards to employees discriminatorily discharged, the NLRB seeks to make the employees “whole”.	*Industrial Relations*
Net effective volume	That portion of the total structural volume with in which the circulating water is in intimate contact with the air flow through the tower. Unit: ft.3.	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Net electricity consumption	Consumption of electricity computed as generation, plus imports, minus exports, minus transmission and distribution losses.	*Energy*
Net energy for load	Net generation of main generating units that are system-owned or system-operated, plus energy receipts minus energy deliveries.	*Energy*
Net energy for load (electric)	Net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to Balancing Authority Areas through interchange. It includes Balancing Authority Area losses but excludes energy required for storage at energy storage facilities. NERC definition	*Energy*
Net energy for system	The sum of energy an electric utility needs to satisfy their service areas, including full and partial requirements consumers.	*Energy*
Net Generation	Gross generation minus plant use.	*Energy*
Net head	The gross head minus all hydraulic losses except those chargeable to the turbine.	*Energy*
Net income	Operating income plus other income and extraordinary income less operating expenses, taxes, interest charges, other deductions, and extraordinary deductions.	*Energy*
Net interstate flow of electricity	The difference between the sum of electricity sales and losses within a state and the total amount of electricity generated within that state. A positive number indicates that more electricity (including associated losses) came into the state than went out of the state during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the state than came into the state.	*Energy*
Net Lift	The net vertical distance through which material is moved against gravity by a conveyor.	*Manufacturing*
Net module shipments	Represents the difference between module shipments and module purchases. When exported, incomplete modules and unencapsulated cells are also included.	*Energy*
Net operable capacity	Total owned capacity less in operable capacity.	*Energy*
Net photovoltaic module shipment	The difference between photovoltaic module shipments and photovoltaic module purchases.	*Energy*
Net profit interest	A portion of the profit remaining after all charges, including taxes and bookkeeping charges, such as depreciation, have been deducted.	*Mining*
Net profits interest	A contractual arrangement under which the beneficiary, in exchange for consideration paid, receives a stated percentage of the net profits. That type of arrangement is considered a nonoperating interest, as distinguished from a working interest, because it does not involve the rights and obligations of operating a mineral property (costs of exploration, development, and operation). The net profits interest does not bear any part of net losses.	*Energy*
Net Receipts	The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.	*Energy*
Net smelter return	A share of the net revenues generated from the sale of metal produced by a mine.	*Mining*
Net Spendable Average Weekly Earnings	a special statistical series developed by the Bureau of Labor Statistics, U.S. Department of Labor, which shows the gross average weekly earnings for workers with a fixed number of dependents, less Social Security, and federal income taxes.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Net summer capacity	The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of June 1 through September 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.	*Energy*
Net winter capacity	The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of peak winter demand (period of December 1 through February 28). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.	*Energy*
Net working interest	The reporting company's working interest is not including any basic royalty or overriding royalty interests.	*Energy*
Net worth	The difference between total assets and total liabilities.	*Mining*
Netback purchase	Refers to a crude oil purchase agreement wherein the price paid for the crude is determined by sales prices of the types of products that are derivable from that crude as well as other considerations (e.g., transportation and processing costs). Typically, the price is calculated based on product prices extant on or near the cargo's date of importation.	*Energy*
Nether coal	the lower sections of a thick coal seam. (Mids.).	*Mining*
Nether roof	the roof strata for a short distance above any underground excavation.	*Mining*
Net-shape-processing	Material processing that does not require a subsequent shaping operation.	*Material Process*
Network	A system of transmission and distribution lines cross-connected and operated to permit multiple power supply to any principal point on it. A network is usually installed in urban areas. It makes it possible to restore power quickly to customers by switching them to another circuit.	*Energy*
Network control	Network control systems monitor and control the electricity network to keep power flowing and to preserve the balance between power generation and consumption.	*Electrical*
Network copolymer	Alloylike combinations of polymers with an overall network, rather than linear, structure.	*Material Process*
Network Customers	Customers receiving service under the terms of the Transmission Provider's Network Integration Tariff.	*Energy*
Network former	Oxides that form oxide polyhedra, leading to network structure formation in a glass.	*Material Process*
Network Integration Transmission Service	A service that allows the customer to integrate, plan, dispatch, and regulate its Network Resources.	*Energy*
Network Load	Designated load of a transmission customer.	*Energy*
Network management	A system that uses network control and asset management to oversee all aspects (operational and maintenance) of a network.	*Electrical*
Network modifier	Oxides that do not form oxide polyhedra and, therefore, break up the network structure in a glass.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Network molecular structure	Polymeric structure associated with a polyfunctional mer.	*Material Process*
Network Polymer	A polymer composed of trifunctional mer units that form three-dimensional molecules.	*Engineering Physics*
Networks	See Field	*Quality Engineering*
Neural Network	A neural network is a computer network designed to function in a similar way to natural neural structures such as a human brain.	*Control Engineering*
Neutral axis	An imaginary line in the cross section of a beam, shaft, or the like, along which no stresses occur.	*Civil Engineering*
Neutral Cleaner	Non-alkaline, non-acid cleaner. The pH of mild neutral cleaners may be as high as 10 and not contain harsh alkalis.	*Chemistry*
Neutral Oil	The basis of most commonly used automotive and diesel lubricants, they are light overhead cuts from vacuum distillation.	*Lubrication*
Neutralization Number	A measure of the acidity or alkalinity of an oil. The number is the mass in milligrams of the amount of acid (HCl) or base (KOH) required to neutralize one gram of oil.	*Lubrication*
Neutralizer	Chemical to change the pH of a surface so that residues will not interfere with floor coating adhesion.	*Chemistry*
Neutron	Subatomic particle without a net charge and located in the atomic nucleus.	*Material Process*
New Deal	a phrase generally applied to the first and second administrations of Franklin D. Roosevelt with their broad legislative programs and the provision for the rights of employees to bargain collectively.	*Industrial Relations*
New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont;	*Energy*
New England Power Exchange (NEPEX)	This is the operating arm of the New England Power Pool.	*Energy*
New England Power Pool (NEPOOL)	A regional consortium of 98 utilities who coordinate, monitor and direct the operations of major generation and transmission facilities in New England.	*Energy*
New Escape Period	provisions incorporated into awards issued by the National War Labor Board to provide the opportunity for employees covered under maintenance-of-membership agreements to have a period following contract expiration during which they could withdraw from membership.	*Industrial Relations*
New field	A field discovered during the report year.	*Energy*
New field discoveries	The volumes of proved reserves of crude oil, natural gas, and/or natural gas liquids discovered in new fields during the report year.	*Energy*
New Harmony	a colony founded by the wealthy English manufacturer Robert Owen, about 1825 at New Harmony, Indiana, where he attempted to carry out his plan for a cooperative industrial society.	*Industrial Relations*
New Lanark	a textile town located above Glasgow, Scotland where Robert Owen established his cotton mills.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
New Negro Alliance v. Sanitaty Grocery Company	a case decided by the United States Supreme Court March 28, 1938, which related to the definition of the term "labor dispute" under the Norris-LaGuardia Act.	*Industrial Relations*
New reservoir	A reservoir discovered during the report year.	*Energy*
New Unionism	a term variously used but generally applied to efforts by labor for more cooperative working relationship with management and development of such programs as worker education, labor housing, insurance plans, etc., rather than constant emphasis on the building up of militant and political aims of trade unions.	*Industrial Relations*
New York Central Railway Co. v. White	a major decision of the U.S. Supreme Court in 1917 which upheld the constitutionality of the New York Compulsory Workmen's Compensation law which provided compensation for disability or death of an employee resulting from an accidental personal injury.	*Industrial Relations*
New York Transit Labor Board	a board established by Mayor Robert F. Wagner in 1961.	*Industrial Relations*
Newlands Act	a statute passed by Congress July 15, 1913, after the repeal of the Erdman Act.	*Industrial Relations*
NEWT	The standard unit of kinematic viscosity in the English system. It is expressed in square inches per second.	*Mechanical, Process, and Operations*
NEWTON	A unit of force based on the unit of mass, Kg (kilogram) multiplied by the acceleration, M/S2 (meters per second) which produces KGM/S2, called the Newton.	*Mechanical, Process, and Operations*
Newtonian Liquid	A liquid is called Newtonian if its viscosity is unaffected by the kind and magnitude of motion or agitation to which it may be subjected, as long as the temperature remains constant. Water and mineral oil are examples of Newtonian liquids.	*Maintenance and Repair*
Newtonian Behavior	A lubricant exhibits Newtonian behavior if its shear rate is directly proportional to the shear stress. This constant proportion is the viscosity of the liquid.	*Lubrication*
Newtonian flow	Flow characterized by a constant viscosity or a viscosity that is independent of the shear rate in the fluid.	*Chemical*
Newtonian Flow	A flow characteristic evidenced by viscosity that is independent of shear rate, that is the rate of shear is directly proportional to the shearing stress. Water and thin mineral oils are examples of Newtonian fluids.	*Engineering Physics*
Newtonian Fluid	A fluid with a constant viscosity at a given temperature regardless of the rate of shear. Single-grade oils are Newtonian fluids. Multigrade oils are NON-Newtonian fluids because viscosity varies with shear rate.	*Lubrication*
NEWTON-METER	A unit of torque. NIPPLE - A short length of pipe or tube.	*Mechanical, Process, and Operations*
NFPA	National Fluid Power Association	*Oil Analysis*
NGL	See Natural gas liquids.	*Energy*
NGL	An abbreviation for Natural Gas Liquids. These include components of natural gas such as ethane, propane, butane and ethane which can be liquefied at low temperature and which are typically more valuable than methane when sold to refineries.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
NGLs	Natural gas liquids. Liquid hydrocarbons found in association with natural gas.	*Petroleum Drilling*
NGPA	See Natural Gas Policy Act of 1978.	*Energy*
NGPA	SEE: Natural Gas Policy Act of 1978.	*Petroleum Drilling*
NGPL	Natural Gas Plant Liquids	*Energy*
NGV	Natural Gas Vehicle	*Energy*
NGVA	Natural Gas Vehicle Association	*Petro-Chemical Abbreviations*
NHPP	NHPP stands for non-homogeneous Poisson process, which is a simple parametric model used to represent events with a non-constant failure recurrence rate. This type of model is often used to model reliability growth and the reliability of repairable units.	*Reliability Engineering*
NHSEED	A database within The Cochrane Library, the NHS Economic Evaluation Database containing structured abstracts of articles describing the economic evaluation of healthcare interventions. Compiled by the NHS Centre for Reviews and Dissemination.	*Quality Engineering*
NHTSA	National Highway Traffic Safety Administration	*Petro-Chemical Abbreviations*
NHTSA	National Highway Traffic Safety Administration - controls matters relating to safety on North American highways. Also responsible for regulation of CAFE (fuel economy) standards.	*Mechanical, Process, and Operations*
Nibble	One half of a byte.	*General Engineering*
Nibbling	a term used infrequently applied to the practice of some employers who, when they shifted to incentive pay and found that employees were earning 50 percent or more over their hourly rates, sought to remove some of this increase reducing piece rates.	*Industrial Relations*
Niche ring	winding drum for flat wire ropes.	*Mining*
Nick, Nicking	to cut the coal vertically from floor to roof next to the side of the place; or to undercut the seam similar to kirving, preparatory to taking down the 'jud'. (N. East). Also known as 'slotting'. In Scotland it was called 'shearing'.	*Mining*
Nicked Threads	Nicks or indentations in threads can occur during the manufacturing process and during fastener transportation. In general, nicked thread problems tend to increase as the thread diameter increases and for fine pitches. There are acceptance tests for nicked threads that involve measuring the maximum torque required to drive a GO gauge down the thread. Examples of acceptance tests are SAE J123 and the Ford Motor specification WA990 1993. Nicks and indentations in threads are sometimes referred to as gouges.	*Maintenance*
Nickel	common element found in the galvanizing kettle to suppress the reactivity of silicon and phosphorus in the steel	*Materials Process*
Nickel alloy	Metal alloy composed of predominantly nickel.	*Material Process*
Nickel aluminum superalloy	Nonferrous alloy with exceptional high temperature strength and corrosion resistance.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nickel metal hydride	A rechargeable-battery technology.	*Electrical Engineering*
Nickel Plating	The electrolytic deposition of nickel to form a corrosion barrier or to reclaim a worn part. Can also include hard ceramic particles to from a wear resistant composite coating.	*Paint and Coatings*
Nickings	the small coal made when nicking. (N. East).	*Mining*
Nicks	notched sticks used for reckoning. (Yorks.).	*Mining*
Nicrosil/Nisil	A nickel chrome/nickel silicone thermal alloy used to measure high temperatures. Inconsistencies in thermoelectric voltages exist in these alloys with respect to the wire gage.	*General Engineering*
Nigeria (1971-present)	Nigeria (1971-present)	*Energy*
Night Shift	generally defined as either the second or the third shift which works a substantial part of all of its time after sundown.	*Industrial Relations*
Night Work	early efforts by states to provide protective legislation for women and children led to legislation forbidding night work for women in factories as far back as 1890 in the state of Massachusetts.	*Industrial Relations*
Nip	The V-shaped gap between a pair of calendar rolls where incoming material is nipped and drawn between the rolls.	*Engineering Physics*
Nip or Nip-out	when the strata come together and meet, nipping-out the coal seam. A drift would be driven forward though the 'nip-out' to find the coal on the other side. Also called a 'check-out' or 'want', or to cut grooves at the end of roof bars to make a better fit; or the effect produced upon the coal pillars by creep, a crush or squeeze.	*Mining*
Nip Point Guard	A guard placed to eliminate points or areas on the conveyor where injuries might occur.	*Manufacturing*
Nip Rolls	In film blowing, a pair of rolls situated at the top of the tower which close the blown film envelope, seal air inside of it, and regulate the rate at which the film is pulled away from the extrusion die. One roll is usually covered with a resilient material, the other being bare metal.	*Engineering Physics*
Nip	Device at the end of the trailing cable of a mining machine used for connecting the trailing cable to the trolley wire and ground.	*Mining*
Nipple	A pipe nipple is a length of straight pipe with male threads on both ends. It is a connector, or a coupling, threaded on both ends. Nipples are used to allow pipes and fittings to be inter-connected, and are used to fit straight end hose or pipe. Types of pipe nipples include Barrel, Weld, Swage, and Hexagon nipples. See also Pipe Fittings.	*Industrial*
Nipple	A short length of small size pipe, threaded on both ends. Used on end connections of screwed-end valves and in small size piping systems.	*Mechanical*
Nipple, Swage	A pipe fitting that reduces from a larger size to a smaller size. Can be threaded or weld ends. Swage 'Nipples' are male both ends. See 'Cross over' for male X female, see 'Reducing coupling' for female X female.	*Petroleum Engineering*
NIST	National Institute of Standards and Technology (US)	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nitch wheels	a drum or 'pirm' that was used when a winding engine was fitted with a wood-chain (S. Staffs.),	*Mining*
Nitrates	The introduction of the nitro group, NO2 into an organic compound.	*Material Process*
Nitration	The process whereby nitrogen oxides attack petroleum fluids at high temperatures, often resulting in viscosity increase and deposit formation.	*Lubrication*
Nitric acid	A monobasic acid HNO3 used in the manufacture of dyes, celluloid. A strong mineral acid used in the preparation of cellulose nitrate and other nitrates and dyes and to a limited extent as a catalyst. Colorless, corrosive, poisonous liquid.	*Material Process*
Nitriding	The diffusion of nitrogen into alloy steel to form hard nitrides in the surface layer (typically 250μm). Performed at between 500 and 750oC from a gas, salt bath or plasma glow discharge.	*Paint and Coatings*
Nitrile Resins	Nitrile resins were first developed in the late 1960s. They are resistant to flavor, aroma, and the transmission of gas. Therefore, they are ideal for packaging.	*Material Engineering*
Nitrile Rubber	A rubbery copolymer of butadiene and acrylonitrile. It is usually compounded and vulcanized.	*Electrical*
Nitrobenzene (C6H5NO2)	Used to some extent as a homogenizing agent and in organic synthesis. It is a solvent for vinyl resins and is used in alkyl resin production.	*Material Process*
Nitrobutane	A solvent – nitro hydrocarbons.	*Material Process*
Nitrocarburising	The diffusion of nitrogen and carbon into alloy steel or mild steel to form hard nitrides in the surface layer (typically 250μ). Performed at between 500 and 750oC from a gas, salt bath or plasma glow discharge.	*Paint and Coatings*
Nitrocellulose	Any of the esters formed by the reaction of nitric acid upon cellulose.	*Material Process*
Nitroethane	A solvent-nitro hydrocarbons.	*Material Process*
Nitrogen	A gaseous chemical element, which makes up 78 percent of the earth's atmosphere, by volume. In agricultural reporting it usually refers to fertilizer. There are many various formulations and names. Anhydrous ammonia is commonly used by wheat growers and other farmers.	*Agriculture*
Nitrogen (N2)	Diatomic gas. Used as a primary and secondary gas in plasma spraying. Inert to most materials, with some exceptions like titanium.	*Paint and Coatings*
Nitrogen dioxide	A compound of nitrogen and oxygen formed by the oxidation of nitric oxide (NO) which is produced by the combustion of solid fuels.	*Energy*
Nitrogen fixation	The biological conversion of atmospheric nitrogen to a form that can be used by plants for their growth.	*Agriculture*
Nitrogen oxides (NO_x)	Compounds of nitrogen and oxygen produced by the burning of fossil fuels.	*Energy*
Nitrogen/helium test	A pressure test conducted using nitrogen or helium (inert gases) instead of air, water, or other gases to prevent any dangers of fires or explosions. Generally specified by the purchaser when buying a valve or regulator product.	*Mechanical*
Nitromethane	A solvent nitrohydrocarbons.	*Material Process*
Nitropropane	A solvent nitro hydrocarbon.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nitrous Oxide	A chemical compound made up of nitrogen and oxygen, N2O. It is a liquid that turns into a gas when injected into an engine.	*Lubrication*
Nitrous oxide (N_2O)	A colorless gas, naturally occurring in the atmosphere. Nitrous oxide has a 100-year Global Warming Potential of 310.	*Energy*
Nixonoid	A trade name for cellulose nitrate plastic.	*Material Process*
NLEV	national low-emission vehicle	*Petro-Chemical Abbreviations*
NLGI	National Lubricating Grease Institute. A trade association whose main interest is grease and grease technology. NLGI is best known for its system of rating greases by penetration.	*Lubrication*
NLGI Automotive Grease Classifications	Automotive lubricating grease quality levels established jointly by SAE, ASTM and NLGI. There are several categories in two classifications: Chassis Lubricants and Wheel bearing Lubricants. Quality or performance levels within each category are defined by ASTM tests.	*Lubrication*
NLGI Consistency Grades	Simplified system established by the National Lubricating Grease Institute (NLGI) for rating the consistency of grease.	*Lubrication*
NLGI Number	A scale for comparing the consistency (hardness) range of greases (numbers are in order of increasing consistency). Based on the ASTM D 217 worked penetration at 25°C (77°F).	*Lubrication*
NLRB Procedure	the term may apply to the procedure involving the holding of employee elections and the determination of bargaining units under the NLRB rules and regulations.	*Industrial Relations*
NMHC	non-methane hydrocarbons	*Petro-Chemical Abbreviations*
NMMA	National Marine Manufacturers Association	*Petro-Chemical Abbreviations*
NMOG	non-methane organic gases	*Petro-Chemical Abbreviations*
n-Monoamyl aniline	A solvent amine.	*Material Process*
NMR	The ability of a panel meter to filter out noise superimposed on the signal and applied across the SIG HI to SIG LO input terminals. Normally expressed in dB at 50/60 Hz.	*General*
NMR (Normal-Mode Rejection)	The ability of a panel meter to filter out noise superimposed on the signal and applied across the SIG HI to SIG LO input terminals. Normally expressed in dB at 50/60 Hz.	*Electronic Process*
NNH	See Number needed to treat to harm	*Quality Engineering*
NNT	See Number needed to treat to benefit	*Quality Engineering*
No man's land	A roughly 10 to 20 foot wide strip between the track and the spectators where only officials and media personnel with credentials may stand while the cars are on the track. Usually it's between fences and behind barriers, but it varies from track to track and at different sections of the track.	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
No Schedule Maintenance	An Equipment Maintenance Strategy, Where No Routine Maintenance Tasks Are Performed On The Equipment. The Only Maintenance Performed On The Equipment Is Corrective Maintenance, And Then Only After The Equipment Has Suffered A Failure. Also Described As A Run-To-Failure Strategy.	*Plant Engineering*
No Scheduled Maintenance	An equipment maintenance strategy, where no routine maintenance tasks are performed on the equipment. The only maintenance performed on the equipment is corrective maintenance after the equipment has suffered a failure in the event that a fault becomes apparent (e.g. oil leak, running hot, etc.). Also related to "throwaway maintenance" and "run-to-failure" strategy.	*Maintenance*
No till	a method of growing grain when the farmer does not plow the field before planting	*Agriculture*
No. 1 diesel fuel	A light distillate fuel oil that has a distillation temperature of 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high speed diesel engines generally operated under frequent speed and load changes, such as those in city buses and similar vehicles. See No. 1 distillate.	*Energy*
No. 1 Diesel Fuel	A light distillate fuel oil that has distillation temperatures of 550 degrees Fahrenheit at the 90-percent point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines, such as those in city buses and similar vehicles. See No. 1 Distillate.	*Energy*
No. 1 distillate	A light petroleum distillate that can be used as either a diesel fuel (see No. 1 diesel fuel) or a fuel oil (see No. 1 fuel oil).	*Energy*
No. 1 fuel oil	A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See No. 1 Distillate.	*Energy*
No. 2 diesel fuel	A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines that are generally operated under uniform speed and load conditions, such as those in railroad locomotives, trucks, and automobiles. See No. 2 Distillate.	*Energy*
No. 2 distillate	A petroleum distillate that can be used as either a diesel fuel (see No. 2 diesel fuel) or a fuel oil (see No. 2 fuel oil).	*Energy*
No. 2 fuel oil (heating oil)	A distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See No. 2 Distillate.	*Energy*
No. 2 fuel oil and No. 2 diesel sold to consumers for all other end uses	Those consumers who purchase fuel oil or diesel fuel for their own use including commercial/institutional buildings (including apartment buildings), manufacturing and nonmanufacturing establishments, farms (including farm houses), motor vehicles, commercial or private boats, military, governments, electric utilities, railroads, construction, logging or any other nonresidential end-use purpose.	*Energy*

Term	Definition	*Industry*
No. 2 fuel oil sold to private homes for heating	Private household customers who purchase fuel oil for the specific purpose of heating their home, water heating, cooking, etc., excluding farm houses, farming and apartment buildings.	*Energy*
No. 4 Diesel Fuel and No. 4 Fuel Oil	See No. 4 Fuel.	*Energy*
No. 4 Fuel	A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes **No. 4 diesel fuel** used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.	*Energy*
No. 4 fuel oil	A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.	*Energy*
No. 5 Residual fuel oil	A residual fuel oil of medium viscosity, used in steam-powered vessels in government service and power plants, which is also known as "Navy Special" and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). See residual fuel oil.	*Energy*
No. 6 Residual fuel oil	Includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. See residual fuel oil.	*Energy*
NOAA	National Oceanic and Atmospheric Administration.	*Energy*
NOAA division	One of the 345 weather divisions designated by the National Oceanic and Atmospheric Administration (NOAA) encompassing the 48 contiguous states. These divisions usually follow county borders to encompass counties with similar weather conditions. The NOAA division does not follow county borders when weather conditions vary considerably within a county; such is likely to happen when the county borders the ocean or contains high mountains. A state contains an average of seven NOAA divisions; a NOAA division contains an average of nine counties.	*Energy*
Noble	an employer lieutenant of strike operations, usually in charge of detachment of guards or sluggers.	*Industrial Relations*
Noble Metal	A metal that does not readily tend to furnish ions, and therefore does not dissolve readily, nor easily enter into such reactions as oxidation, etc. The opposite of base metal.	*Paint and Coatings*
Noble Tending	to be reduced in an electrochemical cell.	*Material Process*
Noddy	a peg board, either circular or straight, in shape used to keep a tally of the amount of puts or carriages each drawer brought out of the workings. (Som.).	*Mining*
Node	A portion of a stem at which leaf sheaths, petioles, or flowers are attached. They usually are slightly enlarged.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nodger or Noger	a boring bar or jumper. (Derbys.).	*Mining*
Nodular Powder	Irregular particles having Knotted, rounded, or similar shapes.	*Paint and Coatings*
Nodule	Swelling of the root cortex of legumes, containing nitrogen fixing bacteria.	*Agriculture*
Nog, Holing nog or Sprag,	special wedge shaped wood or steel wedge used in undercutting or holing to support the coal after cutting, placed in the cut at regular intervals along the face (usually not greater than 6 feet). -see also Cog and Chock; the term Nog is also used for a collier's tally placed on a tub leaving the pit. (Bacup, Lancs.), or for a wooden chock used to build packs. (Derbys.).	*Mining*
Noise	May arise from vibration, cavitation or aerodynamic flow through the valve.	*Industrial Engineering*
Noise	In process instrumentation, an unwanted component of a signal or variable. Noise may be expressed in units of the output or in percent of output span.	*Electrical Engineering*
Noise Floor	The minimum discernible signal that can be detected by a receiver.	*Reliability Engineering*
Noise, Electrical	The noise results from the presence of undesirable electrical voltages or current. It causes devices to operate erratically (if the noise is on the supply line to a device), or produces false information on erratic operation if present on wires carrying signals from the output of a device to the load. Noise can be present in the supply or picked up on lines in many ways. Pick: up from noisy adjacent wires or metal parts is possible. Good wiring practice and/or additional parts can be used to diminish the effects of noise.	*Electrical Engineering*
Noise, Fluidic	RMS of random pressure variations with respect to the operating pressure defined in terms of a signal-to-noise ratio.	*Mechanical, Process, and Operations*
Noload loss	Power and energy lost by an electric system when not operating under demand.	*Energy*
No-Man's Land	a phrase used to express the lack of clearly defined jurisdiction in industrial relations between the federal and state governments.	*Industrial Relations*
Nomex	A fire- and heat-resistant material used to make driving suits, gloves, shoes, helmet liners, balaclavas and underwear. Divers wear four or five layers of Nomex, including long underwear for complete fire protection. When combined with fuel bladders that are resistant to breaking open in a crash, the risk of fire has been greatly reduced over the last 20 years. Much of this technology was developed for the military.	*NASCAR*
Nominal	A designation to prefix a suffix such as 'bore' (i.e. Nominal bore). It indicates an approximate or variable size or dimension which may require further definition, (for example by also nominating a 'schedule' (See- 'schedule').	*Petroleum Engineering*
Nominal	Name or identifying value of a measurable property by which a conductor or component or property of a conductor is identified, and to which tolerances are applied.	*Electrical*
Nominal Diameter (DN)	A dimensionless designator of pipe in metric system. It indicates standard pipe size when followed by the specific size designation number without the millimeter symbol (for example, DN 40, DN 300).	*Maintenance and Repair*
Nominal Pipe Size (NPS)	A dimensionless designator of pipe. It indicates standard pipe size when followed by the specific size designation number without an inch symbol (for example, NPS 1½, NPS 12).	*Maintenance and Repair*

Term	Definition	*Industry*
Nominal Thickness	The thickness given in the product material specification or standard to which manufacturing tolerances are applied.	*Maintenance and Repair*
Nominal Diameter	The diameter equal to the external diameter of the threads.	*Maintenance*
Nominal dollars	A measure used to express nominal price.	*Energy*
Nominal filtration rating	An arbitrary micrometer value indicated by the filter manufacturer. Due to lack of reproducibility, this rating is depreciated.	*Mechanical, Process, and Operations*
Nominal Filtration Rating	An arbitrary micrometer value indicated by a filter manufacturer. Due to lack of reproducibility this rating is deprecated.	*Lubrication*
Nominal Pipe Size	Used to describe standard sizes for pipe from 1/8 - 12 inches. The nominal size is specified on the basis of the inside diameter. Depending on the wall thickness, the inside diameter may be less thank or greater than, the number indicated.	*Petroleum Engineering*
Nominal price	The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred.	*Energy*
Nominal Sensing Distance	An approximate dimension value measured from the face of the sensor to the nearest point of the target. It does not take into consideration manufacturer's tolerance or operational variables. Also known as the operating point.	*Electrical Engineering*
Nominal tower dimensions	Width and length measured from and to column centerline or walls; height measured from basin curb to top of fan deck (counterflow design) or to top of distribution basin (crossflow design). Unit: ft.	*Facility Engineering*
Nominal Workweek	the total number of hours scheduled for a department or a plant for a one week period.	*Industrial Relations*
Non Return to Zero	A binary encoding scheme in which ones and zeroes are represented by opposite and alternating high and low voltages, and where there is no return to a zero (reference) voltage between encoded bits. That is, the stream has only two values: low and high.	*Electrical Engineering*
Non Chlorine Bleach	A laundry product containing peroxygen compounds, which release active oxygen in wash water. This type product produces gentler bleaching action than chlorine bleach.	*Chemistry*
Non-aqueous phase liquid (NAPL)	contaminants that remain as the original bulk liquid in the subsurface (see also free product).	*Chemical*
Nonassociated natural gas	Natural gas that is not in contact with significant quantities of crude oil in the reservoir. See natural gas.	*Energy*
Nonattainment area	Any area that does not meet the national primary or secondary ambient air quality standard established by the Environmental Protection Agency for designated pollutants, such as carbon monoxide and ozone.	*Energy*
Non-basic Service	Any category of service not related to basic services (generation, transmission, distribution and transition charges).	*Energy*
Non-biomass waste	Material of non-biological origin that is a byproduct or a discarded product. "Non-biomass waste" includes municipal solid waste from non-biogenic sources, such as plastics, and tire-derived fuels.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nonbranded product	Any refined petroleum product that is not a branded product.	*Energy*
Non-bypassable Wires Charge	A charge generally placed on distribution services to recover utility costs incurred as a result of restructuring (stranded costs - usually associated with generation facilities and services) and not recoverable in other ways.	*Energy*
Non-certified Vendor	sellers of processed and prepared foods allowed in limited numbers in a non-certified portion of the market.	*Agriculture*
Noncoincident demand	Sum of two or more demands on individual systems that do not occur in the same demand interval.	*Energy*
Noncoincidental peak load	The sum of two or more peak loads on individual systems that do not occur in the same time interval. Meaningful only when considering loads within a limited period of time, such as a day, week, month, a heating or cooling season, and usually for not more than 1 year.	*Energy*
Noncoincidental Peak Load	The sum of two or more peak loads on individual systems, not occurring in the same time period.	*Energy*
Non-Combustible	A material which will not ignite, burn or support combustion when subjected to heat or fire.	*Chemical*
Non-Communist Affidavit	the affidavit formerly required under the Taft-Hartley Act provided statements that the officers were not members of the Communist Party or affiliated with it.	*Industrial Relations*
Non-Complying Union	an organization which failed to meet the filing requirements of the Taft-Hartley Act.	*Industrial Relations*
Non-contact	A slang expression referring to a defective condition in which a supposedly closed switch lacks electrical continuity.	*Electrical Engineering*
Non-Continuous Process	plant operations or production where the service or process may be interrupted and which are not scheduled on a continuous or round-the-clock basis.	*Industrial Relations*
Non-Contributory Pension Plans	pension plans which are entirely financed by employer contributions.	*Industrial Relations*
Nonconventional plant (uranium)	A facility engineered and built principally for processing of uraniferous solutions that are produced during in situ leach mining, from heap leaching, or in the manufacture of other commodities, and the recovery, by chemical treatment in the plant's circuits, of uranium from the processing solutions.	*Energy*
Noncrystalline	The solid state wherein there is no long-range atomic order. Sometimes used synonymously with the terms amorphous, glassy and vitreous.	*Engineering Physics*
Noncrystalline	Atomic arrangement lacking in long range order.	*Material Process*
Noncrystalline solid	Solid lacking in long range structural order.	*Material Process*
Nondedicated vehicle	A motor vehicle capable of operating on an alternative fuel and/or on either gasoline or diesel.	*Energy*
Non-Destructive Evaluation	(NDE) also referred to as Non-Destructive Examination. It refers to a means of Non-Destructive Testing, a group of activities using various methods to find, measure, locate or determine numerous facets of about Material or equipment, that allows an inspector to decide (in accordance with required standards) if any identified characteristics or conditions constitute flaws.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nondestructive Examination or Inspection	Inspection by methods that do not destroy the item, part, or component to determine its suitability for use.	*Maintenance and Repair*
Non-Destructive Testing	Testing Of Equipment, Which Does Not Destroy The Equipment, To Detect Abnormalities In Physical, Chemical Or Electrical Characteristics. For Some Reason Which Escapes Me, Vibration Analysis And Tribology Are Not Generally Considered To Be Ndt Techniques, Even Though They Meet The Above Criteria. Techniques Which Are Considered To Be Ndt Techniques Are Ultrasonic Thickness Testing, Dye Penetrant Testing, X-Raying, And Electrical Resistance Testing.	*Plant Engineering*
Nondestructive testing	The evaluation of engineering materials without impairing, their usefulness.	*Material Process*
Non-Destructive Testing (NDT)	A wide group of analysis techniques used in science and industry to evaluate the properties of a material, component or system without causing damage	*Reliability Engineering*
Non-destructive tests	Those inspection tests which are not destructive to the valve structure or function. See "Radiography," "Dye Penetrant," "Magnetic Particle" and "Ultrasonic Testing."	*Mechanical*
Non-Disabling Injury	an injury which does not result in the loss of working time or in the disability of th employee.	*Industrial Relations*
Non-experimental study	See Observational study	*Quality Engineering*
Nonferrous alloy	Metal alloy composed predominantly of an element(s) other than iron.	*Material Process*
Non-Financial Incentives	benefits accruing to individuals which are not measured in terms of dollars and cents.	*Industrial Relations*
Nonfirm power	Power or power-producing capacity supplied or available under a commitment having limited or no assured availability.	*Energy*
Non-Firm Power	Power supplied or available under terms with limited or no assured availability.	*Energy*
Non-Firm Transmission Service	Point-to-point transmission service that is reserved and/or scheduled on an as-available basis and is subject to interruption. Non-firm Transmission Service is available on a stand-alone basis as either Hourly Non-firm Transmission Service or Short-Term Non-firm Transmission Service.	*Energy*
Non-Firm Transmission Service	Point-to-point service reserved and/or scheduled on an as-available basis.	*Energy*
Non-flowing Artesian Well	Occurs when the pressure is not great enough to force the water out of the well.	*Petroleum Engineering*
Nonfuel components	Components that are not associated with a particular fuel. These include, but are not limited to, control spiders, burnable poison rod assemblies, control rod elements, thimble plugs, fission chambers, primary and secondary neutron sources, and BWR (boiling water reactor) channels.	*Energy*
Nonfuel use (of energy)	Use of energy as feedstock or raw material input.	*Energy*
Nonfungible product	A gasoline blend or blendstock that cannot be shipped via existing petroleum product distribution systems because of incompatibility problems. Gasoline/ethanol blends, for example, are contaminated by water that is typically present in petroleum product distribution systems.	*Energy*
Nongraded	An engineering term pertaining to a soil or an unconsolidated sediment consisting of particles essentially the same size.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Non-homogeneous Poisson process (NHPP)	This is a simple parametric model used to represent events with a non-constant failure recurrence rate. This type of model is often used to model reliability growth and reliability of repairable units	*Reliability Engineering*
Nonhydrocarbon gases	Typical nonhydrocarbon gases that may be present in reservoir natural gas, such as carbon dioxide, helium, hydrogen sulfide, and nitrogen.	*Energy*
Nonincendive	Inability under normal operation to ignite a hazardous mixture.	*Electrical Engineering*
Non-inferiority trial	A trial designed to determine whether the effect of a new treatment is not worse than a standard treatment by more than a pre-specified amount. A one-sided version of an equivalence trial. See also: Equivalence trial	*Quality Engineering*
Non-Interruptive Task List	A preventive maintenance task list where all tasks can safely be done without interrupting production.	*Maintenance*
Non-jurisdictional	Utilities, ratepayers and regulators (and impacts on those parties) other than state-regulated utilities, regulators and ratepayers in a jurisdiction considering restructuring. Examples include utilities in adjacent state and non-state regulated, publicly owned utilities within restructuring states.	*Energy*
Non-Lien	Funds are encumbered only when invoices have been received against the blanket order.	*Procurement*
Nonlinearity	The deviation from a best fit straight line of true output vs. actual value being measured.	*Reliability Engineering*
Nonmethane volatile organic compounds (NMVOC)	Organic compounds, other than methane, that participate in atmospheric photochemical reactions.	*Energy*
Non-modulated Controls	The controls designed for indoor applications subject to neither bright ambient light nor extreme vibration. Usually incandescent lamp controls, scanners and light source-photoreceiver pairs.	*Electrical Engineering*
Non-Newtonian Behavior	The property of some fluids, and many plastic solids (including grease), of exhibiting a variable relationship between shear stress and shear rate.	*Lubrication*
Non-Newtonian Fluid	Fluid, such as a grease or a polymer-containing oil (e.g., multi-grade oil), in which shear stress is not proportional to shear rate.	*Lubrication*
Non-Occupational Injury	similar to non-industrial injury. An injury or accident which results in the loss of time but does not occur on the employer's premises.	*Industrial Relations*
Nonoperating interest	Any mineral lease interest (e.g., royalty, production payment, net profits interest) that does not involve the rights and obligations of operating a mineral property.	*Energy*
Non-Operating Union	a phrase applied to railroad unions of workers who are not directly engaged in the operation of the train or engine service.	*Industrial Relations*
Non-Operational Consequences	A Failure Has Non-Operational Consequences If The Only Impact Of The Failure Is The Direct Cost Of The Repair (Plus Any Secondary Damage Caused To Other Equipment As A Result Of The Failure.	*Management*
Nonoxide ceramic	Ceramic material composed predominantly of a compound(s) other than an oxide.	*Material Process*
Nonoxidizing biocide	A biocide whose effectiveness depends on some property other than its ability to oxidize organic material (i.e., systematic poisons and surface activity).	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nonparametric Analysis	A method of analysis that allows the user to characterize failure data without assuming an underlying failure distribution. This avoids the potentially large errors brought about by making incorrect assumptions about the distribution. The confidence bounds that are associated with this analysis are usually much wider than those calculated via parametric analysis. Additionally, predictions outside the range of the observations are not possible.	*Reliability Engineering*
Non-Point Source Contamination or Pollution	Pollution discharges over a wide land area, not from one specific location. Non-point source pollution is contamination that occurs when rainwater, snowmelt, or irrigation washes off plowed fields, city streets, or backyards. As this runoff moves across the land surface, it picks up soil particles and pollutants, such as nutrients and pesticides.	*Petroleum Engineering*
Nonpolar	interaction in which the electron density around adjacent atoms is symmetric	*Physics*
Non-Preformed	Rope or strand that is not preformed. See PREFORMED STRANDS and PREFORMED ROPE.	*Wire Rope & Cable*
Nonprimitive	Crystal structure having atoms at unit cell positions in addition to the unit cell corners.	*Material Process*
Nonprimitive unit cell	See Nonprimitive.	*Material Process*
Nonproducing reservoir	Reservoir in which oil and/or gas proved reserves have been identified, but which did not produce during the report year to the owned or contracted interest of the reporting company regardless of the availability and/or operation of production, gathering, or transportation facilities.	*Energy*
Non-Production Bonus	compensation or money paid to individual workers which does not depend on the production or output of the individual worker or the group.	*Industrial Relations*
Non-randomized study	Any quantitative study estimating the effectiveness of an intervention (harm or benefit) that does not use randomisation to allocate units to comparison groups (including studies where 'allocation' occurs in the course of usual treatment decisions or peoples' choices, i.e. studies usually called 'observational'). To avoid ambiguity, the term should be substantiated using a description of the type of question being addressed. For example, a 'non-randomized intervention study' is typically a comparative study of an experimental intervention against some control intervention (or no intervention) that is not a randomized controlled trial. There are many possible types of non-randomized intervention study, including cohort studies, case-control studies, controlled before-and-after studies, interrupted-time-series studies and controlled trials that do not use appropriate randomisation strategies (sometimes called quasi-randomized studies).	*Quality Engineering*
Nonrecurring engineering	One-time engineering costs associated with a project.	*Electrical Engineering*
Nonrecurring engineering	one-time engineering costs associated with a project.	*Electrical Engineering*
Nonrenewable fuels	Fuels that cannot be easily made or "renewed," such as oil, natural gas, and coal.	*Energy*
Nonrequirements consumer	A wholesale consumer (unlike a full or partial requirements consumer) that purchases economic or coordination power to supplement their own or another system's energy needs.	*Energy*
Non-Resident Employee	a person working for a company who does not reside within the geographic unit or area where the employer's plant is located.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nonresidential building	A building used for some purpose other than residential. Nonresidential buildings comprise three groups commercial, manufacturing/industrial, and agricultural.	*Energy*
Nonrigid plastic	Plastics material that has a stiffness or apparent modulus of elasticity not over 50000 psi (3.44738 105 KPa) at 25 °C (77 °F), when determined according to ASTM D-747-43T.	*Material Process*
Non-rising stem	A gate valve having its stem threaded into the gate. As the stem turns, the gate moves, but the stem does not rise. Stem threads are exposed to line fluids.	*Mechanical*
Nonroad alternative fuel vehicle (nonroad AFV)	An alternative fuel vehicle designed for off-road operation and use for surface/air transportation, industrial, or commercial purposes. Nonroad AFVs include forklifts and other industrial vehicles, rail locomotives, self-propelled electric rail cars, aircraft, airport service vehicles, construction vehicles, agricultural vehicles, and marine vessels. Recreational AFVs (golf carts, snow mobiles, pleasure watercraft, etc.) are excluded from the definition.	*Energy*
Non-Rotating Cylinder	A cylinder in which relative rotation of the cylinder housing and the piston and piston rod, plunger or ram, is not recommended.	*Mechanical, Process, and Operations*
Non-Rotating Wire Rope	Term, now abandoned, referring to 19 x 7 or 18 x 7 rope.	*Wire Rope & Cable*
Non-Routine Maintenance	Any maintenance task not performed at a regular, pre-determined frequency.	*Maintenance*
Non-Scheduled Time	A period of time when the equipment is not scheduled to be used in production, such as un-worked shifts, weekends, and holidays.	*Maintenance*
Non-Scheduled Work	Work that is not planned or scheduled. Work falls into three categories: 1) emergency, 2) Do It Now (DIN), 3) routine.	*Maintenance*
Non-seat	a chain attached to the winding rope for lowering and raising men in the shaft. (Mids.).	*Mining*
Nonsilicate glass	Glass composed predominantly of a compound(s) other than silica.	*Material Process*
Nonsilicate oxide ceramic	Ceramic material composed predominantly of an oxide compound(s) other than silica.	*Material Process*
Non-Soap Thickener	Specially treated or synthetic materials (not including metallic soaps) dispersed in liquid lubricants to form greases. Sometimes called Synthetic Thickener, Inorganic Thickener, or Organic Thickener.	*Lubrication*
Nonspinning reserve	The generating capacity not currently running but capable of being connected to the bus and load within a specified time.	*Energy*
Non-Spinning Wire Rope	See ROTATION RESISTANT ROPE.	*Wire Rope & Cable*
Nonstochiometric compound	Chemical compound in which variations in ionic charge lead to variations in the chemical elements, for example, Fe1-xO.	*Material Process*
Non-Union Employee	generally an individual who does not belong to the particular union which exists at his place of work.	*Industrial Relations*
Non-Union Goods or Material	products or services which are produced or performed by non-union workers or under non-union conditions.	*Industrial Relations*
Non-Union Shops	in general usage, a place of employment without a recognized collective bargaining agent.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nonutility generation	Electric generation by end-users, or small power producers under the Public Utility Regulatory Policies Act, to supply electric power for industrial, commercial, and military operations, or sales to electric utilities.	*Energy*
Non-utility Generator	Independent power producers, exempt wholesale generators and other companies in the power generation business that have been exempted from traditional utility regulation.	*Energy*
Nonutility power producer	A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for electric generation and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers). Non-utility power producers are without a designated franchised service area and do not file forms listed in the Code of Federal Regulations, Title 18, Part 141	*Energy*
Nonutility Power Producer	A legal entity that owns electric generating capacity, but it not an electric utility.	*Energy*
Nonvolatile	NoM is memory which retains its stored value when power is removed.	*Electrical Engineering*
Non-waived tests	Used in the Final CLIA Rule as a category of tests that encompasses both moderate complexity and high complexity tests. QC regulations in the Final CLIA Rule are the same for all non-waived tests, whereas earlier drafts provided different QC requirements for the classes of moderate and highly complex tests.	*Quality*
Non-Workers	a term which has relatively little meaning but may be used for classification purposes to distinguish between work classifications and non-work classifications.	*Industrial Relations*
Nonwoven medium	A filter medium composed of a mat of fibers.	*Oil Analysis*
Nook or Neuk	a corner of a working place at the face. (Lancs.); or the corner of a pillar of coal. (N. East).	*Mining*
Nooper	a large pick used for dressing or straightening the coalface. (Leics.) -see also Dresser and Noper.	*Mining*
Noper	a mandrill or loading pick. (Derbys.), (Leics.).	*Mining*
NOPR	Notice of Proposed Rulemaking	*Energy*
NOR device	A control device which has its output in the logical 1 state if and only if all the control signals assume the logical 0 state.	*Mechanical, Process, and Operations*
NORA	National Oil Recyclers Association	*Petro-Chemical Abbreviations*
No-Raiding Agreement	a pact signed between the American Federation of Labor and the Congress of Industrial Organizations June 9, 1954, in which they pledged they would not attempt to organize or represent employees when "an established bargaining relationship" existed between an employer and another union.	*Industrial Relations*
Nordel	Du Pont trademark for EPDM synthetic rubber.	*Electrical*
Norite	A coarse-grained igneous rock that is host to copper/nickel deposits in the Sudbury area of Ontario.	*Mining*
Normal (axial) Stress	The force per unit area on a given plane within a body a = F/A	*General*

Term	Definition	*Industry*
Normal butane (C_4H_{10})	A straight-chain saturated (paraffinic) hydrocarbon extracted from both natural gas and refinery gas streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of 31 degrees Fahrenheit.	*Energy*
Normal Contact Position	The normal contact position of a switch exits when no force is applied to the plunger.	*Electrical Engineering*
Normal distribution	A statistical distribution with known properties commonly used as the basis of models to analyze continuous data. Key assumptions in such analyses are that the data are symmetrically distributed about a mean value, and the shape of the distribution can be described using the mean and standard deviation.	*Quality Engineering*
Normal fault	a fault that hades or is angled towards the downthrown side.	*Mining*
Normal High	The state of a control in which the output is high (logic1) in voltage in the rest (Off) condition.	*Electrical Engineering*
Normal Hydrogen Electrode	A reversible hydrogen electrode (Pt) in contact with hydrogen gas at 1 atmosphere partial pressure and immersed in a solution containing hydrogen ions at unit activity.	*General*
Normal Paraffin	A hydrocarbon consisting of molecules in which any carbon atom is attached to no more than two other carbon atoms; also called straight chain paraffin and linear paraffin.	*Lubrication*
Normal Plane	A plane normal to the tooth surfaces at a point of contact, and perpendicular to the pitch plane.	*Mechanical Engineering*
Normal Retirement Age	generally the specific age established in any pension or retirement plan of a company which is used as a guide for the regular retirement program.	*Industrial Relations*
Normal strain	Strain measuring the intensity of deformation along an axis. Normal strain is usually denoted by	*Engineering Physics*
Normal stress	Stress acting perpendicular to an imaginary plane cutting through an object. Normal stress has two senses: compression and tension. Normal stress is often simply called stress.	*Engineering Physics*
Normal Unemployment	a phrase designed to describe that amount of unemployment which is presumed to be normal during any economic period.	*Industrial Relations*
Normal Work Area	a term generally used in the field of motion and time study to designate the limited area which is within easy access or reach by the worker while he is standing or seated at his normal job.	*Industrial Relations*
Normal Workweek	the established number of hours for the general operation of a plant, shift, or department for a one week period.	*Industrial Relations*
Normalization	The process of creating sensor interchangeability.	*Electrical Engineering*
Normalizing	A process in which a ferrous metal is heated to a suitable temperature above the transformation range and is subsequently cooled in still air at room temperature.	*Maintenance and Repair*
Normally Closed	See air-to-open	*Industrial Engineering*
Normally closed solenoid valve	An electrically operated valve whose inlet orifice is closed when the solenoid coil is not energized. Energize to open. See "Solenoid Valve."	*Mechanical*
Normally Low	The state of a control in which the output is low (logic 0) in voltage in the rest (Off) condition.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Normally Open	See air-to-close	*Industrial Engineering*
Normally-Closed (N/C) valve	A pinch valve that in which the tubing is pinched in the de-energized state.	*General Mechanical*
Normally-Open (N/O) valve	A pinch valve in which the tubing is not pinched in the de-energized state.	*Mechanical*
Normal-Mode Rejection Ratio	The ability of an instrument to reject interference usually of line frequency (50–60 Hz) across its input terminals.	*Electrical*
Normande	A breed of beef cattle. Registry is by the North American Normande Association.	*Agriculture*
North American Electric Reliability Corporation (NERC)	A nonprofit corporation formed in 2006 as the successor to the North American Electric Reliability Council established to develop and maintain mandatory reliability standards for the bulk electric system, with the fundamental goal of maintaining and improving the reliability of that system. NERC consists of regional reliability entities covering the interconnected power regions of the contiguous United States, Canada, and Mexico. See the North American Electric Reliability Corporation (NERC) Regions.	*Energy*
North American Electric Reliability Council (NERC)	Council formed by electric utility industry in 1968 to promote the reliability and adequacy of bulk power supply in utility systems of North America. NERC consists of ten regional reliability councils: Alaskan System Coordination Council (ASCC); East Central Area Reliability Coordination Agreement (ECAR); Electric Reliability Council of Texas (ERCOT); Mid-America Interconnected Network (MAIN); Mid-Atlantic Area Council (MAAC); Mid-Continent Area Power Pool (MAPP); Northeast Power Coordinating Council (NPCC); Southeastern Electric Reliability Council (SERC); Southwest Power Pool (SPP); Western systems Coordinating Council (WSCC).	*Energy*
North American Industry Classification System (NAICS)	A new classification scheme, developed by the Office of Management and Budget to replace the Standard Industrial Classification (SIC) System, that categorizes establishments according to the types of production processes they primarily use.	*Energy*
North/South	Technology factors are provided for North and South because some equipment and technologies are temperature sensitive. A North designation generally represents a utility that experiences cold winters and has average annual heating degree days of at least 5,000 (based on a 65 degree base). A South designation has relatively mild winters but a significant saturation of air conditioning. This geographical designation is very general, but it is intended to separate out areas that are warmer than others.	*Energy*
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.	*Energy*
Northeast Region	New England division and Middle Atlantic division	*Energy*
Northern	Chicago, IL, Detroit, MI, Duluth, MN, Minneapolis, MN, St. Louis, MO, Pembina, ND, Cleveland, OH, Milwaukee, WI.	*Energy*
Northern Appalachian Region	Consists of Maryland, Ohio, Pennsylvania, and Northern West Virginia.	*Energy*
North-South Wage Differentials	differences in wage rates, both by industry and job classification, which show variations by region and geography.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nose Roller	A small roller, used on power belt curve conveyors, to reduce the gap at the transfer points.	*Manufacturing*
Noseover	A section of conveyor with transition rollers placed in conveyor to provide transition from incline to horizontal or horizontal to incline.	*Manufacturing*
Nose-Over	Curved or segmented frame sections having rollers properly spaced to provide a transition from incline to level or from level to decline.	*Equipment*
No-Solicitation Rule	a rule or regulation adopted by employers which forbids solicitation of union membership or dues on company time or premises.	*Industrial Relations*
No-Strike Clause	a provision in collective bargaining agreements in which the union gives its promise that during the term of the contract the employees will not engage in activities that will result in a stoppage of work at the employer's plant.	*Industrial Relations*
No-Suit Clause	a provision in a contract whereby the employer not to file a suit against the union for actions which occur.	*Industrial Relations*
NOT device	A control device which has its output in the logical 1 state if and only if the control signal assumes the logical 0 state. The NOT device is a single input NOR device.	*Mechanical, Process, and Operations*
Notch	Minimum spectral value, at a natural frequency. Also, the deliberate reducing of a portion of a test spectrum (random vibration testing).	*Reliability Engineering*
Notch Sensitivity	Extent to which the sensitivity of a material to fracture is increased by the presence of a surface inhomogeneity, such as a notch.	*Engineering Physics*
Notched	in a support set where the posts are slightly let into the bars, they are said to be 'notched'. This was common in N. Staffs. Also called 'lipped' (N. Staffs.).	*Mining*
Notching	cutting out various shapes from the edge of a strip, blank or part	*Materials Process*
Note	The term "back-to-back connection" is also used to describe a test set-up for electrical devices where a motor and a generator are connected to the same shaft line.	*Electrical*
Note	Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol (for use outside of nonattainment areas) are included in data on conventional gasoline.	*Energy*
Notice of Proposed Rulemaking	A designation used by the Federal Energy Regulatory Commission for some of its dockets.	*Energy*
Novolak	A trade for a permanent fusible and soluble phenol aldehyde resin used principally in varnishes.	*Material Process*
Nox	See Nitrogen oxides	*Energy*
Noxious Fumes	A combination of inert and corrosive gases usually associated with exhaust fumes or industrial by-products gases which can cause corrosive effects on temperature and pressure sensors when exposed.	*Electrical Engineering*
Nozzle	A device for controlled distribution of water in a cooling tower. Nozzles are designed to deliver water in a spray pattern by pressure or by gravity flow.	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nozzle	In injection of transfer molding, the orifice containing plug at the end of the injection cylinder or transfer chamber which contacts the mold sprue bushing and directs the molten resin into the mold. The nozzle is shaped to form a seal under pressure against the sprue bushing. Its orifice is shaped by tapering to maintain the desired flow of resin, and sometimes contains a check valve to prevent back flow, or an on-off valve to interrupt the flow at any desired point in the molding cycle.	*Engineering Physics*
NPCC	Northeast Power Coordinating Committee	*Energy*
n-Pentane (CH3(CH2)3CH3)	Colorless liquid. A petroleum hydrocarbon used as a starting point in various syntheses, as a solvent, etc.	*Material Process*
NPN	A transistor consisting of two N-type regions separated by a P-type region.	*Electrical Engineering*
NPRA	National Petrochemical & Refiners Association (US)	*Petro-Chemical Abbreviations*
NPRM	notice of proposed rule making (EPA)	*Petro-Chemical Abbreviations*
NPS	Nominal pipe size - dimensionless number used to indicate sizes of pressure pipe and valves - used interchangeably with valve size in inches.	*General Mechanical*
NPT	National Pipe Thread.	*General*
NRC	Natural Resources Canada	*Petro-Chemical Abbreviations*
NRCC	National Research Council of Canada	*Petro-Chemical Abbreviations*
NRCS	An agency of the USDA	*Agriculture*
NRECA	See National Rural Electric Cooperative Association	*Energy*
NREL	National Renewable Energy Laboratory	*Petro-Chemical Abbreviations*
NRS Non-rising stem	A gate valve having its stem threaded into the gate. As the stem turns the gate moves but the stem does not rise. Stem threads are exposed to the line fluid.	*General Mechanical*
NSPS	New Source Performance Standard	*Petro-Chemical Abbreviations*
NTSC	NTSC is the color television standard established by the National Television Standards Committee in the United States in 1953. The NTSC standard's distinguishing feature was that it added color to the original 1941 black and white television standard in such a way that black and white TVs continued to work.	*Electrical Engineering*
n-type semiconductor	Extrinsic semiconductor in which the electrical conductivity is dominated by negative charge carriers.	*Material Process*
Nubber	a block of wood about 12ins square used to throw runaway tubs off the rails on an incline haulage road. It was placed between the rails when a run of tubs had gone by. (Mids.).	*Mining*
Nuclear ceramic	Ceramic material with a primary engineering application in the nuclear industry.	*Material Process*
Nuclear Electric Power	Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nuclear electric power (nuclear power)	Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.	*Energy*
Nuclear Energy	Energy from the inner core or nucleus of the atom, as opposed to energy released in chemical processes, which derives from the electrons surrounding the nuclei. Nuclear fusion is the release of thermonuclear energy by the conversion of hydrogen nuclei to helium nuclei, in a continuing reaction in the sun and other stars. Nuclear fusion is the principle behind thermonuclear weapons. Attempts to harness fusion for commercial power production have so far not succeeded.	*Energy*
Nuclear fuel	Fissionable materials that have been enriched to such a composition that, when placed in a nuclear reactor, will support a self-sustaining fission chain reaction, producing heat in a controlled manner for process use.	*Energy*
Nuclear Magnetic Resonance (NMR)	Determinations of the number of hydrogen atoms in a complex molecule and the characteristic grouping in which they occur, conducted by placing the specimen in a strong constant magnetic field, then applying a perpendicular r.f. alternating magnetic field. At certain frequencies of the latter field, a hydrogen atom nucleus will absorb and emit energy, the frequency and amount of which are indicative of the characteristic grouping in which the atom is located – e.g., a CH3, CH2 or an –OH group.	*Engineering Physics*
Nuclear reactor	An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.	*Energy*
Nuclear Regulatory Commission	This is the federal agency responsible for the licensing of nuclear facilities. They oversee these facilities and make sure regulations and standards are followed.	*Energy*
Nucleate Initiate	a phase transformation.	*Material Process*
Nucleating Agent	Finely divided solid material added to semicrystalline polymers to modify the crystalline structure by providing sites for initiation of crystalline growth. A properly nucleated polymer will possess improved clarity, hardness, and tensile strength.	*Chemistry*
Nucleation	The initial stage in a phase transformation. It is evidenced by the formation of small particles (nuclei) of the new phase, which are capable of growing.	*Engineering Physics*
Nucleonic steering	automatic horizon control of a power loader by means of a radioactive sensor reacting against the roof or floor of the seam.	*Mining*
Nucleus	Central core of atomic structure, about which electrons orbit.	*Material Process*
NUG	Nonutility Generator	*Energy*
Nugget	A water-worn piece of precious metal, usually implying some size.	*Mining*
Nugget	A small mass of precious metal, found free in nature.	*Mining*
Null	A condition, such as balance, which results in a minimum absolute value of output.	*General*
Null	The condition when the pressure on each side of the sensing diaphragm is equal.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Null hypothesis	A hypothesis of the form: there is no difference between A and B. This form of the hypothesis is the basis for statistical tests of significance, such as the t-test and the F-test. In the t-test, A and B are mean values. In the F-test, A and B are variances (squares of standard deviations)	*Quality*
Null Offset	The electrical output present, when the pressure sensor is at null.	*Electrical Engineering*
Null Temperature Shift	The change in null output value due to a change in temperature.	*Electrical Engineering*
Nullification of Agreement	setting aside or abrogating the terms of an agreement.	*Industrial Relations*
Number Needed to Treat (NNT)	The number of patients who must be exposed to an intervention before the clinical outcome of interest occurred; for example, the number of patients needed to treat to prevent one adverse outcome. Equal to the inverse of the absolute risk reduction: NNT = 1/ARR = 1/CER-EER.	*Analysis*
Number needed to treat to benefit	An estimate of how many people need to receive a treatment before one person would experience a beneficial outcome. For example, if you need to give a stroke prevention drug to 20 people before one stroke is prevented, then the number needed to treat to benefit for that stroke prevention drug is 20. The NNTb is estimated as the reciprocal of the absolute risk difference. See also: Number needed to treat to harm Also called: NNT, NNTb, Number needed to treat	*Quality Engineering*
Number needed to treat to harm	A number needed to treat to benefit associated with a harmful effect. It is an estimate of how many people need to receive a treatment before one more person would experience a harmful outcome or one fewer person would experience a beneficial outcome. See also: Number needed to treat to benefit Also called: NNH, NNTh, Number needed to harm	*Quality Engineering*
Number of control measurements, N	Used here to indicate the total number of control measurements available for use in assessing the quality of an analytical run. We consider N to be the total number of control measurements available for inspection when using common Levey-Jennings type QC charts or multirule type QC procedures where it is possible to combine the measurements from different materials to accumulate a higher N (and higher error detection) for evaluating control status. These measurements may be replicates on one level or material, individual measurements on two or more materials, or replicate measurements on two or more materials. For example, if you assay a single material and make two measurements on that material, N is 2. If you assay two materials (as required by US CLIA regulations) and make single measurements on each, N is 2. If you assay two materials and make duplicate measurements on each, N is 4. If you assay three materials and make single measurements on each, N is 3. If you assay three materials and make duplicate measurements on each, N is 6. With the use of mean/range or cusum type of QC procedures where it is more difficult to combine the measurements from different control materials, N is more likely to be the number of replicates on an individual material.	*Quality*
Number of mines	The number of mines, or mines collocated with preparation plants or tipples, located in a particular geographic area (State or region). If a mine is mining coal across two counties within a State, or across two States, then it is counted as two operations. This is done so that EIA can separate production by State and county.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Number of mining operations	The number of mining operations includes preparation plants with greater than 5,000 total direct labor hours. Mining operations that consist of a mine and preparation plant, or a preparation plant only, will be counted as two operations if the preparation plant processes both underground and surface coal. Excluded are silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year.	*Energy*
Number snatcher	Man responsible for the listing of numbers on incoming empty railway wagons and the recording of date and time received (N. Staffs.).	*Mining*
Number-Average Molecular Weight (MN)	The average molecular weight of a high polymer expressed as the first moment of a plot of the number of molecules in each molecular weight range against the molecular weight. In effect, this is the total molecular weight of all molecules dived by the number of molecules.	*Engineering Physics*
Numeric	Description of a symbology's character set which consists of only numerals.	*Gears*
NURE	See National Uranium Resource Evaluation	*Energy*
Nut Dilation	Under load, the wedging action of the threads causes dilation of the nut resulting in an increase in the minor diameter of the nut, and reducing the effective shear areas of both the external and internal threads.	*Maintenance*
Nut Runner	A torque control fastener tightening tool that is usually powered by compressed air. The design of the tool is such that attempts are made to ensure that the applied torque is independent of joint stiffness.	*Maintenance*
Nut shells	The horny outer case of such nuts as walnuts, ground and used for filler.	*Material Process*
NUTEK	Swedish National Board for Industrial and Technical Development	*Petro-Chemical Abbreviations*
Nutrients	nitrogen, phosphorous, potassium, and minerals that plants need to grow	*Agriculture*
Nutrients	Naturally occurring, soil elements essential for tree growth and reproduction.	*Forestry*
Nuts	small pieces of coal or re-screened small coal, smaller than stove coal and larger than pea coal. Also called 'chestnut coal'.	*Mining*
NVFEL	National Vehicle and Fuel Emissions Laboratory (US-EPA)	*Petro-Chemical Abbreviations*
NVFL	National Vehicle and Fuel Lab (EPA)	*Petro-Chemical Abbreviations*
NVH	Noise, Vibration and Harshness - A general term which covers undesirable noise and vibration experienced by vehicle occupants.	*Mechanical, Process, and Operations*
Nyloc Nut	A torque prevailing nut that uses a nylon patented insert to provide a locking feature. The nylon insert, it is claimed, helps to seal the bolt thread against seepage of water, oil, petrol, paraffin and other liquids. The nut is covered by UK patent 8028437 and European patent 81303450-1. Nyloc is a registered trade name of Forest Fasteners.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Nylon	Generic name for all long-chain polymers which have recurring amide groups (-CONH-) as an integral part of the main polymer chain. Various types of nylons are described in subsequent listings, the numbers of which relate to the number of carbon atoms in the various reactants. Nylon first appeared in 1939 when its fiber was used in the production of nylon stockings. Nylon is found in more than just stockings, however, such as in electronics, automotive parts, and in packaging. The origin of the word nylon is arbitrary. The company credited with the invention, DuPont has stated that originally the name was intended to be No-Run (that is run as in the sense of the compound chain of the substance unraveling), but at the time there was no real justification for the claim, so it needed to be changed. It was the discoverer, Walter Carothers, who was responsible for that. He changed the name, letter by letter, until finally the management at DuPont accepted what he'd come up with – which was nylon was the explanation in 1978. Back in 1940, the company's John W. Eckelberry stated that the first three letters – the nyl – had no read meaning at all, whilst the on suffix was inspired by that used in other fibers.	*Material Engineering*
Nylon	A generic term for any long chain synthetic polymeric amide which has recurring amide groups as an integral part of the main polymer chain, and which is capable of being formed into a filament in which the structural elements are oriented in the direction of the axis.	*Material Process*
Nylon 66 Poly	hexamethylene adipamide, an important engineering polymer.	*Material Process*
Nymex	New York Mercantile Exchange	*Energy*
Nymph	The immature stage of insects, following hatching, which does not have a pupal stage, i.e., incomplete metamorphosis (egg, nymph, adult). Late instar nymphs may have nonfunctional rudimentary wings and/or genitalia.	*Forestry*
Nyquist	In A/D conversion, the Nyquist principle (derived from the Nyquist-Shannon sampling theorem) states that the sampling rate must be at least twice the maximum bandwidth of the analog signal in order to allow the signal to be reproduced. The maximum bandwidth of the signal (half the sampling rate) is commonly called the Nyquist frequency (or Shannon sampling frequency).	*Electrical Engineering*
O	O	*Forestry*
--O--	--O--	*Petroleum Drilling*
O	Oil.	*Petroleum Drilling*
O&G	Oil & Gas	*Petroleum Drilling*
O&G	Oil and Gas.	*Petroleum Drilling*
O&M	Operation and Maintenance.	*Energy*
O.D.	Outside Diameter - The measurement of the outermost diameter of a circular part.	*Mechanical*
O.E.M.	'Original Equipment Manufacturer'. A company which first designed and built parts or equipment.	*Petroleum Engineering*
O.M.S	Output per man-shift.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
O3	See Ozone.	*Energy*
OA	Optical Amplifier.	*Quality*
OAG	Open Application Group.	*Quality*
OASI	See: Old Age and Survivors' Insurance	*Industrial Relations*
Oaste	a name given to a person who went to Newcastle to buy coal. The coal vendor was called a 'hoastman'. (N. East).	*Mining*
OBD	on-board diagnostic	*Petro-Chemical Abbreviations*
OBD-II	on-board diagnostic II	*Petro-Chemical Abbreviations*
Objective Standards (NWLB)	the National War Labor Boards had numerous cases involving plants which had rate ranges for particular jobs. A major issue concerned the methods by which employees were to be placed and to progress within the rate ranges for these jobs.	*Industrial Relations*
Obligate aerobes	organisms that require the presence of molecular oxygen [O(2)] for their metabolism.	*Chemical*
Obligate anaerobes	organisms for which the presence of molecular oxygen is toxic. These organisms derive the oxygen needed for cell synthesis from chemical compounds.	*Chemical*
Obligated Producer	See Packaging Waste Regulations.	*Quality*
Obligation to Serve	The obligation of a utility to provide electric service to any customer who seeks that service, and is willing to pay the rates set for that service. Traditionally, utilities have assumed the obligation to serve in return for an exclusive monopoly franchise.	*Energy*
Obliteration	A synergistic phenomenon of both particle silting and polar adhesion. When water and silt particles co-exist in a fluid containing long-chain molecules, the tendency for valves to undergo obliteration increases.	*Lubrication*
Observable	a general term given to a system component for which there is no direct control thereof, but the value of such component provides pertinent information about the state of the system. For example, consider a heating and cooling system for an enclosed football stadium. The current temperature at various locations throughout the stadium is an observable.	*Petroleum Drilling*
Observation well	A non-producing well used to monitor pool pressure, usually included in annual pressure testing surveys.	*Petroleum Engineering*
Observational study	A study in which the investigators do not seek to intervene, and simply observe the course of events. Changes or differences in one characteristic (e.g. whether or not people received the intervention of interest) are studied in relation to changes or differences in other characteristic(s) (e.g. whether or not they died), without action by the investigator. There is a greater risk of selection bias than in experimental studies. See also: Randomized controlled trial Also called: Non-experimental study	*Quality Engineering*
Obsolescent Stock	Obsolescent Stock: see Stock (Obsolescent).	*Quality*
Obsolete Stock	Obsolete Stock: see Stock (Obsolete).	*Quality*

Term	Definition	*Industry*
Obsolete Store Items	Stock keeping units that have not had activity in three or more years and are not designated as safety stock.	*Maintenance*
Obstruction lights or Aviation warning lights	Warning lights required by FAA regulations, placed on the outside of the hyperbolic shell of a natural draft tower.	*Facility Engineering*
Obtuse	An angle that measures between 90° and 180°.	*Math*
OC Curve	In sampling, a sample plan is obtained from a published sampling table, and specifies the size (N) of an incoming lot of material, the quality (p%) required of this incoming lot, the size (n) of the sample to be taken, and the acceptance criterion c. Now, when such a sample plan is "operated" (i.e., used) in material receipt, an OC curve is a function or graph illustrating the probabilities of acceptance of the incoming lot of material over a successive range of possible incoming quality levels. For example, the OC curve will show: (1) the probability of acceptance of the incoming lot if the quality is 0.5% non-conforming; (2) the probability of acceptance of the lot (with the same sample plan) if the lot has 0.6% non-conforming; (3) the probability of acceptance of the lot if the lot has 0.7% non-conforming ... and so on. It is desirable that OC curves should be "steep" - that is, that they should show big differences in probabilities of acceptance from one incoming quality level to the next. In order for an OC curve to be steep, the sample plan chosen must specify a relatively large sample. See also Operating Characteristic and see sub-section 5.3 of the free on-line purchasing 'course' at this site.	*Quality*
OCA	Of site Consequences Analysis.	*Material Process*
OCAW	See: Oil, Chemical and Atomic Workers International Union (AFL-CIO)	*Industrial Relations*
Occlude	to cause to become obstructed or closed and thus prevent passage either into or from.	*Chemical*
Occupancy sensors	These are also known as "ultrasonic switchers." When movement is detected, the lights are turned on and remain on as long as there is movement in the room.	*Energy*
Occupation	the term usually is applied to a person's trade or vocation.	*Industrial Relations*
Occupation Analysis	the study of the content and requirements of specific occupations or occupational groups to determine whether similar job titles or occupation names or titles actually have the same content.	*Industrial Relations*
Occupational Deferment	deferment of-- in some cases, literally exemption from-- compulsory military service on the ground that an individual's continued pursuit of his civilian occupation contributes more to the country than his military service would.	*Industrial Relations*
Occupational Group	analyses of the labor force data as well as detailed classifications of occupations attempt to slot occupations into groups or sub-groups which are closely related.	*Industrial Relations*
Occupational Health	The prediction and prevention of work-related ill health, and of health issues associated with work.	*Quality*
Occupational History	See: Employment History	*Industrial Relations*
Occupational Immobility	See: Labor Mobility, Labor Immobility	*Industrial Relations*
Occupational Information	data and descriptive material prepared usually as a result of job analyses, questionnaires, and other materials which describe the salient features and characteristics of particular occupations, their requirements, and the industries in which they are found.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Occupational Injury	an accident or injury which is work connected.	*Industrial Relations*
Occupational Mobility	the extent to which individuals in a particular occupation move into work other than that other than that for which they were essentially trained.	*Industrial Relations*
Occupational Outlook	a publication of the Bureau of Labor Statistics in the U.S. Department of Labor which deals with the current developments in the employment opportunities in various occupation and industries. It is published four times a year.	*Industrial Relations*
Occupational Outlook Handbook	a publication, in the form of a handbook, issues by the Bureau of Labor Statistics, U.S. Department of Labor, in cooperation with the Veterans Administration.	*Industrial Relations*
Occupational Prescription	a term used in occupational therapy, either in the treatment of handicapped workers or those with other types of illness, including mental illness.	*Industrial Relations*
Occupational Pyramid	a phrase used in the social sciences, particularly in sociology, to indicate the structure of the working force.	*Industrial Relations*
Occupational Rate	a wage rate which is assigned to a specific occupation, either in a single plant, a geographic area, or an industry.	*Industrial Relations*
Occupational Safety and Health Administration (OSHA)	A division of the United States Department of Labor. The mission of the Occupational Safety and Health Administration (OSHA) is to save lives, prevent injuries and protect the health of America's workers. To accomplish this, federal and state governments must work in partnership with the more than 100 million working men and women and their six and a half million employers who are covered by the Occupational Safety and Health Act of 1970. (see also: http://www.osha.gov)	*Maintenance*
Occupational Seniority	a form of seniority whereby transfers or layoffs under a contract are based on the actual length of service of the individual in his occupation.	*Industrial Relations*
Occupational Shift	changes in the technology of industry as well as changes resulting from special circumstances, such as a shift from peacetime to a wartime economy or the reconversion from wartime economy to a peacetime one, which requires major shifts to the labor force and frequently also changes in the occupational economy.	*Industrial Relations*
Occupational Stratification	the phrase may apply to the actual arrangement of various occupations in the order of their status level.	*Industrial Relations*
Occupational Structure	the attempt to classify and code, frequently by the use of numerical arrangements, the various occupations within a particular economy or in a particular industry, or within a plant, from the highest to the lowest labor grade.	*Industrial Relations*
Occupational Survey	a procedure for studying the occupational groupings of a country, state or locality, plant, or industry.	*Industrial Relations*
Occupational Therapy	a method used to speed the recovery and work activity of an individual, handicapped by physical or mental disability, through some activity such as rug making, handicrafts, or other activities under the guidance of a therapist.	*Industrial Relations*
Occupational Wage Relationship	an attempt to show the inter-relation of wage rates in occupations which themselves show a range of responsibilities and skills.	*Industrial Relations*
OCD	Office of Community Development, a unit within the USDA.	*Agriculture*
Ocean energy systems	Energy conversion technologies that harness the energy in tides, waves, and thermal gradients in the oceans.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ocean going	(US term) In transportation, shipping on the open sea (in UK English, deep sea.)	*Quality*
Ocean thermal energy conversion (OTEC)	The process or technologies for producing energy by harnessing the temperature differences (thermal gradients) between ocean surface waters and that of ocean depths. Warm surface water is pumped through an evaporator containing a working fluid in a closed Rankine-cycle system. The vaporized fluid drives a turbine/generator.	*Energy*
Ochre or Ochrey water	mine water stained orange-red by contamination with hydrated iron oxide.	*Mining*
OCMA	Oil Companies Materials Association - An association of British oil companies which has written a standard for "fire safe" testing of soft seated valves. See "Fire Safe."	*Mechanical*
OCP	olefin copolymer	*Petro-Chemical Abbreviations*
OCR	Optical Character Reader	*Gears*
OCS	Open Control System. This term is sometimes used to emphasize the lack of proprietary architecture. ABB include the term in their DCS brand name, Advant OCS.	*Control Engineering*
OCS	The Outer Continental Shelf. Generally the area outside the territorial boundaries of the coastal state over which the federal government exercises control.	*Petroleum Drilling*
Octagon Head	A bolt or screw whose head cross section is a regular polygon with 8 sides.	*Maintenance*
Octahedral position	The void space among closed-packed, hard sphere atoms or ions for which there are six nearest neighbors. An octahedron (double pyramid) is circumscribed by lines constructed from centers of adjacent spheres.	*Engineering Physics*
Octal	Pertaining to a base 8 number system.	*General*
Octane	A flammable liquid hydrocarbon found in petroleum. Used as a standard to measure the anti-knock properties of motor fuel.	*Energy*
Octane Number	A measure of a fuel's ability to prevent detonation in a spark ignition engine. Measured in a standard single-cylinder, variable-compression-ratio engine by comparison with primary reference fuels. Under mild conditions, the engine measures Research Octane Number (RON); under severe conditions Motor Octane Number (MON). Where the law requires posting of octane numbers on dispensing pumps, the Antiknock Index (AKI) is used. This is the arithmetic average of RON and MON, (R + M)/2. It approximates the Road Octane Number, which is a measure of how an "average" car responds to the fuel.	*Lubrication*
Octane number	A number indicating the relative antiknock characteristics of gasoline.	*Petroleum Engineering*
Octane rating	A number used to indicate gasoline's antiknock performance in motor vehicle engines. The two recognized laboratory engine test methods for determining the antiknock rating, i.e., octane rating, of gasolines are the Research method and the Motor method. To provide a single number as guidance to the consumer, the antiknock index (R + M)/2, which is the average of the Research and Motor octane numbers, was developed.	*Energy*
Octane Requirement (OR)	The lowest octane number reference fuel that will allow an engine to run knock-free under standard conditions of service. OR is a characteristic of each individual vehicle.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Octane Requirement Increase (ORI)	As deposits accumulate in the combustion chamber, the ORI of an engine increases, usually reaching an equilibrium value after 10,000 to 30,000 km. ORI is a measure of the increase, which may be in the range of three to ten numbers.	*Lubrication*
Octanol/water partition coefficient (Kow)	a coefficient representing the ratio of the solubility of a compound in octanol (a non-polar solvent) to its solubility in water (a polar solvent). The higher the Kow, the more non-polar the compound. Log Kow is generally used as a relative indicator of the tendency of an organic compound to adsorb to soil. Log Kow values are generally inversely related to aqueous solubility and directly proportional to molecular weight.	*Chemical*
Octave	The interval between two frequencies differing by exactly 2:1.	*Reliability Engineering*
Octene	A comonomer used in the production used in the production of linear low-density polyethylenes.	*Engineering Physics*
Octyl acetate	sec-Octyl acetate A solvent – ester.	*Material Process*
Octyl alcohol	sec-Octyl alcohol A solvent – alcohol.	*Material Process*
OD	The measurement of the outside diameter of a circular part.	*General Mechanical*
OD	The measurement of the outside diameter of a circular part.	*Mechanical*
Odd knobbing	breaking off the coal from the sides in the Thick Coal workings (S. Staffs.).	*Mining*
Odd lot	A block of shares that is less than a board lot.	*Mining*
Odds	A proportion in which the numerator contains the number of times an event occurs and the denominator includes the number of times the event does not occur.	*Analysis*
Odds ratio	The ratio of the odds of an event in one group to the odds of an event in another group. In studies of treatment effect, the odds in the treatment group are usually divided by the odds in the control group. An odds ratio of one indicates no difference between comparison groups. For undesirable outcomes an OR that is less than one indicates that the intervention was effective in reducing the risk of that outcome. When the risk is small, odds ratios are very similar to risk ratios. Also called: OR	*Quality Engineering*
Odds Ratio (Syn cross-product ratio, relative odds)	A measure of the degree of association; for example, the odds of exposure among the cases compared with the odds of exposure among the controls.	*Analysis*
ODI	oil drain interval	*Petro-Chemical Abbreviations*
OEAM	See Operational Equipment Asset Management.	*Maintenance*
OECA	Office of Enforcement and Compliance Assurance	*Petro-Chemical Abbreviations*
OECD	See Organization for Economic Cooperation and Development.	*Energy*
OED	(1) Outside exchange of dies - synonymous with external set-up time (qv); and (2) The Oxford English Dictionary, the prime reference to the vocabulary and usage of the English language (UK version), published in 13 volumes by Oxford University Press, and available in a 2 volume shorter edition (The Shorter OED).	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
OEE	Original Equipment Effectiveness, or Overall Equipment Effectiveness. The overall equipment effectiveness is the product of (1) equipment availability, (2) equipment performance and (3) equipment quality rate ... say (1) 80%, (2) 80% and (3) 80%, making an OEE of 0.8 x 0.8 x 0.8, = 0.512, or 51.2%.	*Quality*
OEIU	See: Office Employees International Union (AFL-CIO)	*Industrial Relations*
OEM	Original Equipment Manufacturer.	*Control Engineering*
OEM	Original Equipment Manufacturer - A company which produces passenger vehicles or major components of those vehicles such as the engines, transmissions, etc.	*Mechanical, Process, and Operations*
Of a material due to the stress concentration associated with a pre existing flaw	of a material due to the stress concentration associated with a pre existing flaw.	*Material Process*
Of full scale output or reading	of full scale output or reading.	*Electronic Process*
Of light in a vacuum to its velocity in the substance	of light in a vacuum to its velocity in the substance.	*Material Process*
Of water	of water.	*Civil Engineering*
OFA	Oxygenated Fuels Association	*Petro-Chemical Abbreviations*
OFAT (One Factor At A Time)	A method of experimentation for examining the effect of a number of possible causes. Contrast Full Factorial.	*Quality*
OFC	Open Fieldbus Consortium.	*Control Engineering*
Off	Device is powered off (power switch is off; no response to communications) - no data and function is available.	*Aeronautical Engineering*
Off Delay Logic	The adjustable delay (after input signal stops) before output is de: energized.	*Electrical Engineering*
Off peak	Period of relatively low system demand. These periods often occur in daily, weekly, and seasonal patterns; these off-peak periods differ for each individual electric utility.	*Energy*
Off peak gas	Gas that is to be delivered and taken on demand when demand is not at its peak.	*Energy*
Off State Current	The supply or bias current flowing into a solid state device when it is in the unactuated state (see Leakage Current).	*Electrical Engineering*
Off take rods	extra wooden rods at the top and bottom of a winding shaft that guided and steadied a cage during decking.	*Mining*
Off the Shelf Satisfaction	See First Pick Ratio.	*Quality*
Offal	the inedible parts of a butchered animal removed in dressing it	*Agriculture*
Off-camber	Some turns on road and street courses are actually banked outward, which can make them very tricky to negotiate. This is known as an off-camber turn.	*NASCAR*
Offer	An offer is an invitation to "come and do business with me on these terms". It is a promise made to the other party that if the terms proposed are satisfactory, there will be a contract. It is, in fact, a legal commitment to the other party to form a contract if that other party agrees.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Offer (legal)	A proposal by a party to supply goods or service in exchange for money. The making of an offer is the first step in forming a contract.	*Quality*
Off-gas treatment system	refers to the unit operations used to treat (i.e. condense, collect, or destroy) contaminants in the purge gas from the thermal desorber.	*Chemical*
Off-gates	gob or goaf-roads in longwall working, usually about 150yds. apart. (N. East).	*Mining*
Off-highway use	Includes petroleum products sales for use in:	*Energy*
Off-hours equipment reduction	A conservation feature where there is a change in the temperature setting or reduction in the use of heating, cooling, domestic hot water heating, lighting or any other equipment either manually or automatically.	*Energy*
Office Employees International Union (AFL-CIO)	an organization of clerical and office employees.	*Industrial Relations*
Office of Community Development, (OCD)	A unit within the USDA.	*Agriculture*
Office of Education	an office within the U.S. Department of Health, Education, and Welfare.	*Industrial Relations*
Office of Manpower, Automation and Training (OMAT)	see: Manpower; Manpower Administration, Department of Labor	*Industrial Relations*
Office of Price Administration	the agency which administered the Price Control Act during World War II, parallel to efforts at wage stabilization and dispute settlement under the National War Labor Board.	*Industrial Relations*
Office of Vocational Rehabilitation	a decision within the U.S. Department of Health, Education, and Welfare concerned with the problems of vocational rehabilitation.	*Industrial Relations*
Office Worker	an individual generally engaged in work which includes such jobs as typing, secretarial work, filing, key-punching of cards, and other related clerical jobs in and around the office.	*Industrial Relations*
Official Collective Agreement	See: Agreement, Collective	*Industrial Relations*
Officious Bystander Test	A contract between the company and a supplier is comprised of express terms (i.e., written down) and implied terms (obvious terms implied by common-sense, and by custom and practice). To determine later whether some particular term X is implied or not, the company might imagine what reply would have been given by both parties while the contract was being drawn up to an officious bystander (i.e., a nosy passer-by) if he had asked them "Is X intended to be included?". If both parties would have replied in unison "Yes - the inclusion of X is obvious! X is essential from the business point of view!", then X is indeed an implied term. Note that X must be essential at the time the contract is being drawn up; it is not an implied term simply because it later seems reasonable, or on lengthy reflection seems a reasonable extension of the agreement.	*Quality*
Off-peak	Periods of relatively low system demands.	*Energy*
Off-Peak/On-Peak	Block of time when energy demand and price is low (off-peak) or high (on-peak).	*Energy*
Offset	Part of received data that is undesired, consisting of a random, time-invariant term added to a signal; Synonyms: bias; Compare: noise, signal.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Offset	Part of received data that is undesired, consisting of a random, time-invariant term added to a signal; Synonyms - bias; Compare - noise, signal.	*Aeronautical Engineering*
Offset Printing	The stress at which the strain exceeds by a specified amount (the offset) an extension of the initial proportional portion of the stress-strain curve. It is expressed in force per unit area, usually pounds per square inch.	*Engineering Physics*
Offshore	That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water. If a state agency uses a different basis for classifying onshore and offshore areas, the state classification should be used (e.g., Cook Inlet in Alaska is classified as offshore; for Louisiana, the coastline is defined as the Chapman Line, as modified by subsequent adjudication).	*Energy*
Offshore reserves and production	Unless otherwise dedicated, reserves and production that are in either state or Federal domains, located seaward of the coastline.	*Energy*
Offsite-produced energy for heat, power, and electricity generation	This measure of energy consumption, which is equivalent to purchased energy includes energy produced off-site and consumed onsite. It excludes energy produced and consumed onsite, energy used as raw material input, and electricity losses.	*Energy*
Off-system	Any point not on or directly interconnected with a transportation, storage, and/or distribution system operated by a natural gas company within a state.	*Energy*
Off system (natural gas)	Natural gas that is transported to the end user by the company making final delivery of the gas to the end user. The end user purchases the gas from another company, such as a producer or marketer, not from the delivering company (typically a local distribution company or a pipeline company).	*Energy*
Off-take or Off-take drift	a raised section of the upcast shaft above the surface to carry off steam and smoke produced by the engines and the ventilation furnace underground; or a drift, driven from the surface, to the point in a pumping shaft where the pump discharges the water. This was usually where a mine had been sunk on a hillside. The drift would be driven from the hillside to the shaft. Also called an 'off-take level'. (Scot.). –see also Delivery drift.	*Mining*
ofhc	Oxygen-free high-conductivity copper. The industrial designation of the pure copper used in a Type T thermocouple.	*General*
OFT	Office of Fair Trading, a UK body which investigates alleged breaches of the Competition Act, and is empowered to take legal action as it deems fit.	*Quality*
Ohio AFL-CIO	the official weekly publication is News and Views.	*Industrial Relations*
Ohio State University-Labor and Research Service	Address: Labor Education and Research Service, Ohio State University, Columbus, Ohio.	*Industrial Relations*
Ohm	A measure of the electrical resistance of a material equal to the resistance of a circuit in which the potential difference of 1 volt produces a current of 1 ampere.	*Energy*
Ohm	Unit of electrical resistance. If a 1 volt source is connected to a wire with a resistance of 1 ohm, then 1 ampere of electric current will flow.	*Electrical*
Ohm	Unit of measure of electrical resistance.	*Energy*
Ohmeter	An instrument used to measure electrical resistance.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ohm's law	Relationship between voltage, current, and resistance in an electrical circuit.	*Material Process*
Ohm's Law	In a given electrical circuit, the amount of current in amperes is equal to the pressure in volts divided by the resistance, in ohms. The principle is named after the German scientist Georg Simon Ohm.	*Energy*
Oil	A mixture of hydrocarbons usually existing in the liquid state in natural underground pools or reservoirs. Gas is often found in association with oil. Also see Petroleum.	*Energy*
Oil	A liquid of vegetable, animal, mineral or synthetic origin that provides the basis for increased wear resistance as well as an income to those in the business of providing value.	*Lubrication*
Oil Analysis	The process of monitoring the condition of equipment through the analysis of oil properties and other lubricants. Typically, oil analysis is conducted through the measurement of particulates in the oil, or the chemical composition of the oil (spectrographic oil analysis). It is commonly used for monitoring the condition of large gearboxes, engines, and transformers. See Oil Monitoring, and Oil Debris Monitoring.	*Maintenance*
Oil Analysis	The routine activity of analyzing lubricant properties and suspended contaminants for the purpose of monitoring and reporting timely, meaningful and accurate information on lubricant and machine condition.	*Lubrication*
Oil bass or Oil shale	shale worked for oil.	*Mining*
Oil battery	A system or arrangement of tanks or other surface equipment or devices receiving the effluent of one or more wells for the purpose of separation and measurement prior to the delivery to market or other disposition.	*Petroleum Engineering*
Oil company use	Includes sales to drilling companies, pipelines or other related oil companies not engaged in the selling of petroleum products. Includes fuel oil that was purchased or produced and used by company facilities for the operation of drilling equipment, other field or refinery operations, and space heating at petroleum refineries, pipeline companies, and oil-drilling companies. Oil used to bunker vessels is counted under vessel bunkering. Sales to other oil companies for field use are included, but sales for use as refinery charging stocks are excluded.	*Energy*
Oil Consumption	The amount of lubricating fluid that is consumed by a machine, production line, plant or company over a given period of time.	*Lubrication*
Oil Consumption Ratio	Annual oil purchases divided by machine charge volume. For example, if you purchased 10,000 gallons of oil in one year and the total amount of oil that all of your machine holds is 4,200 gallons, your consumption ratio is 2.4.	*Lubrication*
Oil content (D721)-0.5	percent maximum;	*Energy*
Oil content (D721)-0.51	percent minimum to 15 percent maximum.	*Energy*
Oil Debris Monitoring	The analysis of metallic particles that collect in oil to gauge the degree of machine degradation. A variety of techniques may be employed, which include: Laboratory analysis of collected oil samples	*Maintenance*
Oil Drain	A large bolt or plug that secures the drain hole in the oil pan. It is generally fitted with a gasket or O-ring to prevent leakage.	*Lubrication*
Oil Field	A geographical area under which an oil reservoir lies.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oil Field	An area which is underlain by one or more reservoirs containing oil.	*Petroleum Drilling*
Oil field	A geographic area under which an oil reservoir lies.	*Petroleum Drilling*
Oil Filter	A device which removes the inherent or introduced impurities from the oil that lubricates an internal-combustion engine.	*Lubrication*
Oil Flushing	A fluid circulation process that is designed to remove contamination and decomposition from a lubrication-based system.	*Lubrication*
Oil In Place	An estimated measure of the total amount of oil contained in a reservoir, and, as such, a higher figure than the estimated recoverable reserves of oil.	*Petroleum Drilling*
Oil in place	An estimated measure of the total amount of oil contained in a reservoir, and, as such, a higher figure than the estimated recoverable reserves of oil.	*Petroleum Drilling*
Oil marketer	A business dedicated to the development and marketing of lubricants for commercial and consumer equipment. Oil marketers and their additive company partners work closely with OEMs to develop lubricants which allow equipment to function.	*Mechanical, Process, and Operations*
Oil Mist	A method of lubricant delivery in which oil is piped throughout the machine to desired locations and dispensed with a spray nozzle. Oil mist systems are employed to cool and lubricate many machine parts at once.	*Reliability Engineering*
Oil Mist Lubrication	A method of lubricant delivery in which oil is piped throughout the machine to desired locations and dispensed with a spray nozzle. Oil mist systems are employed to cool and lubricate many machine parts at once.	*Lubrication*
Oil Mist System	A device which delivers lubricant to multiple machine parts at once via a setup that includes piping and a spray nozzle.	*Lubrication*
Oil Monitoring	Oil monitoring is the practice of regularly checking oil to assess the level of oil degradation to determine the oil's suitability for continued use as a lubricant, power transmission medium, or coolant. A variety of techniques are typically applied, which include: Subjective inspection	*Maintenance*
Oil Oxidation	Occurs when oxygen attacks petroleum fluids. The process is accelerated by heat, light, metal catalysts and the presence of water, acids, or solid contaminants. It leads to increased viscosity and deposit formation.	*Lubrication*
Oil Pool	An underground reservoir or trap containing oil.	*Petroleum Drilling*
Oil reservoir	An underground pool of liquid consisting of hydrocarbons, sulfur, oxygen, and nitrogen trapped within a geological formation and protected from evaporation by the overlying mineral strata.	*Energy*
Oil Ring	A loose ring, the inner surface of which rides a shaft or journal and dips into a reservoir of lubricant from which it carries the lubricant to the top of a bearing by its rotation with the shaft.	*Lubrication*
Oil Sampling	A procedure which involves the collection of a volume of fluid from lubricated or hydraulic machinery for the purpose of performing oil analysis. Samples are typically drawn into a clean bottle which is sealed and sent to a laboratory for analytical work.	*Reliability Engineering*
Oil sands	Naturally occurring mixture of bitumen (a heavy, viscous form of crude oil), water, sand and clay. Using hydroprocessing technology, bitumen can be refined to yield synthetic crude oil.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oil shale	A sedimentary rock containing kerogen, a solid organic material.	*Energy*
Oil stocks	Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products.	*Energy*
Oil well	A well completed for the production of crude oil from at least one oil zone or reservoir.	*Energy*
Oil well (casing head) gas	Associated and dissolved gas produced along with crude oil from oil completions.	*Energy*
Oil Workers	refers to the Oil Workers International Union (CIO) which, after its merger with United Gas, Coke and Chemical Workers (CIO), adopted the name Oil, Chemical, and Atomic workers International Union (AFL-CIO)	*Industrial Relations*
Oil	A mixture of liquid hydrocarbons of different molecular weights.	*Petroleum Drilling*
Oil, Chemical, and Atomic Workers International Union (AFL-CIO)	in March 1955 the Oil Workers International Union (CIO) merged with the United Gas, Coke and Chemical Workers of America (CIO) to form the Organization.	*Industrial Relations*
Oiler	A device for once-through lubrication. Three common types of oilers are: drop-feed, wick-feed, and bottle-feed; all depend on gravity to induce a metered flow of oil to the bearing. The drop-feed oiler delivers oil from the bottom of a reservoir to a bearing one drop at a time; flow rate is controlled by a needle valve at the top of the reservoir. In a wick-feed oiler, the oil flows through a wick and drops from the end of the wick into the bearing; feed is regulated by chaining the number of strands, by raising or lowering the oil level, or by applying pressure to the wick. In a bottle-feed oiler, a vacuum at the top of the jar keeps the fluid from running out; as tiny bubbles of air enter, the vacuum is reduced and a small amount of oil enters the bearing or is added to a reservoir from wick the bearing is lubricated.	*Lubrication*
Oiliness	That property of a lubricant that produces low friction under conditions of boundary lubrication. The lower the friction, the greater the oiliness.	*Lubrication*
Oiliness Agent	A material which forms an adsorbed film to reduce friction. An additive, usually polar in nature, used to improve the lubricity of a mineral oil. Now usually called a boundary lubrication additive.	*Lubrication*
OIS	Operator Interface Station. A kind of HMI.	*Control Engineering*
OJT	See: On-the-Job Training	*Industrial Relations*
Oklahoma State AFL-CIO	address: 531 Commerce Exchange Building, Oklahoma City, Oklahoma.	*Industrial Relations*
Old Age	a term which is undergoing redefinition because of great advances in medical and other technology which have increased the life span of individuals.	*Industrial Relations*
Old Age and Survivors' Insurance (OASI)	income and benefit payments for retirement through social security legislation.	*Industrial Relations*
Old Age Assistance	a form of public assistance under the Social Security Act designed to assist individuals in need who through the years have not built up social insurance rights or where their needs are greater than those presently provided by social insurance benefits.	*Industrial Relations*
Old age Benefit Taxes	levies under the Federal Insurance Contributions Act which apply both to employees and employers, based on wages paid in certain covered employments.	*Industrial Relations*

Term	Definition	Industry
Old Age Insurance	generally refers to the provisions of the Social Security Act of 1935, which established a federal old-age insurance system.	*Industrial Relations*
Old Age Insurance Act	See: Old Age Insurance	*Industrial Relations*
Old field	A field discovered prior to the report year.	*Energy*
Old men	a reference to any previous generation of miners. Old workings were known as 'old men's workings'.	*Mining*
Old reservoir	A reservoir discovered prior to the report year.	*Energy*
Old workings	workings in coal made at some former time from the same or some other shaft.	*Mining*
Older Person	See: Older Worker	*Industrial Relations*
Older Worker	Older Worker - a term somewhat nebulous in meaning. From the employer's point of view it may imply that the individual has reached the age at which he no longer is sufficiently alert and efficient to shoulder the responsibilities and duties of his job.	*Industrial Relations*
Oldest Local Union in the Country	this honor apparently should be given to eh Columbia Typographical Union of Washington, D.C., which has been continuously in existence since 1815.	*Industrial Relations*
OLDHAM coupling	A double slider connection used to connect shafts which have only lateral misalignment.	*Mechanical*
OLE	Object Linking and Embedding, Microsoft's greatest contribution to industrial control, allows operators to link the same object in several different applications.	*Control Engineering*
Oleamide	An ivory-colored powder used as a slip additive in polyolefins.	*Engineering Physics*
O'Leary's Corollary	(To Murphy's Law) - Murphy was an optimist. (An alternative version states if everything seems to be going well, you have clearly overlooked something.)	*Quality*
Olefinic hydrocarbons (olefins)	Unsaturated hydrocarbon compounds with the general formula CnH2n containing at least one carbon-to-carbon double-bond. Olefins are produced at crude oil refineries and petrochemical plants and are not naturally occurring constituents of oil and natural gas. Sometimes referred to as alkenes or unsaturated hydrocarbons. Excludes aromatics.	*Energy*
Olefins	see alkenes.	*Chemical*
Olefins	The group of unsaturated hydrocarbons named after the corresponding paraffins by the addition of the "ene" and "ylene" to the stem. Examples are ethylene, propylene and butenes. Polymers of olefins and sometimes called olefin plastics or polyolefins.	*Engineering Physics*
Olefins	A family of unsaturated hydrocarbons with one carbon-carbon double bond and the general formula CnH2n.	*Petroleum Engineering*
Olefins (Akenes)	Unsaturated aliphatic hydrocarbons of the formula CnH2n, having one double bond.	*Material Process*
Oligomer	A polymer consisting of only a few monomer units such as a dimer, trimer, tetramer, etc. or their mixtures. Other definitions in the literature place the upper limit of repeating units in an oligomer at about ten.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oligopoly	A market in which there are only a small number of suppliers, and no prospect of new ones, thus limiting competitive choice and, perhaps, presaging the emergence of a cartel (qv). Contrast Monopsony.	*Quality*
Oligopsony	a form of monopoly or control by a small number of buyers who are in a position to influence the demand for a particular commodity.	*Industrial Relations*
Olsen v. Nebraska	a decision of the United States Supreme Court in 1941 which upheld the right of the State of Nebraska to withhold a license from a private employment agency which had failed to limit fees for its services in line with the provisions in state law.	*Industrial Relations*
OMAT (Office of Manpower, Automation and Training)	See: Manpower; Manpower Administration, U.S. Dept. of Labor	*Industrial Relations*
OMB	Office of Management and Budget (US)	*Petro-Chemical Abbreviations*
Ombudsman	The role of the two Ombudsmen is to help resolve areas of conflict that arise between people or entities within The Cochrane Collaboration, for which the usual process of involving the Directors of the reference Cochrane Centre(s) has not been sufficient. The Ombudsmen are appointed by the CCSG (and must not be current members of the CCSG). They report to the CCSG every six months giving details of their activity during the period, but not identifying specific details if, in the opinion of the Ombudsmen, there is a need for these details to remain confidential. If the Ombudsmen are unable to resolve an issue, it can be referred to the CCSG.	*Quality Engineering*
OMEGA	An OMEGA receiver provides position information that can be used to update the aircraft navigation position. OMEGA is the least accurate method of obtaining position information.	*Aeronautical Engineering*
OMS	Office of Mobile Sources (EPA)	*Petro-Chemical Abbreviations*
On a horizontal surface	on a horizontal surface.	*Mining*
On bord	advancing at right angles to the line of main cleat.	*Mining*
On Delay Logic	An adjustable delay (after onset of input signal) before output is energized.	*Electrical Engineering*
On end	advancing in the same direction as the line of main cleat.	*Mining*
On the brushes	a place where boots were cleaned by rotating brushes, usually near to the entrance to the pithead baths. Also where grease could be applied to boots.	*Mining*
On the grind	when the roof is working and ready to fall. (Mids.).	*Mining*
On/off Controller	A controller whose action is fully on or fully off.	*Electronic Process*
On-Call Time Pay	a method of compensation whereby the individual is paid for the time during which he is "on call" or on standby, ready and able to go to work.	*Industrial Relations*
On-Condition Maintenance	See Condition Based Maintenance	*Plant Engineering*
Oncost men, another term for day-wage men	see also Dataller.	*Mining*

Term	Definition	*Industry*
Oncost work	see Backwork	*Mining*
One variation of this process utilizes autofrettage (hydraulic expansion) and heat treatment, above the recrystallization temperature of the material, to produce a wrought structure	One variation of this process utilizes autofrettage (hydraulic expansion) and heat treatment, above the recrystallization temperature of the material, to produce a wrought structure.	*Maintenance and Repair*
One Big Union	Refers to the movement started about 1903 by the Western Federation of Miners which attempted to join all workers of the United States and perhaps of the whole world into a single revolutionary organization.	*Industrial Relations*
One Hundred Percent Premium Plan	an incentive plan which is also referred to as a "standard hour" plan. The worker is paid in direct proportion to his output.	*Industrial Relations*
one or more flow passages to change condition	Removal of the signal allows the pressure sensing valve to reset.	*Mechanical, Process, and Operations*
One Piece Construction	Refers to integral flanged or other equipment made from a single piece of steel. Must not be welded or fabricated or assembled.	*Petroleum Engineering*
One Piece Flow	Another alias of Just-in-Time (qv).	*Quality*
One sun	Natural solar insulation falling on an object without concentration or diffusion of the solar rays.	*Energy*
One way	particular class of house coal (S. Staffs.).	*Mining*
One-Man Town	the term generally is used as the equivalent of a company town where a single company or corporation or large industrialist owns the plant facilities, the company store, the housing, and other facilities primarily because the plant is located in an isolated community.	*Industrial Relations*
One-shot Logic	see Pulsed Logic.	*Electrical Engineering*
One-sided test	See One-tailed test	*Quality Engineering*
One-tailed test	A hypothesis test in which the values for which we can reject the null hypothesis are located entirely in one tail of the probability distribution. Testing whether one treatment is better than another (rather than testing whether one treatment is either better or worse than another) would be a one-tailed test. See also: Two-tailed Also called: One-sided test	*Quality Engineering*
One-time fee	The fee assessed a nuclear utility for spent nuclear fuel (SNF) or solidified high-level radioactive waste derived from SNF, which fuel was used to generate electricity in a civilian nuclear power reactor prior to April 7, 1983, and which is assessed by applying industry-wide average dollar-per-kilogram charges to four distinct ranges of fuel burn up so that equivalent to an industry-wide average charge of 1.0 mill per kilowatt hour.	*Energy*
One-to-One Organization	a form of personnel structure in which supervision is direct supervision of one employee over the work of another employee.	*Industrial Relations*
On-highway use (diesel)	Includes sales for use in motor vehicles. Volumes used by companies in the marketing and distribution of petroleum products are also included.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Online order entry system	A computer-based system that enables distributors, field-sales representatives, and even customers to place orders directly, over the Internet or a corporate intranet, without intervention by an inside salesperson. An Internet-based transaction might be initiated by accessing a Web page, then choosing a sales-order-entry option. The software often includes a product configurator and pricing "engine," and may be linked to production scheduling systems.	*Quality*
On-peak	Periods of relatively high system demand. These periods often occur in daily, weekly, and seasonal patterns; these on-peak periods differ for each individual electric utility.	*Energy*
On-Peak Energy	Energy supplied during periods of relatively high system demand as specified by the supplier.	*Energy*
Onsetter	a person in charge of winding operations underground. He is stationed at the shaft bottom and gives signals to the winding engineman also the man who loads the cage at the shaft bottom or at another landing or stopping place within the shaft. Also called the 'hitcher', 'hooker' or 'hanger-on'; or men who put the full tubs in and take the empty tubs out of the cage at the shaft bottom, or at any other landing.	*Mining*
On-site Maintenance	Maintenance carried out at the location where the asset is used.	*Maintenance*
Onsite transportation	The direct nonprocess end use that includes energy used in vehicles and transportation equipment that primarily consume energy within the boundaries of the establishment. Energy used in vehicles that are found primarily offsite, such as delivery trucks, is not measured by the MECS (an EIA survey).	*Energy*
On-system	Any point on or directly interconnected with a transportation, storage, or distribution system operated by a natural gas company.	*Energy*
Onsystem (natural gas)	Natural gas that is sold (and transported) to the end user by the company making final delivery of the gas to the end user. Companies that make final delivery of natural gas are typically local distribution companies or pipeline companies.	*Energy*
On-system sales	Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.	*Energy*
On-the-Job Training (OJT)	a procedure which utilizes the actual job or work site as the place at which an individual receives instruction while at the same time engaging in productive work.	*Industrial Relations*
On-time Delivery Rate	The percentage of time that ordered products are received by customers by the specified time or date. Some plants will base this calculation on the date "promised" to customers, but better facilities typically will calculate it against dates "requested" by customers.	*Maintenance*
OOP	Out of Production.	*Quality*
Ooster	clinker formed in the mine-hearths where blackband iron stone is calcined (N. Staffs.).	*Mining*
OPA	See: Office of Price Administration	*Industrial Relations*
Opacity	Total loss of image transmission.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Opacity	The characteristic of an object that prevents light from passing through. The opposite of translucent. Opaque objects are easy to detect since they block light almost entirely.	*Electrical Engineering*
Opalescence	Diffusion within a sheet of transparent plastic, or at its surface which interferes with the clarity of vision through the sheet at any angle.	*Material Process*
Opalon	A trade name for cast phenolic plastics.	*Material Process*
OPC	OLE for process control.	*Control Engineering*
OPCM	See: Plasterers' and Cement Masons' International Association of the United States and Canada; Operative (AFL-CIO)	*Industrial Relations*
OPEC	See Organization of Petroleum Exporting Countries.	*Energy*
OPEC (Organization of the Petroleum Exporting Countries)	An intergovernmental organization whose stated objective is to "coordinate and unify the petroleum policies of member countries." It was created at the Baghdad Conference on September 10-14, 1960. Current members (with years of membership) include:	*Energy*
Open access	A regulatory mandate to allow others to use a utility's transmission and distribution facilities to move bulk power from one point to another on a nondiscriminatory basis for a cost-based fee.	*Energy*
Open access (electric)	Federal Energy Regulatory Commission Order No. 888 requires public utilities to provide non-discriminatory transmission service over their transmission facilities to third parties to move bulk power from one point to another on a nondiscriminatory basis for a cost-based fee. Order 890 expanded Open Access to cover the methodology for calculating available transmission transfer capability; improvements that opened a coordinated transmission planning processes; standardization of energy and generation imbalance charges; and other reforms regarding the designation and undesignation of transmission network resources. See NERC definition.	*Energy*
Open Access Same-Time Information System (OASIS)	OASIS is a real-time information-sharing system that enables all buyers and sellers of electricity to access the transmission costs for all other buyers and sellers. This system is designed to ensure that transmission owners and their affiliates do not have an unfair advantage in using transmission to sell power.	*Energy*
Open access transmission tariff (electric)	Electronic transmission tariff accepted by the U.S. Federal Energy Regulatory Commission requiring the Transmission Service Provider to furnish to all shippers with non-discriminating service comparable to that provided by Transmission Owners to themselves. See NERC definition.	*Energy*
Open Access	Access to the electric transmission system by any legitimate market participant, including utilities, independent power producers, cogenerators, and power marketers.	*Energy*
Open bubble	Bubble which has broken partly through the surface of a plastic.	*Material Process*
Open bubble point (boil point)	The differential gas pressure at which gas bubbles are profusely emitted from the entire surface of a wetted filter element under specified test conditions.	*Oil Analysis*
Open center circuit	One in which pump delivery flows freely through the system and back to the reservoir in neutral.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	Industry
Open center system	A hydraulic system in which the control valves are open to continuous oil flow, even in neutral. Pressure in this system is varied, but flow remains constant.	*Mechanical, Process, and Operations*
Open Center Valve	A valve in which the inlet and outlet ports are open in the neutral position, allowing a continuous flow of oil from pump.	*Mechanical, Process, and Operations*
Open Circuit	The lack of electrical contact in any part of the measuring circuit. An open circuit is usually characterized by rapid large jumps in displayed potential, followed by an off-scale reading.	*Electrical*
Open clinical trial	There are at least three possible meanings for this term: 1. A clinical trial in which the investigator and participant are aware which intervention is being used for which participant (i.e. not blinded). Random allocation may or may not be used in such trials. Sometimes called an 'open label' design. 2. A clinical trial in which the investigator decides which intervention is to be used (non-random allocation). This is sometimes called an open label design (but some trials which are said to be 'open label', are randomized). 3. A clinical trial that uses an open sequential design.	*Quality Engineering*
Open Dies	Metal is not confined.	*Metallurgy*
Open Door Principle	the principle that is should be possible for any employee to speak to any of the employer's executives, including the chief executive or president, on any matter which is of concern to the employee, including the handling of his personal grievances.	*Industrial Relations*
Open End or Open Back Barrel	for use with expansion adapters.	*Petroleum Drilling*
Open end pillaring	A method of mining pillars in which no stump is left; the pockets driven are open on the gob side and the roof is supported by timber.	*Mining*
Open Gear	A gear that is exposed to the environment, rather than being housed in a protective gear box. Open gears are generally large, heavily loaded, and slow moving. They are found in such applications as mining and construction machinery, punch presses, plastic and rubber mills, tube mills, and rotary kilns. Open gears require viscous, adhesive lubricants that bond to the metal surfaces and resist run-off. Such lubricants are often called gear shields. Top-quality lubricants for such applications are specially formulated to protect the gears against the effects of water and other contaminants.	*Lubrication*
Open hole	Opencast working.	*Mining*
Open House	the procedure used by many companies in the 1930's and still used occasionally, which is a combination of a conducted tour, a reception, a party, and an opportunity for the community to become familiar with the particular plant.	*Industrial Relations*
Open Loop	Controller in manual mode. See Mode.	*Process Control*
Open Loop	control provides precomputed or preconceived drive signals to the exciter system without modifying or refining those signals based on observation of the resulting motion. See also **Closed Loop**.	*Reliability Engineering*
Open Market Coal	Coal sold in the open market (i.e., coal sold to companies other than in the reporting company's parent company or an operating subsidiary of the parent company).	*Energy*

Term	Definition	*Industry*
Open off	to begin mining coal from a new mine, or a new district within a mine, off headings that have been driven from the shaft into the seam.	*Mining*
Open Order (or Scheduled Receipt)	One of the three plan types in closed-loop MRP (along with the planned order and the firm plan), the open plan being a plan which has been released to the shop floor for work to start (*). Similarly, an open purchase order is a planned purchase in the MRP system which a supplier has committed to transit. When materials plans are assessed by the closed-loop MRP system with regard to their timeliness and the appropriateness of their quantities, open plans cannot be rescheduled to different dates if they are found to have due dates earlier or later than that those that are indicated by strict materials planning logic as being needed. Instead, the open plans are left with their existing dates (and quantities). However, messages are produced by the system commanding the planner, shop supervisor or buyer to reschedule the plans by direct manual intervention in the system. (*When planned or firm planned orders are "released to manufacture", usually by the planner in charge, the MRP system changes their status to that of being "open".) The open plan is also referred to as a scheduled receipt, which self obviously it is. The difference is purely semantic.	*Quality*
Open order	An order to buy or sell stock, which is good until cancelled by the client.	*Mining*
Open out	to drive headings out or commence working in the coal after sinking the shaft.	*Mining*
Open Pit	another name for opencast workings.	*Mining*
Open Pit Mine	Because of the danger associated with drifts, open pit mines are dug from the ground down and are never tunneled and are the most common form of hard rocking mining today.	*Mining*
Open pit	A mine that is entirely on surface. Also referred to as open-cut or open-cast mine.	*Mining*
Open Plan	See Open Order.	*Quality*
Open refrigeration unit	Refrigeration in cabinets (units) without covers or with flexible covers made of plastic or some other material, hung in strips or curtains (fringed material, usually plastic, that push aside like a bead curtain). Flexible covers stop the flow of warm air into the refrigerated space.	*Energy*
Open sequential design	A sequential trial where the decision to stop the trial rests on the size of effect in those studies, and there is no finite maximum number of participants in the study.	*Quality Engineering*
Open set	a 'cundie'; or an unfilled space between two packs. (Scot.).	*Mining*
Open Shop	a plant in which, in theory, workers are employed regardless of union affiliation.	*Industrial Relations*
Open Shop Drive	a campaign spearheaded by various major national employer associations to reduce union activity and to substitute the so-called "American Plan" which in effect was to keep the unions from obtaining any measure of strength within the plants.	*Industrial Relations*
Open Socket	A wire rope fitting that consists of a basket and two ears with a pin. See FITTING.	*Wire Rope & Cable*
Open State	The state a pinch valve is in when the tubing is not pinched.	*Mechanical*
Open System	Capable of automatic communication and information exchange without any proprietary or system specific, software links.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Open Systems	Open systems are customarily defined as those systems that can be supplied by hardware components from multiple vendors, and whose software can be operated from different platforms. They are opposite to closed or proprietary systems.	*Control Engineering*
Open Trade	a condition in a particular job area or occupation or trade which does not limit entry.	*Industrial Relations*
Open Union	a labor organization which all qualified employees are permitted to join.	*Industrial Relations*
Open wheel	Refers to any type of racecar that does not have enclosed wheels. Formula 1 and CART are open-wheel cars. Stock cars and sports cars are typically based more closely on production cars, with the wheels enclosed within fenders.	*NASCAR*
Opencast	the working of coal at the surface outcrop by quarrying methods; or underground, a cutting in stone, coal, &c., usually in the bottom of a place where a ridge has been passed over, and where it is less expensive to cut down the whole of the ridge to make a uniform roadway or rolleyway than to drive a stone drift through it.	*Mining*
Open-End Clause (Open-End Wage Clause)	a provision in a collective bargaining agreement which, although fixed for a period of time, is still open for adjustments of wages under certain conditions.	*Industrial Relations*
Opening out of seams	the commencement of longwall working.	*Mining*
Openings	short headings, between two main headings, used for ventilation.	*Mining*
Open-pit coal mining	essentially a combination of contour and area mining methods and is used to mine thick, steeply inclined coalbeds. The overburden is removed by power shovels and trucks.	*Energy*
Operable capacity	The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.	*Energy*
Operable generators/units	Electric generators or generating units that are available to provide power to the grid or generating units that have been providing power to the grid but are temporarily shut down. This includes units in standby status, units out of service for an indefinite period, and new units that have their construction complete and are ready to provide test generation. A nuclear unit is operable once it receives its Full Power Operating License.	*Energy*
Operable nuclear unit (foreign)	A nuclear generating unit outside the United States that generates electricity for a grid.	*Energy*
Operable nuclear unit (U.S.)	A U.S. nuclear generating unit that has completed low-power testing and is in possession of a full-power operating license issued by the Nuclear Regulatory Commission.	*Energy*
Operable refineries	Refineries that were in one of the following three categories at the beginning of a given year in operation; not in operation and not under active repair, but capable of being placed into operation within 30 days; or not in operation, but under active repair that could be completed within 90 days.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Operable unit	A unit available to provide electric power to the grid. See definition for operating unit.	*Energy*
Operable utilization rate	Represents the use of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.	*Energy*
Operated	Exercised management responsibility for the day-to-day operations of natural gas production, gathering, treating, processing, transportation, storage, and/or distribution facilities and/or a synthetic natural gas plant.	*Energy*
Operated Contact Position	The position to which the contacts move when the plunger is traveled to the operating point or into the overtravel range.	*Electrical Engineering*
Operating band	The range of pressures above and below the operating pressure within which it is desired to keep the supply output.	*Mechanical, Process, and Operations*
Operating capacity	The component of operable capacity that is in operation at the beginning of the period.	*Energy*
Operating Characteristic	The probabilities of acceptance of incoming lots of parts of various quality levels, resulting from the employment of a given sample plan. The operating characteristics of a plan can be handily illustrated as a curve - see OC Curve. OC curves were at one time termed "probability of acceptance curves".	*Quality*
Operating Characteristics of a Switch	The commonly specified force, torque and linear or angular travel properties of a switch. Examples: operating or release force, operating point, differential, overtravel.	*Electrical Engineering*
Operating Conditions (such as ambient temperature, ambient pressure, vibration, etc.)	to which a device is subject, but not including the variable measured by the device.	*Process Control*
Operating Conditions, Normal	The range of operating conditions within which a device is designed to operate, and under which operating influences are usually stated.	*Process Control*
Operating Content	The Operational Situation Within Which An Asset Operates. For Example, Is It A Stand-Alone Piece Of Plant, Or Is It One Of A Duty-Standby Pair? Is It Part Of A Batch Manufacturing Process Or A Continuous Production Process? What Is The Impact Of Failure Of This Item Of Equipment On The Remainder Of The Production Process? The Operating Context Has Enormous Influence Over The Choice Of Appropriate Equipment Maintenance Strategies For Any Asset.	*Plant Engineering*
Operating day	A normal business day. Days when a company conducts business due to emergencies or other unexpected events are not included.	*Energy*
Operating equipment efficiency or effectiveness (OEE)	The percentage of time that equipment, when running or required for production, is producing good-quality products at an acceptable rate. It is the product of three ratios, availability, performance and quality. OEE equals machine availability as a percentage of scheduled uptime x quality yield percentage of all products for a given line x percentage of optimal production rate at which equipment operates.	*Quality*
Operating expenses	Segment expenses related both to revenue from sales to unaffiliated customers and revenue from intersegment sales or transfers, excluding loss on disposition of property, plant, and equipment; interest expenses and financial charges; foreign currency translation effects; minority interest; and income taxes.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Operating Force	The force which must be applied to the plunger to cause the moving contact to snap from the normal contact position to the operated contact position.	*Electrical Engineering*
Operating Hours	The (accumulated) length of time that an item of equipment is actually operating.	*Maintenance*
Operating income	Operating revenues less operating expenses. Excludes items of other revenue and expense, such as equity in earnings of unconsolidated affiliates, dividends, interest income and expense, income taxes, extraordinary items, and cumulative effects of accounting changes.	*Energy*
Operating Mode	Refers to the condition of the photosensor (dark or light illuminated) that energizes output. A mode selector switch determines the operating mode.	*Electrical Engineering*
Operating Point	That position of the plunger at which the contacts snap from the normal contact position to the operated contact position.	*Electrical Engineering*
Operating Pressure	The pressure at which a system is normally operated.	*Mechanical, Process, and Operations*
Operating revenues	Segment revenues both from sales to unaffiliated customers (i.e., revenue from customers outside the enterprise as reported in the company's consolidated income statement) and from intersegment sales or transfers, if any, of product and services similar to those sold to unaffiliated customers, excluding equity in earnings of unconsolidated affiliates; dividend and interest income; gain on disposition of property, plant, and equipment; and foreign currency translation effects.	*Energy*
Operating specifications (OPSpecs)	Used here to describe the imprecision and inaccuracy that are allowable and the QC that is necessary to assure, at a stated level, that a defined quality requirement will be achieved in routine operation.	*Quality*
Operating subsidiary	Company that operates a coal mining operation and is owned by another company (i.e., the parent company).	*Energy*
Operating System	A collection of programs that controls the overall operation of a computer and performs such tasks as assigning places in memory to programs and data, processing interrupts, scheduling jobs and controlling the overall input/output of the system.	*General*
Operating System	A collection of programs that controls the overall operation of a computer and performs such tasks as assigning places in memory to programs and data, processing interrupts, scheduling jobs and controlling the overall input/output of the system.	*Electronic Process*
Operating Temperature	The actual range over which sensors can be operated. Usage outside the temperature limits will result in loss of stability, change in operate point and possible permanent damage to the sensor. Nominal sensing distance is determined at 25 C.	*Electrical Engineering*
Operating time	The time required for a power operator to stroke the valve from the full open to full closed position, or vice-versa.	*Mechanical*
Operating unit	A unit that is in operation at the beginning of the reporting period.	*Energy*
Operating utilization rate	Represents the use of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Operation and Maintenance Expenses	Costs that relate to the normal operating, maintenance and administrative activities of a business.	*Energy*
Operation Compression	In order to reduce the leadtime of a multi-operation job, the job's wait and move activities may be controlled by a colored ticket system. For example, a red ticket may indicate the job is to be moved to the head of the queue, and given priority by shop floor materials handling staff. When the job is back on schedule, the ticket should be removed. The degree of catch-up to be expected must be estimated by a supervisor. The term is synonymous with window scheduling and, more correctly, interoperation time compression.	*Quality*
Operation Overlapping	In order to reduce the leadtime of a job involving the processing of many components, it may be possible to send some of the completed components ahead to the next operation before the first operation has finished, so that a start can be made on them. If the duration of the first operation is shorter than that of the second, calculation of the savings in leadtime is straightforward. If the first operation is longer than the second, however, calculation of the point at which to send the units ahead is slightly complex, since it is desirable that the arrival of the final units sent over should be synchronized with the completion of the units previously sent ahead to the second operation.	*Quality*
Operation Splitting	When a number of components are to be processed by a machine operation, the leadtime required to do so may be halved if 50% of the components are able to be processed by a second alternative machine. (Naturally, the operation splitting between the two machines requires that a second operator should be available, and a second set of tools.) It is noted that since there are now two works orders, each for half the original amount, planned quantities in the planning system must be corrected and an additional set of shop floor paperwork generated. It is also noted that a second set-up is required, casting doubt over the economics of splitting an operation between three machines. See also Split Batch.	*Quality*
Operational amplifier	The ideal op amp is an amplifier with infinite input impedance, infinite open-loop gain, zero output impedance, infinite bandwidth, and zero noise. It has positive and negative inputs which allow circuits that use feedback to achieve a wide range of functions.	*Electrical Engineering*
Operational amplifier	The ideal op amp is an amplifier with infinite input impedance, infinite open-loop gain, zero output impedance, infinite bandwidth, and zero noise. It has positive and negative inputs which allow circuits that use feedback to achieve a wide range of functions.	*Electrical Engineering*
Operational Consequences	A Failure Has Operational Consequences If It Has A Direct Adverse Impact On Operational Capability (Lost Production, Increased Production Costs, Loss Of Product Quality, Or Reduced Customer Service)	*Plant Engineering*
Operational Efficiency	Used In The Calculation Of Overall Equipment Effectiveness. The Actual Output Produced From An Asset In A Given Time Period Divided By The Output That Would Have Been Produced From That Asset In That Period, Had It Produced At Its Rated Capacity. Normally Expressed As A Percentage.	*Plant Engineering*
Operational Environment	The aggregate of all external and internal conditions either natural or man-made that influences the form, operational performance, reliability or survival of a system.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Operational environment	The aggregate of all external and internal conditions (such as temperature, humidity, radiation, magnetic and electric fields, shock vibration, etc.) either natural or man made, or self-induced, that influences the form, operational performance, reliability or survival of an item.	*Reliability Engineering*
Operational Equipment Asset Management (OEAM)	A comprehensive, fully integrated strategy, process, and culture used to gain the greatest lifetime effectiveness, value profitability, and return from assets.	*Reliability Engineering*
Operational Limit	The extremes beyond which a system is not expected to operate normally.	*Reliability Engineering*
Operational pH	The determination of sample pH by relating to pH measurements in a primary standard solution. This relationship assumes that electrode errors such as sensitivity and changes in asymmetry potential can be disregarded or compensated for, provided the liquid junction potential remains constant between standard and sample.	*General*
Operations	How well is equipment operating; Values - operational (all function and data is available), degraded (equipment has partially failed with some function or data unavailable and some available), failed (equipment has failed with no function or data available).	*Aeronautical Engineering*
Operations Research	See OR.	*Quality*
Operative	a spy employed by an agency. He may be a "hooked man" or a professional spy.	*Industrial Relations*
Operative Limits	The range of operating conditions to which a device may be subjected without permanent impairment of operating characteristics.	*Process Control*
Operator	The company that has legal authority to drill wells and undertake the production of hydrocarbons that are found. The Operator is often part of a consortium and acts on behalf of this consortium.	*Petroleum Drilling*
Operator	A device which converts manual, hydraulic, pneumatic or electrical energy into mechanical motion to open and close a valve. See "Power Operator"; "EMO"; "GO"; "HWO"; "MGO"; "MO."	*Mechanical*
Operator Based Maintenance	A philosophy derived from TPM, whereby basic maintenance tasks are performed by operations/production personnel. Typically such activities include cleaning and subjective inspection. Sometimes referred to as Operator Maintenance.	*Maintenance*
Operator Driven Reliability (ODR)	SKF's Operator Driven Reliability is defined as a company-wide, team-based process, which augments classic operator duties to optimize the operation of industrial production plants. ODR impacts equipment effectiveness by contributing to optimal production and financial return on investment. ODR incorporates operational, technical, and financial metrics, which are balanced to best meet the business plan of the Industrial enterprise.	*Maintenance*
Operator	The company that has legal authority to drill wells and undertake the production of hydrocarbons that are found. The Operator is often part of a consortium and acts on behalf of this consortium.	*Petroleum Drilling*
Operator, gas plant	The person responsible for the management and day-to-day operation of one or more natural gas processing plants as of December 31 of the report year. The operator is generally a working-interest owner or a company under contract to the working-interest owner(s). Plants shut down during the report year are also to be considered "operated" as of December 31	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Operator, oil and/or gas well	The person responsible for the management and day-to-day operation of one or more crude oil and/or natural gas wells as of December 31 of the report year. The operator is generally a working-interest owner or a company under contract to the working-interest owner(s). Wells included are those that have proved reserves of crude oil, natural gas, and/or lease condensate in the reservoirs associated with them, whether or not they are producing. Wells abandoned during the report year are also to be considered "operated" as of December 31.	*Energy*
Operator-Driven Reliability	Also known as Total Productive Maintenance or autonomous maintenance. It is maintenance tasks that are performed by the machine operator/operations crew/production department rather than the maintenance staff. It generally includes tasks such as lubricating and tightening machine parts, and changing filters or belts.	*Reliability Engineering*
Opinion Survey	a procedure widely used by personnel managers to obtain information about the basic attitudes of various groups of employees within the organization.	*Industrial Relations*
O-plate	O-plate, the hutches were turned at the junction of roadways. (Scot.).	*Mining*
Opportunity Cost	The potential benefit that is given up when one alternative is selected over another.	*Procurement*
Opposed Spins	Electrons with different fourth quantum numbers	*Physics*
Oppressive Child Labor	this has been generally defined under the Fair Labor Standards Act as work by children under 16 in "nonexcepted occupations" or work by minors under 18 years of age in "hazardous occupations".	*Industrial Relations*
Oppressive Labor Practices	activities of trade unions which, in cases of early organization and frequently during periods of serious strikes, involve violence, sabotage, and other coercive activities which go beyond the persuasion and peaceful picketing allowed by law.	*Industrial Relations*
OPRG	Oxygenated fuels Program Reformulated Gasoline is reformulated gasoline that is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.	*Energy*
OPSpecs chart	A plot of the inaccuracy (on the y-axis) and the imprecision (on the x-axis) that are allowable for different QC procedures. The chart is prepared for a defined quality requirement and for a stated level of analytical quality assurance (AQA). Readily available in workbook format in the OPSpecs Manual and also easily prepared by the QC Validator computer program.	*Quality*
OPT	A manufacturing planning system originally written by Eliyahu Goldratt (see Theory of Constraints) for the resolution of planning difficulties in the presence of bottlenecked work centers. OPT first analyses master plan and material requirements in the normal way, and then, in a module called SPLIT, separates the products required by the plan into two lists, or divisions. (1) The first division comprises all those products for which the quantities required in the plan are in no way constrained or affected by the bottlenecks. These are known as "free products". Because they are unaffected by the bottlenecks, free products are scheduled and managed as they would be in a normal materials planning or MRP/CRP environment. (2) The second division comprises "bottlenecked products" - that is, products where the quantities required cannot be satisfied in full either because of direct capacity limitations of the equipment used in their manufacture or because components used in their manufacture cannot themselves be fully supplied because they (the components) are themselves	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	bottlenecked. The materials plans for the bottlenecked products, and all products directly or indirectly affected by them (i.e., because they are either ancestors or descendants of them), are calculated by the application of mixed integer programming, this being a variant of mathematical programming. What mathematical programming, or mathematical optimization, does is to produce a valid solution (i.e., here, a material plan), but a solution taking account of the stated capacity restrictions and in which there are consequently shortfalls in output. The shortfalls are (obviously) not decided arbitrarily. Instead, they are decided on by calculation, such that some particular, chosen measure of output (which we call an objective function) from the whole plan is optimized (i.e., either maximized or minimized). The module of OPT in which the optimization mathematics comes into play on the bottlenecked products' plans is called "The Brain of OPT". It is usually assumed in using OPT that the objective function that will be specified by the planner will be to maximize contribution (i.e., total sales revenue less cost). This, of course, is the fallacy at the centre of OPT: in the event of bottlenecked output, it must be Sales & Marketing who decide what is to be made and not made, based on the company's widest commercial interests, including an assessment of competing customer claims. Unfortunately, the application of OPT frequently falls into the hands of the company's IT experts, who are blinded by the power of mathematical optimization. The allocation of bottlenecked output cannot be made by a mathematical program based merely on maximum profit. See also Drum, Buffer, Rope for an OPT analogy. Note that the criticism of the allocation of output by mathematical means does not apply to output where Sales & Marketing - and customers - are indifferent as to the product mix, such as grades of petrol from a petroleum refinery.	
Optical and Instrument Workers of America; United (CIO)	charter withdrawn and locals become part of the International Union of Electrical, Radio, and Machine Workers (CIO), and the United Glass and Ceramic Workers of North America (CIO) in March 1954.	*Industrial Relations*
Optical Brightener	Substance that makes color appear brighter in the presence of sunlight and ultraviolet light.	*Chemistry*
Optical density	A method of expressing degree of contamination of a fluid by removal of contaminant by filtration and measuring change in optical transmission of the filter disc or fluid, or both.	*Mechanical, Process, and Operations*
Optical distortion	An apparent distortion of anything viewed through a transparent plastic, caused by the nonuniform optical character of the plastic, and not by its shape.	*Material Process*
Optical fiber	A small diameter glass fiber in which digital light pulses can be transmitted with low losses.	*Material Process*
Optical Isolation	Two networks which are connected only through an LED transmitter and photoelectric receiver with no electrical continuity between the two networks.	*Electrical*
Optical microscope	Instrument using visible light to produce images of the structure of materials at a scale greater than possible with the unaided eye.	*Material Process*
Optical Network Termination	ONT also called ONU (Optical Network Unit), refer to the consumer end equipment in an optical Fiber to the Home (FTTH) link. The ONT/ONU receives downstream data from the OLT (Optical Line Termination) through the passive optical splitters and provides video, voice, and broadband services to the consumer.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Optical Power	The power or intensity of the projected light available from a particular emitter; beam intensity.	*Electrical Engineering*
Optical property	Material characteristic relative to the nature of its interaction with light.	*Material Process*
Optical Throw	Least distance at which a scanner can read a bar code.	*Gears*
Optimization	The process of making a system as near to perfect or as effective as possible.	*Electrical*
Option	An agreement to purchase a property reached between the property vendor and some other party who wishes to explore the property further.	*Mining*
Option (on stock)	The right to buy or sell a share at a set price, regardless of market value.	*Mining*
Option Forecast	A term coined by John Proud in his book Master Scheduling to replace "production forecast (meaning (2))" used in two-level master scheduling.	*Quality*
Option Overplanning	See Over Planning.	*Quality*
Optional delivery commitment	A provision to allow the conditional purchase or sale of a specific quantity of material in addition to the firm quantity in the contract.	*Energy*
Options	A choice to buy or sell metal at an agreed-upon price for a specific date. You must pay a premium (See Put and Call).	*Metallurgy*
Options	Options are potential decisions over which a utility has a reasonable degree of control. One option might be to build a new coal-fired power plant; another option might be to refurbish an old power plant. Each option has one of more values to be specified. A specified option has a specified value such as year of implementation or size of plant. A plan is a set of specified options. A plan contains a set of decisions or commitments the utility can make, given the options available.	*Energy*
or	or	*Energy*
OR device	A control device which has its output in the logical 0 state if and only if all the control signals assume the logical 0 state.	*Mechanical, Process, and Operations*
OR Logic	An output is produced when any one or more inputs are present.	*Electrical Engineering*
or negative charge	A common ground rule in ionic compound formation.	*Material Process*
or normal mode	interference in measuring circuits.	*Process Control*
Oral Agreement (legal)	A legal contract between two parties that has been agreed verbally ("Oral contracts aren't worth the paper they're written on" - Samuel Goldwyn).	*Quality*
Orange Book, The	The name given to the book Production & Inventory Management in The Computer Age, by Oliver Wight, following its publication in 1974, on account of the color of its dust jacket. The Orange Book included the first published exposition of Closed-Loop MRP.	*Quality*
Orange Peel	An uneven surface texture of a plastic article or its finished coating somewhat resembles the surface of an orange, see Melt Fracture.	*Engineering Physics*
Orbit	The path of a shaft centerline during rotation. The orbit is usually observed on an oscilloscope connected to x- and y-axis displacement sensors. Sometimes called a Lissajous pattern.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Orbital shell	Set of electrons in a given orbital.	*Material Process*
Orbitals	Discrete energy levels in which electrons rotate around the nucleus of an atom	*Physics*
ORCB	See: Railway Conductors and Brakemen; Order of (AFL-CIO)	*Industrial Relations*
orchardist	A person who grows fruit trees.	*Agriculture*
ORD	octane requirement decrease	*Petro-Chemical Abbreviations*
Order	A ruling issued by a utility commission granting or denying an application in whole or in part. The order explains the basis for the decision, noting any dispute with the factual assertions of the applicant. Also applied to a final regulation of a utility commission.	*Energy*
Order (Customer)	See Customer Order.	*Quality*
Order fill rate	Annual sales orders filled completely divided by the total annual number of sales orders.	*Quality*
Order of Railroad Telegraphers; The (AFL-CIO)	See: Railway Telegraphers; The Order of (AFL-CIO)	*Industrial Relations*
Order of Railway Conductors and Brakesmen (Ind)	See: Railway Conductors and Brakemen; Order of (Ind)	*Industrial Relations*
Order of the Knights of St. Crispin	See: Knights of Saint Crispin	*Industrial Relations*
Order Point System (= Min/Max System)	A means of replenishing stock. A new replenishment of stock is requested from the supplier (or other replenishment source) when the company's current stock level falls to its calculated order point. The order point is calculated from three factors: (1) the forecast offtake of stock, expressed in units per time period (*); (2) the replenishment leadtime of a new delivery (*); and (3) the safety stock provided to cover forecast error. The order point is then calculated as the "lead-time demand", plus safety stock ... i.e., the offtake demand from stock forecast to occur during the replenishment leadtime, plus safety stock. Note that if the replenishment lot size is R, the average stock level is (R/2 + S). The order point system is also called the Min/Max System because the stock level swings between a minimum (the order point) and a maximum (R + S). If this is the meaning, however, the term is clearly wrong, since the minimum stock is S - the stock level S is reached after the new replenishment has been sent for and before it arrives. (* If the forecast is D units/month and the leadtime has been recorded in days, D must be converted to a forecast of so-many units per day by dividing the monthly forecast by the number of days in the month). Use of the order point system is valid only if the fall in stock level of the product concerned is gradual and even - as it may be, for example, for fuel or common consumables. It cannot be successfully applied in a materials planning environment, since falls in stock levels are lumpy due to lot sizing. It is also very difficult to see how it could be used in a practical way if multi-period sales forecasts were to be taken account of.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Order Policy	The rule governing when a replenishment stock order is to be generated. In materials planning, the order policy will be to generate a new planned order when the projected stock balance falls to zero. While the same policy prevails in the course of master schedule management, the order policy during master schedule formulation, by contrast, is to generate a new plan requirement when the projected stock falls below the product's safety level. Under the order point system of replenishment, the order policy is to generate a replenishment order when stock falls to the order point.	*Quality*
Order Processing	See Sales Order Processing.	*Quality*
Order Quantity	When a replenishment order is generated by the materials planning system, the size of the order to cover the net requirements for the material will be determined by a planning rule applying to the particular product concerned. The order quantity is the amount specified according to the rule (for example, lots of 1000 units, lots of 1500 units, lot-for-lot (qv)).	*Quality*
Order tracking	Control of a computer's data sampling rate, such that display of vibrations at multiples of the shaft's rotating speed (x1, x2, x3, etc.) are enhanced and more easily.	*Reliability Engineering*
Ordered solid solution	Solid solution in which the solute atoms are arranged in a regular pattern.	*Material Process*
Order-to-delivery leadtime	The time from when a specific customer order is received by the plant until product is delivered to customer, including any warehousing, cross-docking and transportation time.	*Quality*
Order-to-shipment leadtime	The time from when a specific order is released to the shop floor until that order is shipped to the customer, including any storage time in finished goods inventory.	*Quality*
Ordinal data	Data that are classified into more than two categories which have a natural order; for example, non-smokers, ex-smokers, light smokers and heavy smokers. Ordinal data are often reduced to two categories to simplify analysis and presentation, which may result in a considerable loss of information.	*Quality Engineering*
Ordinal Number	A number denoting order or rank, such as first, second, third ... as opposed to a cardinal number (1, 2, 3 etc.).	*Quality*
Ordinary Shares	See shares—an ordinary share issued, face value may merely be £1, but if the company prospers, as we know, its value will be many times higher than its face value.	*Quality*
Ore	A mixture of ore minerals and gangue from which at least one of the metals can be extracted at a profit.	*Mining*
Ore pass	Vertical or inclined passage for the downward transfer of ore connecting a level with the hoisting shaft or a lower level.	*Mining*
Ore Reserves	The calculated tonnage and grade of mineralization which can be extracted profitably; classified as possible, probable and proven according to the level of confidence that can be placed in the data.	*Mining*
Ore-bearing	Rock that has some type of ore present in its composition.	*Mining*
Orebody	A natural concentration of valuable material that can be extracted and sold at a profit.	*Mining*
Oregon AFL-CIO	the official publication is the Oregon AFL-CIO Reports issued monthly	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oregon Anti-Picketing Act	a law passed by Oregon in 1938 which was an extremely rigid and severe anti-picketing statute.	*Industrial Relations*
Oreshoot	The portion, or length, of a vein or other structure that carries sufficient valuable minerals to be extracted profitably.	*Mining*
Organic	a USDA standard that requires that crops are raised without the use of most conventional pesticides, petroleum or sewage-based fertilizers, or genetically engineered materials. There is an emphasis on using renewable resources and conservation. Animal products must come from animals that have been fed organic feed, had access to the outdoors, and received neither antibiotics nor growth hormones. Meat products must also be processed in an organic certified facility. The use of the term Organic is regulated by the USDA, and is only permissable by certified producers.	*Agriculture*
Organic Chemicals	Organic chemicals are based on carbon compounds.	*Chemical*
Organic contaminants	surface impurities (dirt, grease, oil, paint markings) that will hinder the formation of the galvanized coating, usually removed in the caustic cleaning stages of the galvanizing process	*Materials Process*
Organic content	The share of a substance that is of animal or plant origin.	*Energy*
Organic farming	producing foods without the use of laboratory made fertilizers, growth substances, or pesticides	*Agriculture*
Organic Light-Emitting Diode	An LED made with organic materials. The diodes in displays made with OLEDs emit light when a voltage is applied to them. The pixel diodes are selectively turned on or off to form images on the screen. This kind of display can be brighter and more efficient than current LCD displays.	*Electrical Engineering*
Organic Light-Emitting Diode	An LED made with organic materials. The diodes in displays made with OLEDs emit light when a voltage is applied to them. The pixel diodes are selectively turned on or off to form images on the screen. This kind of display can be brighter and more efficient than current LCD displays.	*Electrical Engineering*
Organic matter	the dead plants, animals and manure converted by earthworms and bacteria into humus	*Agriculture*
Organic maturation	The process of turning peat into coal.	*Mining*
Organic waste	Waste material of animal or plant origin.	*Energy*
Organism	Any individual animal, plant or bacterium.	*Chemistry*
Organization for Economic Cooperation and Development (OECD)	An international organization helping governments tackle the economic, social and governance challenges of a globalized economy. Its membership comprises about 30 member countries. With active relationships with some 70 other countries, non-governmental organizations (NGOs) and civil society, it has a global reach. For details about the organization, visit http://www.oecd.org.	*Energy*
Organization of the Petroleum Exporting Countries (OPEC)	Organization of Petroleum Exporting Countries.	*Energy*
Organization Structure	the organization structure is the general framework through which work is organized, responsibilities established, lines of communication, responsibility, and direction determined, and coordination of the activities so established as to permit the particular organization to accomplish its purposes.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Organizational Picketing	a form of picketing engaged in by a union whose purpose is to persuade the employer or organization to accept it as the bargaining agent for employees.	*Industrial Relations*
Organized Labor	a term frequently used to distinguish that segment of labor which is organized (unionized) rather than unorganized (non-union).	*Industrial Relations*
Organizers	in union parlance, organizers are individuals who are active in signing up employees in th union and getting workers in the plant to assist them in informing other employees of the union's goals and objectives.	*Industrial Relations*
Organizing	in union parlance, applies to the actual process used by organizers and their superiors in achieving their objectives.	*Industrial Relations*
ORI	octane requirement increase	*Petro-Chemical Abbreviations*
Orientation	Direction in reference to a coordinate frame.	*Aeronautical Engineering*
Orientation	The process of stretching a hot plastic article to align the molecules, thus altering mechanical properties. When the stretching force is applied in one direction, the process is called uniaxial orientation. When stretching is in two directions, the term biaxial origination is used. Upon reheating, an oriented film will shrink in the direction(s) of orientation. This property is useful in applications such as shrink packaging and for improving the strength of molded or extruded articles such as pipe and fibers.	*Engineering Physics*
Orientation order	Parallel or antiparallel alignment of structural units.	*Material Process*
Orifice	In extrusion, the opening in the die formed by the orifice bushing (ring) and mandrel.	*Engineering Physics*
Orifice plate	a flow measurement device for liquids or gases that uses a restrictive orifice plate consisting of a machined hole that produces a jet effect. Typically the orifice meter consists of a thin plate with a square edged, concentric, and circular orifice. The pressure drop of the jet effect across the orifice is proportional to the flow rate. The pressure drop can be measured with a manometer or differential pressure gauge.	*Chemical*
Original cost	The initial amount of money spent to acquire an asset. It is equal to the price paid, or present value of the liability incurred, or fair value of stock issued, plus normal incidental costs necessary to put the asset into its initial use.	*Energy*
Original equipment manufacturer (OEM)	A company that provides the original design and materials for manufacture and engages in the assembly of vehicles. The OEM is directly responsible for manufacturing, marketing, and providing warranties for the finished product.	*Energy*
Original Equipment Manufacturer (OEM)	Manufacturers who produce an end product such as automobiles, machines or switchboards, incorporating components from sub-suppliers, such as ABB.	*Electrical*
Original equipment manufacturer vehicle	A vehicle produced and marketed by an original equipment manufacturer (OEM), including gasoline and diesel vehicles as well as alternative-fuel vehicles. A vehicle manufactured by an OEM but converted to an alternative-fuel vehicle before its initial delivery to an end-user (for example, through a contract between a conversion company and the OEM) is considered to be an OEM vehicle as long as that vehicle is still covered under the OEM's warranty.	*Energy*
Original study	See Primary study	*Quality Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Originating Site	The factory site producing Material M, as described under Multi-Site Netting - qv. See also Consuming Site.	*Quality*
O-Ring	Polyurethane bands polyurethane used to transmit drive power from roller to roller or spool to roller. (138-SP, 190-SP, 2514-SP)	*Manufacturing*
O-ring	An elastomeric or synthetic seal ring of circular cross section.	*General Mechanical*
Orogeny	A period of mountain-building characterized by the folding of a portion of the earth's crust.	*Mining*
Orra man	a spare hand, a man who needs to be found work for the shift. (Scot.).	*Mining*
Orthogonal Frequency Division Multiplexing	A method for multiplexing signals which divides the available bandwidth into a series of frequencies known as tones. Flarion uses the 5GHz channel and divides each channel into 400 discrete tones (each at slightly different frequency). Orthogonal tones do not interfere with each other when the peak of one tone corresponds with the null. All frequencies fade but the rapid switching, frequency-hopping technique is intended to allow more robust data service.	*Electrical Engineering*
Orthogonal	The dictionary definition of orthogonal is perpendicular, or right angled. However, in manufacturing or quality experiments, orthogonal entries in a matrix are entries said to be balanced. For example, consider three factors in an experiment, A, B and C, which can be set for experimental purposes either high (+) or low (-). There are eight ways of varying A, B and C in relation to each other, and the results of the eight experiments on having done so might be set out in a matrix as follows: Run ... A....B....C ..1 .....-....-.... - ..2.....+....-....- ..3.....-....+....- ..4..... +...+ ...- ..5.....- ...- ...+ ..6 .....+ ...- ...+ ..7 .....- ...+ ...+ ..8 .....+ ...+ ...+ ..Effect .? ....? ...? The matrix is an example of an orthogonal array—i.e., a balanced array. For example, if we observe Column C, we see that when C is -, factors A and B contain an equal number of plusses and minuses, so that the effects of A and B on C cancel. Similarly, we see that when C is +, factors A and B also cancel each other. The value of orthogonality in experimental design is that it eliminates bias and correlation. There are other orthogonal schemes besides the one shown here - for example, those due to Taguchi and to Plackett–Burman.	*Quality*
OS	An OS is an abbreviation for an Operating System which is the basic computer system which makes all computers function.	*Control Engineering*
OS&D	Overage, shortage and damage, as they may relate to the delivery of materials from a supplier (contrast OTIF).	*Quality*
OS&Y	Outside Screw & Yoke - A valve in which the fluid does not come in contact with the stem threads. The stem sealing elements is between the valve body and the stem threads.	*Mechanical*
OS&Y Outside Screw & Yoke	A valve design in which the stem threads are above the packing gland or outside the valve body and there is a yoke to support the top or outer end of the stem.	*General Mechanical*
OSA	On Shelf Availability - a common and obvious customer service goal, which must normally be qualified by such statements as "for 99% of all orders" or "non-available items supplied within 3 days" etc., (There is also the question of the consequences of non-availability.)	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oscar shovel	a large collier's shovel. Any man working with one was said to have been presented with an Oscar - the film award. (Mids.). –see also Pit pan.	*Mining*
Oscillation	Variation with time of a quantity such as force, stress, pressure, displacement, velocity, acceleration or jerk. Usually implies some regularity (as in sinusoidal or complex vibration).	*Reliability Engineering*
OSHA	Occupational Safety and Health Administration	*Petro-Chemical Abbreviations*
OSHA	Operation safety hazard analysis.	*Material Process*
OSHA-reportable incident rates	Should be calculated as the number of injuries (N) divided by total hours worked by all employees in a calendar year (EH) multiplied by 200,000 (base for 100 equivalent full-time employees working 40 hours per week, 50 weeks per year): (N divided by EH) x 200,000. A separate calculation must be made for more serious injuries and illnesses that result in employees taking time off from their jobs, being transferred to another job or doing lighter or restricted duties.	*Quality*
Ostler	a person responsible for the welfare of the colliery's horses. Also called a 'Horse fettler'	*Mining*
OTA	Office of Technology Assessment (DOE)	*Petro-Chemical Abbreviations*
OTAG	Ozone Transport Assessment Group	*Petro-Chemical Abbreviations*
OTAQ	Office of Transportation and Air Quality (US EPA)	*Petro-Chemical Abbreviations*
OTC	Ozone Transport Commission	*Petro-Chemical Abbreviations*
OTCR	On-Time delivery performance to Customer Request date ... in effect, the same as OTIF, qv.	*Quality*
OTEC	See Ocean Thermal Energy Conversion.	*Energy*
OTED	One Touch Exchange of Die - the goal of accomplishing a machine changeover in 100 seconds or less (see also SMED).	*Quality*
Other	The "other" category is defined as representing electricity consumers not elsewhere classified. This category includes public street and highway lighting service, public authority service to public authorities, railroad and railway service, and interdepartmental services.	*Energy*
Other +20 color, Saybolt minimum	other +20 color, Saybolt minimum.	*Energy*
Other capital costs	Costs for items or activities not included elsewhere under capital-cost tabulations, such as for and decommissioning, dismantling, and reclamation.	*Energy*
Other demand-side management (DSM) assistance programs	A DSM program assistance that includes alternative-rate, fuel-switching, and any other DSM assistance programs that are offered to consumers to encourage their participation in DSM programs.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Other end users	For motor gasoline, all direct sales to end users other than those made through company outlets. For No. 2 distillate, all direct sales to end users other than residential, commercial/institutional, industrial sales, and sales through company outlets. Included in the "other end users" category are sales to utilities and agricultural users.	*Energy*
Other energy operations	Energy operations not included under Petroleum or Coal. "Other energy" includes nuclear, oil shale, tar sands, coal liquefaction and gasification, geothermal, solar, and other forms of on conventional energy.	*Energy*
Other Film Resins	Other resins are used, either singly or as a blend in film products. These include polyvinylidene chloride (PVDC), ethylene vinyl alcohol (EVOH), nylon, and ethylene vinyl acetate (EVA). Properties: The properties exhibited will depend on the type or mix of resins used. PVDC has excellent moisture and gas barrier properties. EVOH also has great gas-barrier properties, but is often co-extruded with PE films to improve its moisture resistance. Nylon, with a relatively high melting point, is sometimes used in microwavable products. It also has good gas resistance. EVA offers excellent adhesion, and has good heat-sealing properties. Applications: PVDC is sold as a household wrap. It is also commonly laminated or co-extruded with other films to improve barrier properties. EVOH is commonly used in modified atmosphere packaging (where a special atmosphere is required inside the package to preserve the contents). Nylon films are often used to package cheese because they won't let oxygen in, but will allow carbon dioxide to escape out of the wrapping, thus giving the product a longer shelf life. EVA is often used in combination with other resins for bag-in-a-box applications, and is used to wrap meat, poultry and ice.	*Engineering Physics*
Other finished	Motor gasoline not included in the oxygenated or reformulated gasoline categories.	*Energy*
Other gas	Includes manufactured gas, coke-oven gas, blast-furnace gas, and refinery gas. Manufactured gas is obtained by distillation of coal, by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke.	*Energy*
Other generation	Electricity originating from these sources biomass, fuel cells, geothermal heat, solar power, waste, wind, and wood.	*Energy*
Other Hydrocarbons	Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite. Excludes natural gas used for fuel or hydrogen feedstock.	*Energy*
Other industrial plant	Industrial users, not including coke plants, engaged in the mechanical or chemical transformation of materials or substances into new products (manufacturing); and companies engaged in the agriculture, mining, or construction industries.	*Energy*
Other load management	Demand-Side Management (DSM) program other than Direct Load Control and Interruptible Load that limits or shifts peak load from on-peak to off-peak time periods. It includes technologies that primarily shift all or part of a load from one time-of-day to another and secondarily may have an impact on energy consumption. Examples include space heating and water heating storage systems, cool storage systems, and load limiting devices in energy management systems. This category also includes programs that aggressively promote time-of-use rates and other innovative rates such as real time pricing. These rates are intended to reduce consumer bills and shift hours of operation of equipment from on-peak to off-peak periods through the application of time-differentiated rates.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Other oils equal to or greater than 401 degrees Fahrenheit	Oils with a boiling range equal to or greater than 401 degrees Fahrenheit that are intended for use as a petrochemical feedstock.	*Energy*
Other operating costs	Costs for other items or activities not included elsewhere in operating-cost tabulations, but required to support the calculation of a cutoff grade for ore reserves estimation.	*Energy*
Other oxygenates	Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropylether (IPE) or n-propanol).	*Energy*
Other power producers	Independent power producers that generate electricity and cogeneration plants that are not included in the other industrial, coke and commercial sectors.	*Energy*
Other refiners	Refiners with a total refinery capacity in the United States and its possessions of less than 275,000 barrels per day as of January 1, 1982.	*Energy*
Other service to public authorities	Electricity supplied to municipalities, divisions or agencies of state or Federal governments, under special contracts or agreements or service classifications applicable only to public authorities.	*Energy*
Other single-unit truck	A motor vehicle consisting primarily of a single motorized device with more than two axles or more than four tires.	*Energy*
Other supply contracts	Any contracted gas supply other than owned reserves, producer-contracted reserves, and interstate pipeline purchases that are used for acts and services for which the company has received certificate authorization from FERC. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are included with other supply contracts.	*Energy*
Other tests	include the determination of the ash softening temperature, the ash fusion temperature (the temperature at which the ash forms clinkers or slag), the free swelling index (a guide to a coal's coking characteristics), the Gray King test (which determines the suitability of coal for making coke), and the Hardgrove grindability index (a measure of the ease with which coal can be pulverized). In a petrographic analysis, thin sections of coal or highly polished blocks of coal are studied with a microscope to determine the physical composition, both for scientific purposes and for estimating the rank and coking potential.	*Energy*
Other trucks/vans	Those trucks and vans that weigh more than 8,500 lbs GVW.	*Energy*
Other unavailable capability	Net capability of main generating units that are unavailable for load for reasons other than full-forced outage or scheduled maintenance. Legal restrictions or other causes make these units unavailable.	*Energy*
OTIF	Relating to the delivery of goods from a supplier - on-time, in full. The presumption must also be that the delivery is 100% conforming to quality requirements—contrast OS&D! OTIF is but one of many possible customer service targets.	*Quality*
Out break coal	an old term for the outcrop of a coal seam.	*Mining*
Out stroke	the privilege of breaking through a barrier and working or transporting coal from an adjoining royalty or mine. (N. East).	*Mining*
Outage	The period during which a generating unit, transmission line, or other facility is out of service.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Outage	Time during which service is unavailable from a generating unit, transmission line, or other facility.	*Energy*
Outboard Rotor	A two-journal rotor which has its center of gravity between the journals.	*General Engineering*
Outburst	a sudden inrush of water or gas. -see Feeder. In the case of a gas outburst, often, large quantities of fine coal are forced out.	*Mining*
Outby; outbye	Nearer to the shaft, and hence farther from the working face. Toward the mine entrance. The opposite of inby.	*Mining*
Out-bye, Outbye	the direction from the workings out of the mine towards the shaft/s. The opposite of 'in-bye'.	*Mining*
Outcome	A component of a participant's clinical and functional status after an intervention has been applied, that is used to assess the effectiveness of an intervention. See also: Primary outcome, Secondary outcome Also called: Endpoint	*Quality Engineering*
Outcome variable	See Dependent variable	*Quality Engineering*
Outcrop	the place where rock beds or coal seams appear at the surface. -see also Basset, Basset edge and Crop.	*Mining*
Outcrop	An exposure of rock or mineral deposit that can be seen on surface, that is, not covered by soil or water.	*Mining*
Outcropping	working the coal at outcrop, often illegally.	*Mining*
Outer Continental Shelf	Offshore Federal domain.	*Energy*
Outer marker	Marker beacon located 5-7mi from the end of the runway; See Also: marker beacon.	*Aeronautical Engineering*
Outer marker	Marker beacon located 5-7mi from the end of the runway; See Also - marker beacon.	*Aeronautical Engineering*
Outer seat ring	The outer metal piece of a two-piece seat ring unit. See "Inner Seat Ring."	*Mechanical*
outer shell of a brake	The brake shoes press against the drum to slow or stop drum and wheel rotation for braking.	*Mechanical Engineering*
Outer Wires	Outer layer of wires.	*Wire Rope & Cable*
Outlaw Strike	a work stoppage or strike which has been forbidden by law or has been called without union authorization.	*Industrial Relations*
Outlet Connection	A connection on a Run. Used to inlet or outlet the flow fluid or gas into a Choke or Manifold.	*Petroleum Engineering*
Outlier	A data point that is greater than three standard deviations from the mean (to appreciate the "mean", see variance). See also Black Swan.	*Quality*
Outliers	Discrepant values. Values which do not agree with the pattern of the majority of other values. They may be due to mistakes or they may represent a significant finding. When outliers are suspected, it is best to calculate the data set with and without the outlier values. If their presence changes the conclusion drawn from the data, then the experimental results are not reliable. It is possible to apply a wide variety of statistical tests or rules for purposes of rejecting outliers, however, the choice of rules is always subject to argument. It is always better to inspect the data as it is collected during the experiment, identify discrepant values, and determine their cause.	*Quality Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Out-of-Line Rates	in operations which bear incentive or piece rates, it is possible for an individual rate to allow more than normal earnings for the particular job.	*Industrial Relations*
Out-of-Work Benefits	prior to the development of unemployment insurance it had been the practice of some unions to try to establish funds to assist members during periods of unemployment.	*Industrial Relations*
Output	The electrical signal which is produced by an applied input to the transducer.	*Electrical*
Output	The useful energy delivered by a circuit or device. Can mean energy produced at the output terminals of an amplifier: a source of energy.	*Electrical Engineering*
Output Impedance	The resistance as measured on the output terminals of a pressure transducer.	*Electrical*
Output Impedance	The impedance across the output terminals of a sensor presented by the sensor to the associated external circuitry.	*Electrical Engineering*
Output Noise	The RMS, peak-to-peak (as specified) AC component of a transducer's DC output in the absence of a measurand variation.	*Electrical*
Output Noise	The RMS peak: to: peak (as specified) AC component of a sensors DC output in the absence of a change in input pressure.	*Electrical Engineering*
Output Per Man-Hour	a measure of productivity established primarily by the U.S. Government and compiled regularly by the U.S. Bureau of Labor Statistics.	*Industrial Relations*
Output state	The final state of hydraulic amplification used in the servovalve. OXIDATION - The interaction of air and moisture on the surface of a substance.	*Mechanical, Process, and Operations*
Output to Input Ratio	The ratio between the sensed current and the output current of the amplifier.	*Electrical Engineering*
Output, Restriction of	See: Restriction of Output	*Industrial Relations*
Outset	the height of the pit head landing above the mouth of the shaft. (N. East); or a brick or stone walling built up within the tubbing in a shaft.	*Mining*
Outside Agitators	a term frequently applied to union organizers in early American labor history during organizational campaigns in anti-union or strongly non-union communities.	*Industrial Relations*
Outside Air Temperature (OAT)	The temperature just outside the aircraft; Symbols: T; Typical Units: deg; Dimensions: Temperature.	*Aeronautical Engineering*
Outside In	The quality view of a system, whereby basic procedures are considered broadly from the viewpoint of the customer.	*Quality*
Outside-mounted Seal	A mechanical seal with its seal head mounted outside the seal chamber that holds the fluid to be sealed. Outside seals have the pumped fluid's pressure at their I.D.	*Lubrication*
Outsourcing	Shifting of production work or support activities to an outside (third-party) supplier.	*Maintenance*
Outwan, outwards	towards the shaft. (Scot.).	*Mining*
Outwash	Stratified sand and gravel removed or washed out from a glacier by meltwater streams and deposited in front of, or beyond the end moraine, or margin of an active glacier. The coarser material is deposited nearer to the ice.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oven	An appliance that is an enclosed compartment supplied with heat and used for cooking food. Toaster ovens are not considered ovens. The range stove top or burners and the oven are considered two separate appliances, although they are often purchased as one appliance.	*Energy*
Oven Cleaner	Usually a liquid in an aerosol container or pump-actuated bottle. To clean a cold oven a strong chemical is necessary. Usually the product is thick or foamy to promote clinging to vertical surfaces.	*Chemistry*
Over Cuts	where two lines intersect bordering the perimeter of an opening that is being saw cut. These overcuts are caused by the radius of the saw blade. In order for a blade to cut all the way through a wall or slab at the corners, there must be an overcut.	*Petroleum Drilling*
Over Planning	In two-level master scheduling (see Master Scheduling and also the Final Assembly Schedule), the quantities of the various option variants which are master scheduled are determined by forecasts derived from option preferences specified by customers in the past. In a particular month, however, the variants specified in actual orders are likely to differ from the forecast split. For example, the split of option variants may be forecast to be 50:50 between the red and blue types. In a particular month, it is expected to sell 500 assemblies. Instead of selling 250 blue types, however, the company is asked for 305 blues and 195 reds. An option overplan, therefore, is a safety stock placed on an option variant to help ensure that there are high levels of option availability even though the split of actual customer orders is different from forecast. In effect, option overplanning is the providing of safety stock of option variants. The overplan amounts should be set by calculation, not by hunch and guess. A useful quick calculation is available, however, avoiding the complexity of normal safety stock mathematics, and applicable if the number of super items to be final assembled is 50 or more: Thus: Safety Stock = k SQRT (S + ui x (1 - ui)), where k = the safety factor, S = the number of super items, and ui = the super bill usage of the ith option variant.	*Quality*
Over the entire area of abutting surfaces	over the entire area of abutting surfaces	*Maintenance and Repair*
Over Trading	A company is said to be over trading when the volume and extent of the business it has taken on is excessively large in relation to the capital it has to meet it. In these circumstances, the company may place excessive reliance on loan capital, overdrafts and supplier credit.	*Quality*
Overaging	Continuation of the age hardening process so long that the precipitates coalesce into a coarse dispersion, becoming a less effective dislocation barrier and leading to a drop in hardness.	*Material Process*
Overall Equipment Effectiveness	A Term Initially Coined In Connection With Total Productive Maintenance. It Provides A Measure Of Overall Asset Productivity. Is Generally Expressed As A Percentage, And Can Be Calculated By Multiplying Availability By Utilization By Operational Efficiency By Quality Rate.	*Management*
Overall Equipment Effectiveness (OEE)	A term initially coined in connection with Total Productive Maintenance (TPM). It provides a measure of overall asset productivity, and is generally expressed as a percentage. OEE is calculated by multiplying Availability, Operational Efficiency, and Quality Rate. For example: OEE = 90% availability * 80% operational efficiency * 90% quality performance = 65%. To get an idea of total efficiency, the overall equipment effectiveness is multiplied with system utilization.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Overall Length	(OAL) The dimension outside of pulley to outside of pulley including belting or lagging, of any conveyor lengthwise.	*Manufacturing*
Overall tower dimensions	(a) Width: overall dimensions perpendicular to the tower's longitudinal axis; (b) length: overall dimension parallel to the air inlet louvers and the longitudinal axis; (c) total height: distance from basin curb to top of fan stack. Dimensions measured in feet.	*Facility Engineering*
Overall Width	(OAW) The dimension outside to outside of frame rails.	*Manufacturing*
Overboard Water	Another name for produced water or brine produced from oil and gas wells.	*Petroleum Drilling*
Overburden	Any material, consolidated or unconsolidated, that overlies a coal deposit.	*Energy*
Overburden ratio	Overburden ratio refers to the amount of overburden that must be removed to excavate a given quantity of coal. It is commonly expressed in cubic yards per ton of coal, but is sometimes expressed as a ratio comparing the thickness of the overburden with the thickness of the coalbed.	*Energy*
Overburden	Layers of soil and rock covering a coal seam. Overburden is removed prior to surface mining and replaced after the coal is taken from the seam.	*Mining*
Overcast	a ventilation air-crossing where the return airway is bridged over the intake airway and sealed to prevent short circuiting of the air flow, sometimes called an 'over crossing', 'overgate', 'overpass' or 'air bridge'. -see also Air-crossing.	*Mining*
Overcast (undercast)	Enclosed airway which permits one air current to pass over (under) another without interruption.	*Mining*
Overcure	A foggy surface resulting from too long a cure.	*Material Process*
Overcut	to cut by machine at or near roof level in a seam.	*Mining*
Overhaul	A comprehensive examination and restoration of an asset to an acceptable condition.	*Maintenance*
Overhead Position	The position of welding performed from the underside of the joint.	*Maintenance and Repair*
Overhead Drive	A drive assembly mounted over a conveyor which allows clearance for the product.	*Manufacturing*
Overlap	In pay structures and grading, overlap is the percentage of the scale of the bottom of a higher pay grade also covered by the scale at the top of the pay grade immediately lower in the pay structure.	*Quality*
Overlap, a reversed fault	Overlap, a reversed fault.	*Mining*
Overlapping surfaces	created when one area of a metal structure is covered by the surface of another metal structure	*Materials Process*
Overlay	A form of metal weld deposit covering a base metal surface. Typically a Corrosion Resistant Alloy (CRA) to prevent corrosion caused by well fluids (for example containing H2S).	*Petroleum Engineering*
Overload	The flow of electricity into conductors or devices when normal load exceeds capacity.	*Energy*
Overlooker or Overman	a mine official, between a deputy and undermanager, usually in charge of production in part of the mine, a shift or two or more deputied districts.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Overpass, -see Overcast	Overpass, -see Overcast.	*Mining*
Overpressure	The maximum specified pressure which may be applied to the sensing element of a sensor without causing a permanent change in the output characteristics.	*Electrical Engineering*
Overrange of a system or element	any excess value of the input signal above its upper range-value or below its lower range-value.	*Process Control*
Override	To alter selection made automatically by software.	*Aeronautical Engineering*
Overriding royalty	A royalty interest, in addition to the basic royalty, created out of the working interest; it is, therefore, limited in its duration to the life of the lease under which it is created.	*Energy*
Overrope	an endless haulage but with the rope running above the tubs (S. Staffs.).	*Mining*
Overrun Device	In mechanical safety, a device used in conjunction with a guard designed to prevent access to machinery parts which are moving by their own inertia after the power has been switched off. Examples are rotation sensing devices, timing devices and certain braking systems.	*Quality*
Overset, props set at an angle where the axis of the prop is on the gob side of the perpendicular	Overset, props set at an angle where the axis of the prop is on the gob side of the perpendicular.	*Mining*
Overshoot	The number of degrees by which a process exceeds the set point temperature when coming up to the set point temperature.	*Electrical*
Oversteer	See Loose.	*NASCAR*
Overtapping	Tapping of a thread following a plating operation so that the thread tolerances comply within specification allowing the internal and external threads to assemble. It is normal practice to overtap the internal rather than the external thread.	*Maintenance*
Overtapping	cutting female fastener threads of nuts or threaded holes larger than standard to account for the increased diameter of the galvanized (male) mating part	*Materials Process*
Overtime	the hours worked by an employee in excess of the standard established either by law, by the collective bargaining agreement, or by company policy.	*Industrial Relations*
Overtime Pay	the payment of a premium for hours generally worked in excess of eight hours in one day or 40 in one week.	*Industrial Relations*
Overtime Premium Pay	the term is synonymous with the phrase "actual overtime rate;" it denotes the payment of wages at a premium rate for hours worked beyond or outside the regular hours in the establishment- a arte set up either by law, industry practice, collective bargaining agreement, or employer policy.	*Industrial Relations*
Overtime Rate	the wage rates actually set by contract, by statute, or by company policy for hours work in excess of or outside the regularly scheduled work day, work week, shift, etc.	*Industrial Relations*
Overtime Work	the actual hours put in by an employee in excess of his regularly scheduled work time.	*Industrial Relations*
Overtime-on-Overtime	under the provisions of the Fair Labor Standards Act employees were entitled to receive overtime pay for hours in excess of 40 in one week.	*Industrial Relations*

Term	Definition	*Industry*
Overtravel	An operating characteristic of a switch, overtravel is the distance through which the plunger moves when traveled from the operating point to the full overtravel point. As a characteristic of the actuation applied to the switch, overtravel is the distance the plunger is driven past the operating point.	*Electrical Engineering*
Overturned	Where the oldest sedimentary rock beds are lying on top of a younger beds.	*Mining*
Overview, systematic	See Systematic review (synonym: systematic overview)	*Quality Engineering*
Overvoltage	A positive or negative change in electrochemical potential relative to a corrosion potential.	*Material Process*
Overvoltage Protection	Overvoltage Protector (OVP) refers to a circuit that protects downstream circuitry from damage due to excessive voltage. An OVP monitors the DC voltage coming from an external power source, such as an off-line power supply or a battery, and protects the rest of the connected circuitry using one of two methods: a crowbar clamp circuit or a series-connected switch.	*Electrical Engineering*
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Overwind	when the cage is raised too far above its landing level at the surface. A hooking device usually comes into operation to safely secure the cage.	*Mining*
Overwork	the limits on the physical or mental endurance of an individual in performing his job.	*Industrial Relations*
Overworkings	workings in seams above other current workings.	*Mining*
Oviposition	The act of depositing the eggs.	*Forestry*
Ovipositor	The egg-laying apparatus; the extended genitalia of a female insect.[1] Fin.Swe.	*Forestry*
Own Account	In distribution, a company's own fleet of vehicles.	*Quality*
Owned reserves	Any reserve of natural gas that the reporting company owns as a result of oil and gas leases, fee-mineral ownership, royalty reservations, or lease or royalty reservations and assignments committed to services under certificate authorizations by FERC. Company-owned recoverable natural gas in underground storage is classified as owned reserves.	*Energy*
Owned/rented	(As used in EIA's consumption surveys.) The relationship of a housing unit's occupants to the structure itself, not the land on which the structure is located. "Owned" means the owner or co-owner is a member of the household and the housing unit is either fully paid for or mortgaged. A household is classified "rented" even if the rent is paid by someone not living in the unit. "Rent-free" means the unit is not owned or being bought and no money is paid or contracted for rent. Such units are usually provided in exchange for services rendered or as an allowance or favor from a relative or friend not living in the unit. Unless shown separately, rent-free households are grouped with rented households.	*Energy*
Owner occupied	(As used in EIA's consumption surveys.) Having the owner or the owner's business represented at the site. A building is considered owner occupied if an employee or representative of the owner (such as a building engineer or	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	building manager) maintains office space in the building. Similarly, a chain store is considered owner occupied even though the actual owner may not be in the building but headquartered elsewhere. Other examples of the owner's business occupying a building include State-owned university buildings, elementary and secondary schools owned by a public school district, and a post office where the building is owned by the U.S. Postal Service.	
Owners equity	Interest of the owners in the assets of the business represented by capital contributions and retained earnings.	*Energy*
Ownership of building	(As used in EIA's consumption surveys.) The individual, agency, or organization that owns the building. For certain EIA consumption surveys, building ownership is grouped into the following categories Federal, State, or local government agency; a privately owned utility company; a church, synagogue, or other religious group; or any other type of individual or group.	*Energy*
Ownership (See Owned/rented.)	Ownership: (See Owned/rented.)	*Energy*
Ox	A male bovine. In some usages, the term implies a castrated male; but this isn't always the case.	*Agriculture*
Oxalyc acid (COOHCOOH 2H2O)	Colorless monoclinic crystals. A dibasic acid used in the production of alkyd resins, as an acid catalyst in polymerization reactions, and in the manufacture of dyes.	*Material Process*
OXCAT	oxidation catalyst	*Petro-Chemical Abbreviations*
Oxidation	The process of combining with oxygen. All petroleum products are subject to oxidation to some degree. The reaction increases with rise in temperature. Oxidation produces oil-insoluble oxidized materials, which result in viscosity increase and deposits. Occurs when oxygen attacks petroleum fluids. The process is accelerated by heat, light, metal catalysts and the presence of water, acids, or solid contaminants. It leads to increased viscosity and deposit formation.	*Lubrication*
Oxidation	To combine with oxygen. Slow oxidation is typified by the rusting of a metal.	*Chemistry*
Oxidation Inhibitor	A chemical additive that minimizes the formation of harmful acids and varnish forming compounds that form when a fluid is subjected to air at elevated temperatures.	*Lubrication*
Oxidation inhibitor	Substance added in small quantities to a petroleum product to increase its oxidation resistance, thereby lengthening its service or storage life; also called antioxidant.	*Mechanical, Process, and Operations*
Oxidation Stability	The resistance of lubricants to chemically react with oxygen. The absorption and reaction of oxygen may lead to deterioration of lubricants.	*Lubrication*
Oxidation	A chemical reaction caused by exposure to oxygen that results in a change in the chemical composition of a mineral.	*Mining*
Oxidation-reduction (redox)	a chemical reaction consisting of an oxidation reaction in which a substance loses or donates electrons, and a reduction reaction in which a substance gains or accepts electrons. Redox reactions are always coupled because free electrons cannot exist in solution and electrons must be conserved.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oxidative Degradation	Oxidative degradation is the reaction of oxygen (in air) with the fluid by a free radical mechanism to form larger molecules which end up as polymers or solids. These thicken the fluid and increase its viscosity. A more viscous fluid will be more difficult to pump, have poorer heat transfer characteristics as well as an increased chance of coke formation. Oxidation is also accompanied by an increase in the acidity (TAN) of the fluid. As with all chemical reactions, oxidation occurs more rapidly as the temperature is increased. At room temperature, the reaction rate is hardly measurable. However, it can become a factor in the life of the fluid in certain styles of heat transfer systems. At temperatures encountered in systems in use in the plastics extrusion and die casting industries, as an example, oxidation is the main cause of fluid degradation.	*Lubrication*
Oxide	Compound between an element metal(s) and oxygen.	*Material Process*
Oxide glass	Noncrystalline solid in which the predominant component(s) is (are) an oxide(s).	*Material Process*
Oxidize	To chemically transform a substance by combining it with oxygen.	*Energy*
Oxidized	to combine with oxygen; make into an oxide	*Materials Process*
Oxidizing	An environment or material which promotes oxidation.	*Paint and Coatings*
Oxidizing Flame	An oxyfuel gas flame having an oxidizing effect caused by excess oxygen.	*Maintenance and Repair*
Oxyacetylene Cutting	An oxygen-cutting process in which metals are severed by the chemical reaction of oxygen with the base metal at elevated temperatures. The necessary temperature is maintained by means of gas flames obtained from the combustion of acetylene with oxygen.	*Maintenance and Repair*
Oxyacetylene Welding	A gas welding process in which coalescence is produced by heating with a gas flame or flames obtained from the combustion of acetylene with oxygen, with or without the addition of filler metal.	*Maintenance and Repair*
Oxyfuel Gas Welding (OFGW)	A group of welding processes in which coalescence is produced by heating with a flame or flames obtained from the combustion of fuel gas with oxygen, with or without the application of pressure and with or without the use of filler metal.	*Maintenance and Repair*
Oxygen	Dissolved oxygen and high temperatures together form a highly corrosive element for the materials and equipment used in steam systems. In order to prevent corrosion, oxygen in the make-up water must be removed through the use of scavenger chemicals and/or deaeration towers.	*Industrial*
Oxygen concentration cell	Electrochemical cell in which the corrosion and associated electrical current are due to a difference in gaseous oxygen concentrations.	*Material Process*
Oxygen Cutting (OC)	A group of cutting processes used to sever or remove metals by means of the reaction of oxygen with the base metal at elevated temperatures. In the case of oxidation-resistant metals, the reaction is facilitated by use of a chemical flux or metal powder.	*Maintenance and Repair*
Oxygen (O2)	Gas used to support combustion of fuel gases in combustion thermal spray processes. Achieves much higher flame temperatures than using air.	*Paint and Coatings*
Oxygen Bomb Test	A test to determine the ability of conductors and insulations to withstand physical and electrical change when immersed in pure oxygen gas of specified temperature and pressure for a specified time.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Oxygen Gouging	An application of oxygen cutting in which a chamfer or groove is formed.	*Maintenance and Repair*
Oxygenate	An oxygen containing, ashless organic compound, such as alcohol or ether, that can be used as a fuel or fuel supplement.	*Lubrication*
Oxygenated Fuels	Fuels for internal combustion engines that contain oxygen combined in the molecule, e.g. alcohols, ethers and esters. Term also applies to blends of gasoline with oxygenates, e.g. Gasohol, which contains 10% by volume anhydrous ethanol in unleaded gasoline.	*Lubrication*
Oxygenated gasoline	Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. See Nonattainment area.	*Energy*
Oxygenated gasoline (includes Gasohol)	Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 1.8 percent or higher by weight. This includes gasohol irrespective of where it is consumed.	*Energy*
Oxygenates	Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Fuel ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.	*Energy*
Ozokerite	A natural hydrocarbon wax of some flexibility, having a melting point of 140 - 200 °F (54 - 93.33 °C).	*Material Process*
Ozone (O_3)	Colorless gas or dark blue liquid.	*Material Process*
Ozone	A molecule made up of three atoms of oxygen. Occurs naturally in the stratosphere and provides a protective layer shielding the Earth from harmful ultraviolet radiation. In the troposphere, it is a chemical oxidant, a greenhouse gas, and a major component of photochemical smog.	*Energy*
Ozone & CO Nonattainment Areas	Any area of the continental U.S. that does not meet the 1990 Clean Air Act requirements for carbon monoxide or ground-level ozone pollutants.	*Lubrication*
Ozone Depletion	Chemical destruction of the stratospheric ozone layer over and above natural processes.	*Chemical*
Ozone precursors	Chemical compounds, such as carbon monoxide, methane, non methane hydrocarbons, and nitrogen oxides, which in the presence of solar radiation react with other chemical compounds to form ozone.	*Energy*
P	P	*Forestry*
--P--	--P--	*Petroleum Drilling*
P & ID	Process and Instrumentation Diagram	*Control Engineering*
P Controller	P Controller - A controller which produces proportional control action only.	*Electrical Engineering*
P value	The probability (ranging from zero to one) that the results observed in a study (or results more extreme) could have occurred by chance if in reality the null hypothesis was true. In a meta-analysis, the P value for the overall effect assesses the overall statistical significance of the difference between the intervention groups, whilst the P value for the heterogeneity statistic assesses the statistical significance of differences between the effects observed in each study.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
P.H.	See: Prentice-Hall, Ic.	*Industrial Relations*
P.M.	See: Premium Money (Push Money)	*Industrial Relations*
P1	Used to designate Inlet Pressure.	*Industrial Engineering*
P2	Used to designate Outlet Pressure.	*Industrial Engineering*
Pace Setter	See: Pacers	*Industrial Relations*
Pacers	Employees who are exceptionally fast workers and are used by the employer to set norms or production standards in incentive or piece rate systems.	*Industrial Relations*
Pacific	Alaska, California, Hawaii, Oregon, and Washington.	*Energy*
Pacific Coast Marine Firemen, Oilers, Watertenders and Wipers Association	See: Seafarers' International Union of North America; Pacific Coast Marine Firemen, Oilers, Watertenders and Wipers Association (AFL-CIO)	*Industrial Relations*
Pack	a form of permanent roof support in mines consisting of mine debris surrounded by vertical dry stone walls completed tightly to the roof. Often packs are built in continuous strips, a system which is called "strip packing". The packs are usually 3 to 6 yards wide and extend from the face props back into the waste. They are often spaced 5 to 15 yards apart along the face. The rocks of the roof between the packs and behind the temporary supports are allowed to collapse. At some faces all the gob, goaf or waste is filled with debris and this is known as "solid packing". Most packs are built by hand, but some are built by the method known as "pneumatic packing". In this method crushed rock is blown by compressed air through pipes into the place to be packed. If water is added then this is known as "hydraulic packing or stowing".–see also Roadside pack, Walled pack, Checker pack, Cushion pack and Cross pack.	*Mining*
Pack Parburizing	See Carburising.	*Paint and Coatings*
Pack Train	Pack trains were used to transport the bare necessities to miners and loggers in the 19th century. They usually consisted of 5 or more horses or mules and a few men.	*Mining*
Pack wall	a pack built at each side of a gob road to support the roadway and stow away the waste from the ripping.	*Mining*
Package	the term "package" is designed to describe the total benefits which the parties agree to in collective bargaining, including wages and other cost or monetary items in the form of fringe benefits such as insurance, paid vacations, and sick leave.	*Industrial Relations*
Package Stop	Any of various devices, either manual or mechanical, used to stop flow on a conveyor	*Manufacturing*
Packaged air conditioning units	Usually mounted on the roof or on a slab beside the building. (These are known as self-contained units, or Direct Expansion (DX). They contain air conditioning equipment as well as fans, and may or may not include heating equipment.) These are self-contained units that contain the equipment that generates cool air and the equipment that distributes the cooled air. These units commonly consume natural gas or electricity. The units are mounted on the roof top, exposed to the elements. They typically blow cool air into the building through	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	duct work, but other types of distribution systems may exist. The units usually serve more than one room. There are often several units on the roof of a single building. Also known as Packaged Terminal Air Conditioners (PTAC). These packaged units are often constructed as a single unit for heating and for cooling.	
Packaged manrider	a system which embodies a train of vehicles constructed for the dual role of men-and-materials transport, running on conventional rails. The train is permanently attached to one end of an otherwise endless rope; the other end of the rope terminates at a rope reserve or storage drum which forms part of, and travels with, the train. The system was usually used in gate roads.	*Mining*
Packaged units	Units built and assembled at a factory and installed as a self-contained unit to heat or cool all or portions of a building. Packaged units are in contrast to engineer-specified units built up from individual components for use in a given building. Packaged Units can apply to heating equipment, cooling equipment, or combined heating and cooling equipment. Some types of electric packaged units are also called "Direct Expansion" or DX units.	*Energy*
Packers	the best quality stone used to build packs.	*Mining*
Packing	(See Filling).	*Facility Engineering*
Packing	The deformable sealing material inserted into a valve stem stuffing box, which, when compressed by a gland, provides a tight seal about the stem. See "Gland"; "Stuffing Box."	*Mechanical*
Packing Box	The chamber located in the bonnet that surrounds the stem and contains the packing and other stem-sealing components.	*Industrial Engineering*
Packing Follower	A part that transfers a mechanical load to the packing from the packing flange or nut.	*Industrial Engineering*
Packing gland	See "Gland."	*Mechanical*
Packing List	An itemized listing of package contents which is prepared by the shipper.	*Procurement*
Packinghouse Workers of America; United (AFL-CIO)	See: Packinghouse, Food and Allied Workers; United (AFL-CIO)	*Industrial Relations*
Packinghouse Workers; National Brotherhood of (Ind)	the union's official publication is the National Brotherhood News, issued at irregular times.	*Industrial Relations*
Packinghouse, Food and Allied Workers; United (AFL-CIO)	the organization was previously known as the United Packinghouse Workers of America.	*Industrial Relations*
Pack-Off Adaptor	Used in a wellhead below the Tubing Head (Tubing Spool) to adapt between flange sizes or pressure ratings and provide a seal around a secondary casing string.	*Petroleum Engineering*
Packout	Total amount of commodity that is packed.	*Agriculture*
PAD Districts or PADD	See Petroleum Administration for Defense Districts.	*Energy*
PADD	Petroleum Administration for Defense District	*Petro-Chemical Abbreviations*

Term	Definition	*Industry*
PADD 1 (East Coast)	PADD 1 (East Coast):	*Energy*
PADD 1A (New England)	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.	*Energy*
PADD 1B (Central Atlantic)	Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.	*Energy*
PADD 1C (Lower Atlantic)	Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia.	*Energy*
PADD 2 (Midwest)	Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.	*Energy*
PADD 3 (Gulf Coast)	Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.	*Energy*
PADD 4 (Rocky Mountain)	Colorado, Idaho, Montana, Utah, and Wyoming.	*Energy*
PADD 5 (West Coast)	Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington.	*Energy*
Paddle	In a gate of a lock or sluice, a panel that slides to permit the passage of water.	*Civil Engineering*
Paddle	In a gate of a lock or sluice, a panel that slides to permit the passage of water.	*Civil Engineering*
Paddock	The area where the team transporters are parked, and where the teams work on cars between on-track sessions.	*NASCAR*
Paddy	an underground train for transporting men; or an open or non-safety lamp. (Yorks.).	*Mining*
Paddy light or Paddy lamp	the front or tail light on a man-riding train.	*Mining*
Paddy pan	a bucket or tub for lowering the horse's water on a swinging bont before the advent of the cage. (Leics.).	*Mining*
Padrone System	this system operated substantially as a contract as a contract labor arrangement. The leader, who did the recruiting, was known as the padrone.	*Industrial Relations*
Pads	pieces of timber placed between the tops of props and the roof-support timbers. (Mids.). -see also Biscuit.	*Mining*
PAG	Polyalkylene glycol	*Petro-Chemical Abbreviations*
PAG Synthetic Fluid	Polyalkaline glycol have excellent oxidative and thermal stability, very high VI, excellent film strength and an extremely low tendency to leave deposits on machine surfaces. The low deposit-forming tendency is really due to two properties – the oil's ability to dissolve deposits and the fact that the oil burns clean. So when they are exposed to a very hot surface or subjected to micro-dieseling by entrained air, PAGs are less likely to leave residue that will form deposits. PAGs may also be the only type of base oil with significantly lower fluid friction, which may allow for energy savings. The other unique property of PAGs is the ability to absorb a great deal of water and maintain lubricity. There are actually two different types of PAGs – one demulsifies and the other absorbs water. The most common applications for PAGs are compressors and critical gearing applications. The negatives of PAGs are their very high cost and the potential to be somewhat hydrolytically unstable.	*Lubrication*
Paid Holidays	See: Holiday Pay	*Industrial Relations*

Term	Definition	*Industry*
Paid Jury Leave	leave with pay granted to an employee to perform jury service during normal or regular working hours.	*Industrial Relations*
Paid Leave	a provision in contracts which provides for leave with pay for the individual employee for a stipulated period of time.	*Industrial Relations*
Paid Sick Leave	a provision in an agreement or company policy which permits employees to take leave without loss of seniority or employment rights, and with pay, for periods of illness.	*Industrial Relations*
Paid Vacation Plan	prior to unionization many companies had established vacation plans for their clerical and supervisory employees.	*Industrial Relations*
Painters, Decorators and Paperhangers of America; Brotherhood of (AFL-CIO)	the organization of painters was established at a meeting called by the Baltimore, Maryland, painters in March 1887.	*Industrial Relations*
Pair of gears	a pair of large wooden props with a timber roof bar spanning the roadway. (N. East), (Scot.).	*Mining*
Pair of timbers	a bar held against the roof spanning a roadway with a single prop under each end (S. Wales).	*Mining*
Paired design	A study in which participants or groups of participants are matched (e.g. based on prognostic factors). One member of each pair is then allocated to the experimental (intervention) group and the other to the control group.	*Quality Engineering*
Paired t-test	A form of the t-test where the data consist of pairs of observations on one set of samples, either before and after experimental treatment, or by two different methods of measurement. This statistical test is often used in analyzing the data from a comparison of methods experiment. Information about the systematic error is provided by the bias statistic; information about the random error between methods is provided by the standard deviation of the differences. These estimates will be reliable if proportional error is absent, or if the estimate of bias is only interpreted for a medical decision concentration that is close to the mean of the data. The t-value itself is a ratio of the systematic and random error terms and is useful only to assess whether sufficient data has been collected to conclude that a real difference exists. The t-value should not be interpreted as an indicator of method acceptability.	*Quality*
PAJ	Petroleum Association of Japan	*Petro-Chemical Abbreviations*
Paldie	a square piece of timber placed between the top of a prop and the roof bar. (Scot.). -see also Biscuit.	*Mining*
Pallet	A flat or shaped wheelless load carrier of a pallet conveyor.	*Equipment*
Palletization	Shipping goods on wooden or plastic pallets for greater handling efficiency.	*Agriculture*
Pan	To wash gravel, sand or crushed rock samples in order to isolate gold or other valuable metals by their higher density.	*Mining*
PAN	To wash gravel or rock that have been ground in a pan to separate gold.	*Mining*
Pan coal	small coal, which used to be sold to salt makers for the fires beneath the salt pans.	*Mining*

Term	Definition	*Industry*
Pan grader or Grader	during the move-up, the pan conveyor would be split into sections, moved over nearer to the coalface and rebuilt. The grader would then work his way along the face leveling the conveyor and ensuring that it was straight. (Scot.).	*Mining*
Pan hole	the track along the face along which the pan conveyor was rebuilt. (Scot.).	*Mining*
Pan or Panning	Usually to wash the dirt from the free gold with a pan, the pan resembles an ordinary milk-pan.	*Mining*
Pan run	a longwall face which used a pan conveyor to move the coal. (Scot.).	*Mining*
Penalty Rates	a term used interchangeably with premium rate or rates for overtime, Sunday, and holiday work, or for unpleasant, obnoxious, or hazardous work.	*Industrial Relations*
Pancaking	The effect of adding on charges as power moves through several transmission systems.	*Energy*
Pane	a lift or stint of coal (S. Staffs.).	*Mining*
Panel	a rectangular pillar of coal which would be worked using the panel system; or a district or section of the working-place that was separated by barriers of coal from other districts; or a district in Bord and Pillar workings; or any thin band or rib of hard rock. (Lancs.). In later years the term was used to describe a modern 'longwall face'.	*Mining*
Panel	A Plate or surface for mounting components.	*Mechanical, Process, and Operations*
Panel of Arbitrators	the American Arbitration Association and the Federal Mediation and Conciliation Service both maintain lists or panels of qualified arbitrators who have been screened by the two organizations to serve as arbitrators.	*Industrial Relations*
Panel point	A joint between two or more members of a truss. Also called "node."	*Civil Engineering*
Panel system	a system of working the coal, which came into use in the North of England, in about 1810, in an attempt to improve the ventilation. The colliery was divided into large squares or panels, separated and isolated by solid ribs of coal. Each panel would have its own boards and pillars fed by its own intake air supply and the return was carried straight to the upcast shaft.	*Mining*
Panel	A coal mining block that generally comprises one operating unit.	*Mining*
Panel mounting	A panel on which a number of components may be mounted.	*Mechanical, Process, and Operations*
Panes	the holing area between 'bunches' (N. Staffs.)—see Bunches.	*Mining*
Panic bar	A switch, in the shape of a bar, used to cut off power at the machine in case of an emergency.	*Mining*
Pans	originally shakerpans, which were used on longwall faces to move the coal. The name was extended at a later date to include bluebird scrapers and panzer face conveyors; or iron troughs bolted together and used in steep inclined seams. The coal was allowed to flow down under its own gravity.	*Mining*
Panzer or Panzer conveyor	see Armored Flexible Conveyor. AFC.	*Mining*
PAO	polyalphaolefin	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PAO Synthetic Fluid	Polyalphaolefins, often called synthetic hydrocarbons, are probably the most common type of synthetic base oil used today. They are moderately priced, provide excellent performance and have few negative attributes. PAO base oil is similar to mineral oil. The advantage comes from the fact that it is built, rather than extracted and modified, making it more pure. Practically all of the oil molecules are the same shape and size and are completely saturated. The potential benefits of PAOs are improved oxidative and thermal stability, excellent demulsibility and hydrolytic stability, a high VI, and very low pour point. Most of the properties make PAOs a good selection for temperature extremes – both high operating temperatures and low start-up temperatures. Typical applications for PAOs are engine oils, gear oils and compressor oils. The negative attributes of PAOs are the price and poor solubility. The low inherent solubility of PAOs creates problems for formulators when it comes to dissolving additives. Likewise, PAOs cannot suspend potential varnish-forming degradation by-products, although they are less prone to create such material.	*Lubrication*
Paper chromatography	A method which involves placing a drop of fluid on a permeable piece of paper and noting the development and nature of the halos, or rings, surrounding the drop through time. The roots of this test can be traced to the 1940s, when railroads used the "blotter spot" tests.	*Oil Analysis*
Paper Locals	local unions which frequently obtain charters, or are self-chartered or established, for the purpose primarily of obtaining payoffs from employers.	*Industrial Relations*
Paper Makers; International Brotherhood of (AFL-CIO)	the international Brotherhood of Papermakers was organized in May 1893 at Holyoke, Massachusetts.	*Industrial Relations*
Paperworkers of America; United (AFL-CIO)	the union merged with the International Brotherhood of Paper Makers (AFL-CIO) in March 1957 to form the United Papermakers and Paper Workers (AFL-CIO)	*Industrial Relations*
PAPTG	Product Approval Protocol Task Group - a committee from the American Chemistry Council (ACC) that reviews new lubricant test procedures and proposed performance limits. This group also administers the Product Approval Code of Practice.	*Mechanical, Process, and Operations*
Par value	The stated face value of a stock. Par value shares have no specified face value, but the total amount of authorized capital is set down in the company's charter.	*Mining*
Parabolic dish	A high-temperature (above 180 degrees Fahrenheit) solar thermal concentrator, generally bowl-shaped, with two-axis tracking.	*Energy*
Parabolic growth rate law An expression	An expression for the buildup of a protective oxide coating in which growth is limited by ionic diffusion.	*Material Process*
Parabolic trough	A high-temperature (above 180 degrees Fahrenheit) solar thermal concentrator with the capacity for tracking the sun using one axis of rotation.	*Energy*
Paracumarone	The name applied to the benzene-soluble resins obtained by the polymerization of cumarone.	*Material Process*
Paraelectric	Having a modest polarization with applied electrical field.	*Material Process*
Paraelectric growth rate law	An expression for the build up of a protective oxide coating in which growth is limited by ionic diffusion.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Paraffin	Any hydrocarbon identified by saturated straight (normal) or branched (iso) carbon chains; also called an alkane. The generalized paraffinic molecule can be symbolized by the formula CnH2n+2. Paraffins are relatively non-reactive and have excellent oxidation stability. In contrast to naphthenic oils, paraffinic lubricating oils have relatively high wax content and pour point, and generally have a high viscosity index (VI.). Paraffinic solvents are generally lower in solvency than naphthenic or aromatic solvents.	*Lubrication*
Paraffin (oil)	A light-colored, wax-free oil obtained by pressing paraffin distillate.	*Energy*
Paraffin (wax)	The wax removed from paraffin distillates by chilling and pressing. When separating from solutions, it is a colorless, more or less translucent, crystalline mass, without odor and taste, slightly greasy to touch, and consisting of a mixture of solid hydrocarbons in which the paraffin series predominates.	*Energy*
Paraffin oil	A mixture of liquid hydrocarbons, refined fraction of mineral oil. Used to some extent as a lubricant.	*Material Process*
Paraffin wax	A solid mixture of purified petroleum hydrocarbons melting between 40 - 60 °C (104 - 140°F).	*Material Process*
Paraffinic	A type of petroleum fluid derived from paraffinic crude oil and containing a high proportion of straight chain saturated hydrocarbons. Often susceptible to cold flow problems.	*Lubrication*
Paraffinic hydrocarbons	Saturated hydrocarbon compounds with the general formula C_nH_{2n+2} containing only single bonds. Sometimes referred to as alkanes or natural gas liquids.	*Energy*
Paraffins	A family of saturated aliphatic hydrocarbons (alkanes) with the general formula CnH2n+2.	*Petroleum Engineering*
Paraffins	see alkanes.	*Chemical*
Paraformaldehyde	A solid polymer of formaldehyde, used instead of formaldehyde in the production and cure of certain plastics such as phenolics. Solid polymers of formaldehyde are also called trioxymethylene and polyxymethylene.	*Material Process*
Paraformaldehyde (or polyoxymethylene) (CH2O)x	White needles sublimes. The solid, polymerized form of formaldehyde. Used like formaldehyde but especially in anhydrous condensations, as an anhydrous phenol-aldehyde condensation.	*Material Process*
Parallax	An optical illusion which occurs in analog meters and causes reading errors. It occurs when the viewing eye is not in the same plane, perpendicular to the meter face, as the indicating needle.	*Electrical*
Parallel	Electrical components that are connected in such a way that the flow of electricity can take multiple, or parallel, paths through the circuit are said to be connected “in parallel” or “in shunt,” as opposed to “in series.” If one of the components in a parallel circuit was to fail, the electricity would continue to flow through an alternative path. (See also Series.)	*Electrical*
Parallel Data	Data transmission where all data bits of a data word are processed at once.	*Electrical Engineering*
Parallel Circuit	A circuit in which current has two or more paths to follow. Two electrical elements are in parallel if both terminals of both elements are electrically connected.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Parallel group trial	A trial that compares two groups of people concurrently, one of which receives the intervention of interest and one of which is a control group. Some parallel trials have more than two comparison groups and some compare different interventions without including a non-intervention control group. Also called: Independent group design	*Quality Engineering*
Parallel Lines	Straight lines, in the same plane, that do not meet.	*Math*
Parallel Path Flow	This refers to the flow of electric power on an electric system's transmission facilities resulting from scheduled electric power transfers between two other electric systems. (Electric power flows on all interconnected parallel paths in amounts inversely proportional to each path's resistance.)	*Energy*
Parallel Spins	Electrons with the same fourth quantum numbers	*Physics*
Parallel Systems	Lubrication systems where the dispensing devices are connected to the main line in parallel. Each dispensing device operates independent of any other in the system.	*Lubrication*
Parallel Transmission	Sending all data bits simultaneously. Commonly used for communications between computers and printer devices.	*Electrical*
Paramagnetism	A relatively weak form of magnetism that results from the independent alignment of atomic dipoles (magnetic) with an applied magnetic field.	*Engineering Physics*
Paramagnetism	Magnetic behavior in which a modest increase in induction, compared to that for a vacuum, occurs with applied magnetic field.	*Material Process*
Parameter	A quantity defining a theoretical model. Unlike variables, parameters do not relate to actual measurements or attributes of patients.	*Quality Engineering*
Parameter	A controllable or variable characteristic of a system or device, temporarily regarded as a constant, the respective values of which serve to distinguish the various specific states of a (the) system or device.	*Process Control*
Parapet wall	portion of any exterior wall that extends above the roofline.	*Petroleum Drilling*
Parasite	An organism which lives on or in another living organism and obtains part or all of its nutrients from that other living organism.	*Forestry*
Parent	A firm that is not directly or indirectly controlled by another entity.	*Energy*
Parent and Affiliated Firms	A parent and those firms that are its consolidated and/or unconsolidated entities.	*Energy*
Parent and its Consolidated Entities	A parent and those firms (if any) that are affiliated with the parent entity for purposes of financial statements prepared in accordance with Generally Accepted Accounting Principles (GAAP). An individual shall be deemed to control a firm that is directly or indirectly controlled by him/her or by his/her father, mother, spouse, children, or grandchildren. See firm.	*Energy*
Parent and its Consolidated Entities	A parent and those firms (if any) that are affiliated with the parent entity for purposes of financial statements prepared in accordance with Generally Accepted Accounting Principles (GAAP). An individual shall be deemed to control a firm that is directly or indirectly controlled by him/her or by his/her father, mother, spouse, children, or grandchildren.	*Energy*

Term	Definition	*Industry*
Parent company	An affiliated company that exercises ultimate control over a business entity, either directly or indirectly, through one or more intermediaries.	*Energy*
Parent Union	the union organization which has prime responsibility for its affiliates.	*Industrial Relations*
Pareto Principle	A business principle that holds that 80% of the impact of a problem will show up in 20% of its causes.	*Reliability Engineering*
Parison	A hollow tube of plastic melt extruded from die head of a blow molding machine and which is expanded within the mold cavity by air pressure to produce the molded part.	*Engineering Physics*
Parison Swell	Expansion of the parison as it leaves the die head.	*Engineering Physics*
Parity	A technique for testing transmitting data. Typically, a binary digit is added to the data to make the sum of all the digits of the binary data either always even (even parity) or always odd (odd parity).	*Electrical*
Parity	A technique for testing transmitting data. Typically, a binary digit is added to the data to make the sum of all the digits of the binary data either always even (even parity) or always odd (odd parity).	*Electronic Process*
Parliamentary pit	When it became a legal requirement for every mine to have a second shaft or outlet, the second shaft sunk at an existing colliery became known as a 'Parliamentary pit'. (Scot.).	*Mining*
Parliamentary Procedure	general rules or procedures which have been established to maintain order and to assist the normal and routine organization and conduct of the business of deliberative bodies.	*Industrial Relations*
Parlon	A trade name for a chlorinated rubber.	*Material Process*
Parrot coal	a variety of cannel coal. It was said to spit and crack with a chattering noise, like a parrot talking.	*Mining*
Part candles	where candles were used up to a point in a mine beyond which only safety lamps could be used then the mine was said to be 'part candles'.	*Mining*
Part Timer	a worker who is employed only part of the time in an establishment which also schedules employees on a full-time basis, or a domestic house hold employee who may work only part of the day and whose time may be divided among several households, either during the day or during the week.	*Industrial Relations*
Partial Load	An electrical demand that uses only part of the electrical power available.	*Energy*
Partial Penetration	When the intake portion of the well is less than the full thickness of the aquifer.	*Petroleum Engineering*
Partial pressure	the portion of total vapor pressure in a system due to one or more constituents in the vapor mixture.	*Chemical*
Partial requirements consumer	A wholesale consumer with generating resources insufficient to carry all its load and whose energy seller is a long-term firm power source supplemental to the consumer's own generation or energy received from others. The terms and conditions of sale are similar to those for a full requirements consumer.	*Energy*
Partial Strike	a cessation of work by a small group of the total organized group in a plant or industry.	*Industrial Relations*
Partially Funded Pension Plan	a pension plan which does not set up sufficient, actuarial reserve during the employees' working period to fund the pension completely upon retirement.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Partially stabilized zirconia (PSZ) ZrO2	Partially stabilized zirconia (PSZ) ZrO2 ceramic with a modest second component addition, for example, CaO, producing a two phase microstructure. Retention of some ZrO2 rich phase in PSZ allows for the mechanism of transformation toughening.	*Material Process*
Participant	An individual who is studied in a trial, often but not necessarily a patient.	*Quality Engineering*
Participating interest	A company's interest in a mine, which entitles it to a certain percentage of profits in return for putting up an equal percentage of the capital cost of the project.	*Mining*
Particle	A minute piece of matter with observable length, width, and thickness; usually measured in micrometers.	*Mechanical, Process, and Operations*
Particle Chemistry	The elements contained within the particles of a spray powder.	*Paint and Coatings*
Particle count	The number of particles present greater than a particular micron size per unit volume of fluid often stated as particles > 10 microns per milliliter.	*Oil Analysis*
Particle count blank	An allowance for the determinable background contamination. PASCAL - Unit of pressure in the metric (SI) system.	*Mechanical, Process, and Operations*
Particle Counter	An instrument that detects and counts particles found in a fluid such as oil.	*Lubrication*
Particle Counting	A microscopic technique that enables the visual counting of particles in a known quantity of fluid. The count identifies the number of particles present greater than a particular micron size per unit volume of fluid often stated as particles > 10 microns per milliliter.	*Lubrication*
Particle density	An important parameter in establishing an entrained particle's potential to impinge on control surfaces and cause erosion.	*Oil Analysis*
Particle erosion	Occurs when fluid-entrained particles moving at high velocity pass through orifices or impinge on metering surfaces or sharp angle turns.	*Oil Analysis*
Particle impingement erosion	A particulate wear process where high velocity, fluid-entrained particles are directed at target surfaces.	*Oil Analysis*
Particle size	The controlling lineal dimension of an individual particle as determined by analysis with sieves or other suitable means.	*Paint and Coatings*
Particle Size Distribution	The percentage by weight, or by number, of each fraction into which a powder sample has been classified with respect to sieve number or microns.	*Paint and Coatings*
Particulate	A small, discrete mass of solid or liquid matter that remains individually dispersed in gas or liquid emissions. Particulates take the form of aerosol, dust, fume, mist, smoke, or spray. Each of these forms has different properties.	*Energy*
Particulate composites	composites that contain large number of coarse particles, such as the cement and gravel found in concrete	*Physics*
Particulates	Particles made up of a wide range of natural materials (e.g., pollen, dust, resins), combined with man-made pollutant (e.g., smoke particles, metallic ash); in sufficient concentrations, particulates can be a respiratory irritant.	*Lubrication*
Particulates such as dust, pollen, mold, and bacteria from the air	particulates such as dust, pollen, mold, and bacteria from the air.	*Mechanical Engineering*
Particulate composite	Composite material with relatively large dispersed particles (at least several microns in diameter) and in concentration greater than 25 vol.%.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Parties to Agreement	collective bargaining agreements generally provide, at the end of the contract, room for the signature of the representatives of the company and the union.	*Industrial Relations*
Parting	A layer of rock within a coalbed that lies roughly parallel to the coalbed and has the effect of splitting the bed into two divisions.	*Energy*
Parting	(1) A small joint in coal or rock; (2) a layer of rock in a coal seam; (3) a side track or turnout in a haulage road.	*Mining*
Parting Line	The line where the dies come together and the flash is removed.	*Metallurgy*
Parting Line	The line formed by the mating surfaces of the mold halves.	*Engineering Physics*
Partition	An interior wall subdividing the tower into cells or into separate fan plenum areas.	*Facility Engineering*
Parts Conveyor	A conveyor used to catch and transport small parts, Stampings, or scrap away from production machinery to hoppers, drums, or other operations. (PC, PCA, PCL, PCX, PCH)	*Manufacturing*
Parts Per Million (PPM)	PPM is a way of stating the performance of a process in terms of actual or projected defective material.	*Reliability Engineering*
Part-Time Employment	the term may apply to part-time work, in which case it indicates that the individual may be employed for only a few hours during the day.	*Industrial Relations*
Part-Time Worker Rate	a rate received by temporary or contingent employees.	*Industrial Relations*
Part-two mine	a safety lamp mine which was regulated under Part 2 of the Coal Mines Act of 1911. (Scot.).	*Mining*
Pascal	Unit of pressure in the metric (SI) system.	*Lubrication*
Pascal's Law	A pressure applied to a confined fluid at rest is transmitted with equal intensity throughout the liquid and that pressure is considered to act at right angles to each surface contacted by the fluid.	*Lubrication*
Pass	A single progression of a welding or surfacing operation along a joint, weld deposit, or substrate. The result of a pass is a weld bead, layer, or spray deposit.	*Maintenance and Repair*
Passage	A machined or cored fluid conducting path which lies within or passes through a component.	*Mechanical, Process, and Operations*
Pass-byes	a siding in which two sets of tubs could pass each other.	*Mining*
Passenger-miles traveled	The total distance traveled by all passengers. It is calculated as the product of the occupancy rate in vehicles and the vehicle miles traveled.	*Energy*
Passing-Bablock regression	An alternate regression calculation that can be employed when ordinary linear regression may not be reliable. This technique is non-parametric and therefore makes fewer assumptions about the nature of the data. It depends on calculating the slopes of all possible pairs of points, ranking those slopes, and selecting a median value. The correlation coefficient is used as a practical measure of when alternate regression techniques should be applied. When r is less than 0.99 or 0.975, depending on the source of the recommendation, Deming regression or Passing-Bablock regression should be used instead of ordinary linear regression.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Passivation	Passivation is the process of making a material resistant to corrosion, which is useful in severe steam conditions. Passivation is the spontaneous formation of a hard non-reactive surface film that prevents and inhibits further corrosion. This layer is usually an oxide or nitride that is a few molecules thick. Passivation is seen in materials such as aluminum, iron, zinc, magnesium, copper, stainless steel, titanium, and silicon.	*Industrial*
Passivation	changing chemically active metal surfaces to a much less reactive state (see phosphating and chromating)	*Materials Process*
Passivator	A type of inhibitor which appreciably changes the potential of a metal to a more noble (positive) value.	*Paint and Coatings*
Passive	The state of a metal surface characterized by low corrosion rates in a potential region that is strongly oxidizing for the metal.	*Paint and Coatings*
Passive optical network	A cost-effective way to provide high performance Fiber to the Home (FTTH) connectivity via shared optical fiber. PON connects up to 32 (or more) homes on the same network using passive optical components (splitters).	*Electrical Engineering*
Passive optical network	A cost-effective way to provide high performance Fiber to the Home (FTTH) connectivity via shared optical fiber. PON connects up to 32 (or more) homes on the same network using passive optical components (splitters).	*Electrical Engineering*
Passive solar heating	A solar heating system that uses no external mechanical power, such as pumps or blowers, to move the collected solar heat.	*Energy*
Passivity	The resistance to corrosion due to the formation of a thin, protective oxide film.	*Material Process*
Past Practice	a term found in collective bargaining agreements and one which has been the basis for many arbitration awards.	*Industrial Relations*
Past Service Benefits	retirement credits which are granted to employees for service in the company prior to the installation of a particular pension plan.	*Industrial Relations*
Past Service Funding	a procedure for paying up the cost of past service liabilities.	*Industrial Relations*
Past Service Liability	when a plan is funded it frequently is necessary to determine actuarially the amount necessary to pay for the cost of past service (prior to the inception of a funded plan) of employees to be covered.	*Industrial Relations*
Past status words	Status words that are logically combined over time (such as "and"ing or "or"ing) to provide history of what has been set in the past.	*Aeronautical Engineering*
Pastures	land or a plot of land used for the grazing of animals	*Agriculture*
Pat coal	the lowest seam of coal reached in a shaft. (Scot.).	*Mining*
Patch	A small placer claim.	*Mining*
Patch test	A method by which a specified volume of fluid is filtered through a membrane filter of known pore structure. All particulate matter in excess of an “average size,” determined by the membrane characteristics, is retained on its surface. Thus, the membrane is discolored by an amount proportional to the particulate level of the fluid sample. Visually comparing the test filter with standard patches of known contamination levels determines acceptability for a given fluid.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Patch test	Any method of evaluating fluid contamination wherein the sample is passed through a standardized laboratory filter, and the change in color, reflectivity, etc., of the laboratory filter is compared with previously established standards.	*Mechanical, Process, and Operations*
Patching	working the coal at an outcrop or by an early form of opencast.	*Mining*
Patent	The ultimate stage of holding a mineral claim, after which no more assessment work is necessary because all mineral rights have been earned.	*Mining*
Patent Assignment	an agreement between workers and their employer, where employees are engaged in research and development or highly specialized engineering or chemical or other research, that if new inventions are developed as a result of their research and development, the patent rights on the development will accrue to the company, not to the employee.	*Industrial Relations*
Patent Defect	See latent defect/fault	*Reliability Engineering*
Paternalism, Employer	a term, generally used in a derogatory sense, describing the "fatherly" interest of an employer in his workers.	*Industrial Relations*
Path integral gain (KINT)	A guidance control law parameter, generated by the lateral guidance modes.	*Aeronautical Engineering*
Path integral limit (INTLIM)	A guidance control law parameter, generated by the lateral guidance modes; Typical Units: rad.	*Aeronautical Engineering*
Path integral value (INTVAL)	A guidance control law parameter, generated by the lateral guidance modes; Typical Units: ft; Dimensions: Length.	*Aeronautical Engineering*
Pathogen	A disease-producing agent, usually applied to a living organism. Generally, any virus, bacteria, or fungi that cause disease.	*Petroleum Engineering*
Pathogen	Any disease producing organism.	*Chemistry*
Pathogen	Any agent of the environment capable of inciting disease.	*Forestry*
Pathogenic	Capable of causing disease.	*Petroleum Engineering*
Pathogenic	Disease producing.	*Chemistry*
Pathos	Emotion	*Management Discussion*
Path-Tracing Method	A method for determining the reliability of complex systems. With this method, every path from a starting point to an ending point is considered. Since systems success involves having at least one path available from one end of the reliability block diagram to the other, as long as at least one path is available, the system has not failed. The reliability of the system is simply the probability of the union of these paths.	*Reliability Engineering*
Patina	relatively insoluble zinc carbonate layer that forms as the galvanized coating weathers, providing added corrosion protection and abrasion resistance	*Materials Process*
Pattern	A duplicate, usually wooden, of a part to be cast. Used to form the mold into which molten metal is poured.	*Mechanical*
Pattern	A duplicate made of wood or metal of a part to be cast. Used to form the mold into which the molten metal is poured.	*General Mechanical*
Pattern Bargaining	a procedure in collective bargaining whereby a union seeks to obtain equal or identical terms from a group of employers in a particular industry based on an agreement already obtained from an important company.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pattern Makers' League of North America (AFL-CIO)	the Pattern Makers' League was organized in Philadelphia, Pennsylvania, in May 1887.	*Industrial Relations*
Patterns Of Failure	Failures manifest in one of four primary patterns. Wear out - constant hazard rate with a distinct wear out region	*Reliability Engineering*
Pauli exclusion principle	Quantum mechanical concept that no two electrons can occupy precisely the same state.	*Material Process*
Pauli Exclusion Principle	concept that no more than two electrons can fit in any orbital and that the two electrons must have opposed spins	*Physics*
Pavement	A paved road, highway, etc. A paved surface, ground covering, or floor. A material used for paving.	*Civil Engineering*
Pavement brushing	the taking up of the floor of a roadway to gain more headroom or compete against the action of creep. – see also Bate, Dint, Denting and Pocking.	*Mining*
Paving	The laying of a pavement.	*Civil Engineering*
Pay	A reservoir or portion of a reservoir containing hydrocarbons that can be economically produced, i.e. it is capable of "paying" an income. Also referred to as "pay sand" or the "pay zone".	*Petroleum Drilling*
Pay Day	the day on which employees receive their wages or salaries.	*Industrial Relations*
Pay for Grievance Time	provisions in collective bargaining agreements in which the employer agrees to compensate certain union officers for time spent in handling grievances.	*Industrial Relations*
Pay for Shop Stewards	this is the same as pay for grievance time but may make particular reference to shop stewards and other members of the executive staff of the union.	*Industrial Relations*
Pay for Time Spent on Union Business	provisions in agreements which go beyond the handling of grievances may make provision for time spent on other union business which relates to general plant operations for which the employer is willing to compensate.	*Industrial Relations*
Pay Period	the time between the beginning and end of a particular period for the purpose of computing the employee's pay.	*Industrial Relations*
Payables to municipality	The amounts payable by the utility department to the municipality or its other departments that are subject to current settlement.	*Energy*
Payback	The length of time it takes for the savings received to cover the cost of implementing the technology.	*Energy*
Payment in Kind	See: Income in Kind	*Industrial Relations*
Payment method for utilities	The method by which fuel suppliers or utility companies are paid for all electricity, natural gas, fuel oil, kerosene, or liquefied petroleum gas used by a household. Households that pay the utility company directly are classified as "all paid by household." Households that pay directly for at least one but not all of their fuels used and that has at least one fuel charge included in the rent were classified as "some paid, some included in rent." Households for which all fuels used are included in rent were classified as "all included in rent." If the household did not fall into one of these categories, it was classified as "other." Examples of households falling into the "other" category are (1) households for which fuel bills were paid by a social service agency or a relative, and (2) households that paid for some of their fuels used but paid for other fuels through another arrangement.	*Energy*

Term	Definition	*Industry*
Payment-by-Result	any method of wage payment which relates earnings of workers to the amount of output.	*Industrial Relations*
Payroll	generally the total wages earned by all of the named employees in a particular plant or establishment for a given payroll period.	*Industrial Relations*
Payroll Deductions	amounts withheld or deducted from individual's gross earning by his employer.	*Industrial Relations*
Payroll Period	See: Pay Period	*Industrial Relations*
Payroll Tax	taxes levied or imposed by the government.	*Industrial Relations*
Payzone	Rock in which oil and gas are found in exploitable quantities.	*Petroleum Drilling*
Payzone	Rock in which oil and gas are found in exploitable quantities.	*Petroleum Drilling*
PBA	polybutene amine	*Petro-Chemical Abbreviations*
PBR	Performance-Based Rates	*Energy*
PC	Personal Computer	*Control Engineering*
PC Card	Add-in cards that conform to the PC Card specification (formerly called PCMCIA). A PC Card is a removable device, approximately the size of a credit card, designed to plug into a matching slot.	*Electrical Engineering*
PCB	PolyChlorinated Biphenyl	*Energy*
PCB	Polychlorinated biphenyl, a class of synthetic chemicals consisting of a homologous series of compounds beginning with monochlorobiphenyl and ending with decachlorobiphenyl. PCBs do not occur naturally in petroleum, but have been found as contaminants in used oil. PCBs have been legally designated as a health hazard, and any oil so contaminated bust be handled in strict accordance with state and federal regulations.	*Lubrication*
PCD	PCD (Pitch Circle Diameter) is the diameter of the circle which passes through the centre of all the bolts, or drilling pattern holes on a valve, flange, or other pipe fitting.	*Industrial*
PCEO	passenger car engine oil	*Petro-Chemical Abbreviations*
PCEOCP	Passenger Car Engine Oil Classification Panel	*Mechanical, Process, and Operations*
PCFV	Partnership for Cleaner Fuels and Vehicles	*Petro-Chemical Abbreviations*
p-channel metal-oxide semiconductor	A p-channel metal-oxide semiconductor (pMOS) transistor is one in which p-type dopants are used in the gate region (the "channel"). A negative voltage on the gate turns the device on.	*Electrical Engineering*
PCIe electrical interface	The PCIe electrical interface - The PCIe electrical interface is also used in a variety of other standards, most notably the Express Card laptop expansion card interface.	*Electrical Engineering*
PCMO	passenger car motor oil	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PCTFE	Polychlorotrifluoroethylene	*Petro-Chemical Abbreviations*
PCV	positive crankcase ventilation	*Petro-Chemical Abbreviations*
PCV System	An abbreviation for "positive crankcase ventilation system". This is a system which prevents the vapors of a crankcase from being directly discharged into the atmosphere.	*Lubrication*
PCV Valve	A Positive Crankcase Ventilation (PCV) valve is a one-way valve that ensures the continual flow and evacuation of gases from the crankcase into the engine.	*Lubrication*
PD Controller	A controller which produces proportional plus	*Electrical Engineering*
PdM	See Predictive Maintenance.	*Maintenance*
PDS	product data sheet	*Petro-Chemical Abbreviations*
PDVSA	Petroleos de Venezuela	*Petro-Chemical Abbreviations*
PE	Pentaerythritol	*Petro-Chemical Abbreviations*
PEA	polyether amine	*Petro-Chemical Abbreviations*
Peaceful Persuasion	a term used frequently in the legal literature of industrial relations and particularly with reference to union activities on the picket line.	*Industrial Relations*
Peaceful Picketing	a form of picketing or marching to inform employees, or the public, that there is a labor dispute in existence or that a firm purchases or uses non-union materials or services.	*Industrial Relations*
Peacock coal	having an iridescent luster due to a film-deposit of pyrites.	*Mining*
Peak	Periods of relatively high system demands.	*Energy*
Peak Clipping	Peak clipping reduces a utility's system peak, reducing the need to operate peaking units with relatively high fuel costs. Peak clipping is typically pursued only for the days the system peak is likely to occur, and the resources are not expected to meet the impending load requirements.	*Energy*
Peak day withdrawal	The maximum daily withdrawal rate (Mcf/d) experienced during the reporting period.	*Energy*
Peak Demand	Maximum power used in a given period of time.	*Energy*
Peak kilowatt	One thousand peak watts.	*Energy*
Peak load month	The month of greatest plant electrical generation during the winter heating season (Oct-Mar) and summer cooling season (Apr-Sept), respectively.	*Energy*
Peak load plant	A plant usually housing old, low-efficiency steam units, gas turbines, diesels, or pumped-storage hydroelectric equipment normally used during the peak-load periods.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Peak Load Power plant	A power generating station that is normally used to produce extra electricity during peak load times.	*Energy*
Peak megawatt	One million peak watts.	*Energy*
Peak shaving	When daily usage of natural gas is charted on graphs, it will show high peaks (usage) during the winter months. These peaks can be "shaved" (averaged out) when the daily consumption is augmented with stand-by supplies of synthetic natural gas, propane, or methane.	*Mechanical*
Peak Water Demand	The highest rate of water use each day. Well capacities or storage facilities must be able to meet this demand.	*Petroleum Engineering*
Peak watt	A manufacturer's unit indicating the amount of power a photovoltaic cell or module will produce at standard test conditions (normally 1,000 watts per square meter and 25 degrees Celsius).	*Energy*
Peaking Capacity	Generating equipment normally operated only during the hours of highest daily, weekly, or seasonal loads; this equipment is usually designed to meet the portion of load that is above base load.	*Energy*
Peaking Unit	A power generator used by a utility to produce extra electricity during peak load times.	*Energy*
Peak-to-peak value	The algebraic difference between extreme values (as D = 2X).	*Reliability Engineering*
Pearl	very small coal almost 'dross'. (Scot.).	*Mining*
Pearl essence	A pasty preparation of fish scales (guanine) which is chemically treated and incorporated into cellulose derivative lacquers plastics.	*Material Process*
Pearlite	A two-phase microstructure found in some steels and cast irons. It results from the transformation of austenite of eutectoid compositions and consists of alternating layers of alpha-ferrite and cementite.	*Engineering Physics*
Pearsall Shale	A Cretaceous age geologic formation which lies approximately 2,000' below the Eagle Ford Shale in South Texas. The Pearsall shale is currently being explored by several companies, including EOG Resources and Chesapeake, who are drilling exploratory wells to determine if the formation holds similar potential to the Eagle Ford Shale in terms of producing oil and gas.	*Petroleum Drilling*
Peas or Pease	a descriptive term for small coal. Smaller than beans and also produced from 'duff'.	*Mining*
Peat	Peat consists of partially decomposed plant debris. It is considered an early stage in the development of coal. Peat is distinguished from lignite by the presence of free cellulose and a high moisture content (exceeding 70 percent). The heat content of air-dried peat (about 50 percent moisture) is about 9 million Btu per ton. Most U.S. peat is used as a soil conditioner. The first U.S. electric power plant fueled by peat began operation in Maine in 1990.	*Energy*
Peat	The partially decayed plant matter found in swamps and bogs, one of the earliest stages of coal formation.	*Mining*
Pebble	An uneven surface having very small uniform irregularities, somewhat similar to the beaded surface of a movie screen. It prevents specular reflection and seriously impairs clear vision through a transparent sheet. Term not recommended.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pebble mill	A grinding mill similar in construction and action as a ball mill, but in which the charge is made up of hard pebbles in place of the more conventional steel balls.	*Mining*
Peck	a collier's pick; or a measure of coal, i.e. the coal peck contains 41 gallons, 4.362 old Winchester measure, 8 pecks making 1 bole and 24 boles 1 chaldron. (N. East).	*Mining*
Pecking up	propping up with stone, brick, or any rubbish, which is at hand (S. Staffs.).	*Mining*
Pedal	A flight control operated by pushing with feet, primarily to control yaw via the rudder in fixed-wing aircraft or thrust to tail rotor in rotary-wing aircraft; pedals are automatically controlled in modern aircraft.	*Aeronautical Engineering*
Pedestals	Used as a transition from the cross struts to the foundation of a natural draft tower or fan mount in force draft towers.	*Facility Engineering*
Pee-dee	a lad employed on board a keel. (N. East).	*Mining*
Peel or Pills	lean ironstone (N. Staffs.).	*Mining*
Peel Test	A destructive method of examination that mechanically separates a lap joint by peeling.8	*Maintenance and Repair*
Peening	The mechanical working of metals by means of hammer blows.	*Maintenance and Repair*
Peer review	A refereeing process for checking the quality and importance of reports of research. An article submitted for publication in a peer-reviewed journal is reviewed by other experts in the area. See also: External peer reviewer (of a Cochrane Review)	*Quality Engineering*
Peerie	a surveyor's large brass plumb-bob. (Scot.).	*Mining*
Peeweet	a miner's singlet, usually of blue-grey flannel, like a lapwing's wing. (Scot.).	*Mining*
Peg Point	applies to a specific occupational rate for a key job in any of the major groupings within the wage structure-unskilled, semi-skilled, or skilled job.	*Industrial Relations*
Peggy	a pick. (Yorks.).	*Mining*
Pegmatite	A coarse-grained, igneous rock, generally coarse, but irregular in texture, and similar to a granite in composition; usually occurs in dykes or veins and sometimes contains valuable minerals.	*Mining*
Peg-top	an underground winding drum, driving one or more haulage roads. The winding drum was usually in a vertical position.	*Mining*
Peldon	hard and compact siliceous rock (S. Staffs.). -see also Cank.	*Mining*
Pellet	A marble-sized ball of iron ore fused with clay for transportation and use in steelmaking.	*Mining*
Pelletizing	The process of creating pellets by moving a melt flow through an extruder die with a number of uniform holes. As the molten extrudate moves through the holes, it is cut into pellets of uniform size and shape and then cooled.	*Engineering Physics*
Pellets	Pellets are pressed pieces of firewood, wood chips and untreated offal timber. They measure approx. 6 millimeters in diameter and 10 to 30 millimeters in length.	*Thermal Management*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pellets	Tablets of uniform size, consisting of resins or mixtures of resins with compounding additives which have been prepared for molding operations by shaping in a pelletizing machine or by extrusion and chopping into short segments.	*Engineering Physics*
Pelt	a coaly stone often found in coal seams. (Scot.).	*Mining*
Peltier Effect	When a current flows through a thermocouple junction, heat will either be absorbed or evolved depending on the direction of current flow. This effect is independent of joule I2 R heating.	*Electrical*
Pen	a narrow airway alongside the solid coal as opposed to an air road through the gob; or a covered-in water drain. (Scot.).	*Mining*
Penalty Cargo	cargoes in the shipping and longshoring industry which because of their obnoxious, disagreeable, or dangerous character are loaded at a premium (higher) rate of pay.	*Industrial Relations*
Pencil ganister	see Ganister.	*Mining*
Pending Work	Work issued to a mechanic or contractor that is unfinished. It is important to complete all pending work. Pending work may refer to equipment returned to service 'temporarily' where further work is required to restore and assure full form, fit, and function. Pending work forms part of backlog, but it is often necessary to segregate and track it separately when referring to temporary modifications.	*Maintenance*
Penetration	A measure of consistency (hardness) based on an inverse penetration measurement (the softer the consistency, the higher the penetration number). Based on ASTM D 217 (IP 50) and similar standardized methods.	*Lubrication*
Penetrometer	Instrument for measuring penetration of surfaces of solid bodies.	*Material Process*
Pennant rock	hard, strong sandstone (S. Wales).	*Mining*
Penning gate	A sluice gate that opens by lifting upward.	*Civil Engineering*
Pennington Case	case in which the United Mine Workers Union was held potentially subject to heavy treble damage claims under the Sherman Antitrust act.	*Industrial Relations*
Pennsylvania AFL-CIO	the official publication is the Pennsylvania AFL-CIO News, published monthly.	*Industrial Relations*
Pennsylvania Anthracite	All mines in the following counties: Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Northumberland, Schuylkill, Sullivan, and Susquehanna. All anthracite mines in Bradford County.	*Energy*
Pennsylvania Bituminous	All mines located in the following counties: Allegheny, Armstrong, Beaver, Bedford, Butler, Cambria, Clarion, Clearfield, Elk, Fayette, Greene, Indiana, Jefferson, Lawrence, Lycoming, Somerset, Venango, Washington, and Westmoreland, and all bituminous mines in Bradford County.	*Energy*
Pennsylvania Greyhound Lines Case	See: NLRB v. Pennsylvania Greyhound Lines, Inc.	*Industrial Relations*
Pennsylvania Oil and Gas Act	State law that gives the Department of Environmental Protection regulatory and permitting authority over the oil and gas industry. DEP asserts that this law gives it primacy, even over local regulations, when it comes to permitting new wells, but the state Supreme Court has allowed local municipalities some authority regarding well zoning.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pennsylvania State University, The Department of Labor Education	Address: 316 Sparks Building, University Park, Pa.	*Industrial Relations*
Pennsylvania, University of-Labor Relations Council	located at Philadelphia 4, Pennsylvania.	*Industrial Relations*
Penny stones	bands of clay ironstone.	*Mining*
Penobel	permitted explosive.	*Mining*
Penrose fillings	Patterns that fill two dimensional space with a resulting fivefold symmetry.	*Material Process*
Pension	periodic payments of money usually on a monthly basis, to individuals who have been retired from the employ of a company after reaching a specified age, or period of service, or because of an accident, illness, or some other reason.	*Industrial Relations*
Pension Fund	a fund set aside to cover the costs of the particular pension plan established and maintained by an employer to provide retirement payments of fixed and determinable amounts to employees over a period of years.	*Industrial Relations*
Pension Plan	an organized program maintained by an employer, the purpose of which is to provide specific and determinable benefits to his employees to be paid over a period of years following the retirement of the employees.	*Industrial Relations*
Pension Planning	procedures adopted by those concerned with the problems of pensions and the study of various assumptions so that a pension plan will meet the objectives for which the particular pension is established.	*Industrial Relations*
Pensionable Age	the age specified under a particular pension program at which the employee either becomes eligible to receive retirement benefits on a voluntary basis, or the age at which he is required to retire and accept the pension under plans where there is a fixed or automatic age for mandatory retirement.	*Industrial Relations*
Pensioner	an individual who has retired and receives a pension from his employer for the performance of past services.	*Industrial Relations*
Penstock	A pipe conducting water from a head gate to a waterwheel. A conduit for conveying water to a power plant. A sluicelike contrivance used to control the flow of water.	*Civil Engineering*
Pentaerythritol tetra acetate	Pentaerythritol tetra acetate C(CH2OCOCH3)4 A plasticizer.	*Material Process*
Pentaerythritol tetra acetate	Pentaerythritol tetra acetate (C(CH2OCOCH3)4 A plasticizer.	*Material Process*
Pentane ($CH_3(CH_2)_3CH_3$)	n-Pentane ($CH_3(CH_2)_3CH_3$) Colorless liquid. A petroleum hydrocarbon used as a starting point in various syntheses, as a solvent, etc.	*Material Process*
Pentanes plus	A mixture of liquid hydrocarbons, mostly pentanes and heavier, extracted from natural gas in a gas processing plant. Pentanes plus is equivalent to natural gasoline.	*Energy*
Penthouse or Penthus	a wooden hut or covering at the bottom of a sinking pit to protect the sinkers.	*Mining*
Pentlandite	Nickel iron sulfide, the most common nickel ore.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Peon	generally a common laborer or one who performs work which is relatively unskilled.	*Industrial Relations*
Peonage	a form of involuntary service, generally under contract.	*Industrial Relations*
People Ex Rel Tipaldo v. Morehead	See: Morehead v. Tilpado	*Industrial Relations*
People Management	The utilization of human resources in order to achieve the organization's objectives.	*Reliability Engineering*
People v. Merlin	a decision of the Court of General Sessions in New York City in 1810, which indicted a group of striking shoemakers for engaging in a conspiracy.	*Industrial Relations*
People v. United Mine Workers	an important decision in Colorado in 1921 which upheld the right of the state to require publicity and the use of legislative investigations and mediation in handling disputes in essential industries, including coal mining.	*Industrial Relations*
People v. Wilzig	a case in New York which involved the application of the common-law doctrine of conspiracy.	*Industrial Relations*
Pepper	Very small pits which appear as an area of small specks.	*Material Process*
Peptide	A short chain of amino acids.	*Agriculture*
Per Capita Income	per capita means "for each person", so the per capita incomes in the United States would be the total income divided by the number of individuals.	*Industrial Relations*
Per Capita Tax	the dues payment made by a local union to the international union to which it is affiliated, or by an international union to its parent federation, based on the number of members in the local union.	*Industrial Relations*
Per protocol analysis	An analysis of the subset of participants from a randomized controlled trial who complied with the protocol sufficiently to ensure that their data would be likely to exhibit the effect of treatment. This subset may be defined after considering exposure to treatment, availability of measurements and absence of major protocol violations. The per protocol analysis strategy may be subject to bias as the reasons for non-compliance may be related to treatment. See also: Intention to treat analysis	*Quality Engineering*
Perbunan	Synthetic rubber produced by the copolymerization of butadiene and acrylonitrile. Formerly known as buna N.	*Material Process*
Percent difference	The relative change in a quantity over a specified time period. It is calculated as follows: the current value has the previous value subtracted from it; this new number is divided by the absolute value of the previous value; then this new number is multiplied by 100.	*Energy*
Percent Planned Work	The Percentage Of Total Work (In Labor Hours) Performed In A Given Time Period Which Has Been Planned In Advance.	*Plant Engineering*
Percent utilization	The ratio of total production to productive capacity, times 100.	*Energy*
Percentage extraction	The proportion of a coal seam which is removed from the mine. The remainder may represent coal in pillars or coal which is too thin or inferior to mine or lost in mining. Shallow coal mines working under townships, reservoirs, etc., may extract 50%, or less, of the entire seam, the remainder being left as pillars to protect the surface. Under favorable conditions, longwall mining may extract from 80 to 95% of the entire seam. With pillar methods of working, the extraction ranges from 50 to 90% depending on local conditions.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Percentage Permanent Viscosity Loss (PPVL)	Measure of the PVL related to the viscosities of the fresh oil; equals PVL divided by fresh oil viscosity, multiplied by 100. Difference between the viscosity of an oil measured at low and high shear stresses, divided by viscosity measured at low shear stress, multiplied by 100.	*Lubrication*
Percentage Shop	a procedure developed by the National War Labor Board during world War II in which a company was required to maintain a fixed percentage of union employees in relation to the total work force employed.	*Industrial Relations*
Perched Water	Unconfined groundwater separated from an underlying main body of groundwater by an unsaturated zone.	*Petroleum Engineering*
Perched Water Table	Occurs when a low-permeability material, located above the water table, blocks or intercepts the down	*Petroleum Engineering*
Percolate (Infiltration)	The movement or flow of water seeping or filtering through the pores of soil, usually downward, without a definite channel.	*Petroleum Engineering*
Percussion drill	A drill, usually air powered, that delivers its energy through a pounding or hammering action.	*Mining*
Perennial	Plants that live or grow for more than one year.	*Forestry*
Perfectly Balanced Rotor	A rotor is perfectly balanced when its mass distribution is such that it transmits no vibratory force or motion to its bearings as a result of centrifugal forces.	*General Engineering*
Perfectly Balanced Rotor	A rotor is perfectly balanced when its mass distribution is such that it transmits no vibratory force or motion to its bearings as a result of centrifugal forces.	*Electronic Process*
Perfluorocarbons (PFCs)	A group of man-made chemicals composed of one or two carbon atoms and four to six fluorine atoms, containing no chlorine. PFCs have no commercial uses and are emitted as a byproduct of aluminum smelting and semiconductor manufacturing. PFCs have very high 100-year Global Warming Potentials and are very long-lived in the atmosphere.	*Energy*
Perfluoromethane	A compound (CF4) emitted as a byproduct of aluminum smelting.	*Energy*
Perforate	Make holes through the casing and cement opposite the producing formation to allow gas to flow into the well.	*Petroleum Engineering*
Perforating	Processes by which plastic film or sheeting is provided with holes ranging from relatively large diameters for decorative effects (by means of punching or clicking) to very small, even invisible, sizes. The latter are attained by passing the material between rollers or plates, one of which is equipped with closely spaced fine needles or by spark erosion.	*Engineering Physics*
Perforating Gun	A device fitted with shaped charges or "bullets" that is lowered to the desired depth in a well and fired to create penetrating holes in casing, cement and formation.	*Petroleum Drilling*
Perforation	A hole made in the casing, cement and formation through which formation fluids enter a wellbore.	*Petroleum Drilling*
Perforations	Slits cut into the well casing to allow groundwater to enter. May be located at more than one level, to coincide with water-bearing strata in the earth.	*Petroleum Engineering*
Performance Appraisal	a systematic review of an individual employee's performance on his job to evaluate the effectiveness or adequacy of his work.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Performance Attributes	Performance attributes measure the quality of service and operating efficiency. Loss of load probability, expected energy curtailment, and reserve margin are all performance attributes.	*Energy*
Performance Based Contracting	In a performance-based contract, the fee paid to the contractor depends (at least partly) on the business results achieved within the contracted work. This means that apart from the quality, speed, etc., of the work itself, the results of positive and negative work achievements is shared. For example, in the case of maintenance contracts, the mutual goal may be reduced mechanical equipment downtime (increased uptime). The benefits are long-term relationship and confidence building, reduced amount of contractors, mutual goals, and sharing the risks of unknown events. Overall cost reductions are mentioned from 9% to 30%. A collection of ten success factors is described.	*Maintenance*
Performance Based Ratemaking (PBR)	Under performance-based ratemaking, rates for utility service would no longer be based on cost-of-service, but instead on performance standards and market indices. PBR allows a utility greater flexibility to manage the costs of its electric system and to price its power at competitive levels by taking the market risk for recovering the revenues.	*Energy*
Performance bias	Systematic differences between intervention groups in care provided apart from the intervention being evaluated. For example, if participants know they are in the control group, they may be more likely to use other forms of care. If care providers are aware of the group a particular participant is in, they might act differently. Blinding of study participants (both the recipients and providers of care) is used to protect against performance bias.	*Quality Engineering*
Performance characteristic	"A property of a test that is used to describe its quality." [CLSI] For a measurement procedure, the performance characteristics include reportable range, imprecision, inaccuracy or bias, interference, recovery, detection limit, and reference interval. Those properties that describe how well a procedure performs. For a control procedure, the performance characteristics are the probabilities for error detection and false rejection, or the average run lengths for rejectable and acceptable quality. For a measurement procedure, the performance characteristics include analytical range, precision, accuracy, interference, recovery, and also the frequency and duration of analytical errors.	*Quality*
Performance Rating	see: Efficiency Rating, Merit Rating	*Industrial Relations*
Performance Specification	A specification that details the functional performance criteria required for a particular material or product (as opposed to a design specification, which prescribes in detail the design characteristics and manufacturing methodology for the material or product).	*Procurement*
Performance standards	These are developed to define and detail the specific attributes of the safety systems to enable them meet the required goals. This is achieved by setting the goals for the SCE and by providing a mechanism to measure and validate their performance.	*Reliability Engineering*
Performance Tests	measures or tests which determine an individual's performance or proficiency in doing his job.	*Industrial Relations*
Performance-based requirements (specifications)	Requirements that describe what the product should do, how it should perform, the environment in which it should operate, and interface and interchangeability characteristics. They should not specify how the product should be designed or manufactured.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Peridotite	An intrusive igneous rock consisting mainly of olivine.	*Mining*
Perilla oil	An oil obtained from several species of perrila grown in China, Japan and India, used in certain types of varnishes.	*Material Process*
Period	Time of a periodic process; 1/f where f is the sampling frequency; Symbols: T; Typical Units: s; Dimensions: Time.	*Aeronautical Engineering*
Period Costs	Those costs that are taken directly to the income statement as expenses in the period in which they are incurred or accrued; such costs consist of selling (marketing) and administrative expenses.	*Procurement*
Period effect	[In a cross-over trial:] A difference in the measured outcomes from one treatment period to another. This could be caused, for instance, by all patients in a trial naturally healing over time. See also: Cross-over trial	*Quality Engineering*
Period of Analysis	The number of years considered in the study.	*Energy*
Periodic	A process that executes at a fixed rate; Compare: aperiodic.	*Aeronautical Engineering*
Periodic built-in-test (PBIT)	Self tests running internal to a device as part of normal operation; Compare: initiated built-in-test.	*Aeronautical Engineering*
Periodic Review	this term may apply to regular merit reviews of individual employees under company or collectively bargained programs for adjustments of individual rates within the rate range or possibly for promotion.	*Industrial Relations*
Periodic table	Systematic graphical arrangement of the elements indicating chemically similar groups.	*Material Process*
Periodic vibration	(See also **Deterministic vibration**.) An oscillation whose waveform regularly repeats. Compare with *probabilistic* vibration.	*Reliability Engineering*
Periodicals	applies generally to the regular union publications which are made available by the trade unions and which are helpful in an examination and evaluation of union programs over a period of time.	*Industrial Relations*
Peripheral	A device that is external to the CPU and main memory, i.e., printer, modem or terminal, but is connected by the appropriate electrical connections.	*Electrical*
Peripheral Component Interconnect	A standard interface used primarily on computer backplanes to connect interface cards and peripheral devices to the processor bus. PCI is often used for video display cards, network interfaces (e.g. Ethernet), and peripheral interfaces such as SCSI or USB.	*Electrical Engineering*
Peritectic diagram	Binary phase diagram with the peritectic reaction.	*Material Process*
Peritectic reaction	The transformation of a solid to a liquid and a solid of a different composition upon heating.	*Material Process*
Perithecium	A sexual fruiting structure of the Ascomycetes with an opening called the ostiole at or near its top.	*Forestry*
Permanent Arbitrator	an arbitrator who is appointed under the terms of a collective bargaining agreement for a specific period of time, generally the duration of the contract, which may be for a period of one, two, or three years.	*Industrial Relations*
Permanent dipole	Molecular structure with an inherent separation of centers of positive and negative charge.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Permanent Disability	the inability of an individual, as the result of an injury or accident, to perform his regular or normal work.	*Industrial Relations*
Permanent Employee	an employee who has met the requirements of the probationary period.	*Industrial Relations*
Permanent Injunction	injunctions granted by courts are generally of three categories: (1) restraining orders, (2) temporary injunctions, and (3) permanent injunctions.	*Industrial Relations*
Permanent magnet	Magnet, typically of a hard steel, that retains its magnetization once magnetized.	*Material Process*
Permanent Partial Disability	permanent partial disability is a disability which generally permits partial use of the affected member, such as a limb.	*Industrial Relations*
Permanent Piece Rate	a piece rate which is established after preliminary or temporary trial rates have been applied to a particular job or operation, and after conditions under which the job is to be run have been standardized.	*Industrial Relations*
Permanent Total Disability	a phrase used with reference to an employee who is considered permanently unable to perform his regular work.	*Industrial Relations*
Permanent Viscosity Loss (PVL)	Difference between the viscosity of fresh oil and that of the same oil after engine operation or special test conditions of polymer degradation.	*Lubrication*
Permanently discharged fuel	Spent nuclear fuel for which there are no plans for reinsertion in the reactor core.	*Energy*
Permeability	The ease with which fluid flows through a porous medium.	*Energy*
Permeability	a qualitative description of the relative ease with which rock, soil, or sediment will transmit a fluid (liquid or gas). Often used as a synonym for hydraulic conductivity or coefficient of permeability.	*Chemical*
Permeability	The property of a formation which quantifies the flow of a fluid through the pore spaces and into the wellbore.	*Petroleum Drilling*
Permeation	The passage or diffusion or a gas, vapor, liquid, or solid through a barrier without physically or chemically affecting it.	*Engineering Physics*
Permissible	That which is allowable or permitted. It is most widely applied to mine equipment and explosives of all kinds which are similar in all respects to samples that have passed certain tests of the MSHA and can be used with safety in accordance with specified conditions where hazards from explosive gas or coal dust exist.	*Mining*
Permissive Wage Adjustment	any provision or procedure which permits the reopening of wage negotiations during the life of the contract when certain conditions take place which require a review of the wages of the particular company.	*Industrial Relations*
Permit	As it pertains to mining, a document issued by a regulatory agency that gives approval for mining operations to take place.	*Mining*
Permit Fee	the charge made by a union for a permit card.	*Industrial Relations*
Permit Permit Card	a certificate or similar document issued by a union, for a fee, which allows or "permits" an individual who is not a member of the union (in some cases he may be in the process of becoming a member) to work on the job covered by the issuing union's contract.	*Industrial Relations*
Permittivity	The proportionality constant between the dielectric displacement D and the electric field E.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Perovskite	Compound crystal structure.	*Material Process*
Perquisites	additional compensation furnished by an employer, usually in goods or services over and above the general payment of wages or salaries.	*Industrial Relations*
Persian Gulf	The countries that surround the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Seehttp://www.eia.doe.gov/emeu/cabs/pgulf.html for more information.	*Energy*
Persistent Unemployment	a general description of a prolonged and sustained rate of unemployment which has continued even during periods of high employment and upward movement of the business cycle.	*Industrial Relations*
Person	An individual, a corporation, a partnership, an association, a joint-stock company, a business trust, or an unincorporated organization.	*Energy*
Personal Communications Service	An American generic term for a mass-market mobile phone service, emphasizing personal communication, independent of the technology used to provide it. PCS includes such digital cellular technologies as GSM 1900, CDMA and TDMA IS-136. 2G, CDMA, Digital, GSM, TDMA.	*Electrical Engineering*
Personal Communications Service	An American generic term for a mass-market mobile phone service, emphasizing personal communication, independent of the technology used to provide it. PCS includes such digital cellular technologies as GSM 1900, CDMA and TDMA IS-136. 2G, CDMA, Digital, GSM, TDMA.	*Electrical Engineering*
Personal computer	A microcomputer for producing written, programmed, or coded material; playing games; or doing calculations. Laptop and notebook computers are excluded for the purposes of EIA surveys.	*Energy*
Personal Computer Memory Card International Association	A standard for miniaturized laptop expansion cards for modems, storage, and other devices. The standard was officially renamed "PC card."	*Electrical Engineering*
Personal Computer Memory Card International Association	A standard for miniaturized laptop expansion cards for modems, storage, and other devices. The standard was officially renamed "PC card."	*Electrical Engineering*
Personal Problems Consultant	a counselor attached to the personnel department staff of a company.	*Industrial Relations*
Personal Property	Any movable item subject to ownership; material, but not real property.	*Procurement*
Personal Services	Infrequent, technical, or unique functions performed by an independent contractor. Personal services contracts almost always run to individuals rather than partnerships, firms, or corporations, and the services performed frequently are not the full-time occupation of the contractor. Example of personal services contracts include translation, technical editing, technical appraisal.	*Procurement*
Personality Inventory	a test or tests designed to measure personality traits particularly those traits which have a bearing on the person's effectiveness in handling particular jobs.	*Industrial Relations*
Personality Profile	the broad summary picture which results from personality inventory testing and interviews.	*Industrial Relations*
Personality Testing	See: Personality Inventory	*Industrial Relations*
Personnel	a term applied to all of the individuals engaged in any enterprise toward whom a personnel administration program is directed.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Personnel (History) Records	the folders, charts, and other materials brought together in the personnel department to provide a continuing record of employees and their activity and progress in the company.	*Industrial Relations*
Personnel Administration	the broad structure of a personnel program designed to obtain the most effective utilization of manpower, not only for more efficient production, but also for better utilization of facilities and equipment.	*Industrial Relations*
Personnel Audit (or Survey)	an annual personnel administration inventory which is an analysis and measurement of a company's personnel policies and practices to determine their effectiveness.	*Industrial Relations*
Personnel Department	the department of a company charged with responsibility for hiring employees.	*Industrial Relations*
Personnel Director	in general the manager of the personnel department, and the chief officer administering personnel policies.	*Industrial Relations*
Personnel Inventory	See: Personnel Inventory	*Industrial Relations*
Personnel Locating System (PLS)	A basic guidance mode, providing lateral guidance to a PLS transmitter from range and bearing inputs. Equipment that determines range and bearing to a personnel with a PLS transmitter; Provides range and bearing to locate ground personnel. Coded continuous or periodic interrogations of the portable ground radios are used to provide the information.	*Aeronautical Engineering*
Personnel Management	the function primarily concerned with utilization of the human resources in a particular company or organization in such a way that the individual employee is given an opportunity to make his maximum contribution under safe and congenial working conditions.	*Industrial Relations*
Personnel Policies Forum	The Bureau of National Affairs panel of personnel and industrial executives who are surveyed periodically on current or major personnel and industrial relations problems.	*Industrial Relations*
Personnel Policy	an organization's guiding principles with respect to employees, very often embodied in a statement (or in statements) by management which in varying degree specifies what actions are to be taken and the principles upon which these directions rest.	*Industrial Relations*
Personnel Relations	the activities of an employer in communicating or otherwise dealing with individual employees in order most effectively to utilize their qualifications and to develop their potentialities, as well as to promote their well being.	*Industrial Relations*
Personnel Services	a variety of facilities provided on a service basis by a company which may range from cafeteria and food services to recreational programs, or to first aid and educational and training facilities.	*Industrial Relations*
Person-year	One whole year, or fraction thereof, worked by an employee, including contracted man power. Expressed as a quotient (to two decimal places) of the time units worked during a year (hours, weeks, or months) divided by the like total time units in a year. For example: 80 hours worked is 0.04 (rounded) of a person-year; 8 weeks worked is 0.15 (rounded) of a person-year; 12 months worked is 1 person-year. Contracted manpower includes survey crews, drilling crews, consultants, and other persons who worked under contract to support a firm's ongoing operations.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Person-years	The average number of years that each participant is followed up for, multiplied by the number of participants.	*Quality Engineering*
Persuader	a large hammer, a 'mash'. (Scot.).	*Mining*
PERT	See: Program Evaluation and Review Technique	*Industrial Relations*
PERT Chart	See Project Evaluation & Review Technique (Pert) Chart	*Management*
Pest	Any unwanted organism that causes stress or mortality to a desired organism.	*Forestry*
Pesticide	a substance that kills any pest, including insects, fungi, and weeds	*Agriculture*
Pesticide	Agent which prevents, repels, destroys or mitigates pests. Types include insecticides, disinfectants and sanitizers, rodenticides, and herbicides.	*Chemistry*
Petering or Peter Out	The ore giving out.	*Mining*
Peto method	A way of combining odds ratios that has become widely used in meta-analysis. It is especially used to analyze trials with time to event outcomes. The calculations are straightforward and understandable, but this method produces biased results in some circumstances. It is a fixed-effect model.	*Quality Engineering*
Petrillo Act	See: Lea Act	*Industrial Relations*
Petrochemical	An organic compound that has been derived from petroleum or natural gas.	*Chemical*
Petrochemical	Any chemical substance derived from crude oil or its products, or from natural gas. Some petrochemical products may be identical to others produced from other raw materials such as coal and producer gas.	*Lubrication*
Petrochemical feedstocks	Chemical feedstocks derived from refined or partially refined petroleum fraction, principally for use in the manufacturing of chemicals, synthetic rubber, and a variety of plastics.	*Energy*
Petrochemicals	Organic and in organic compounds and mixtures that include but are not limited to organic chemicals, cyclic intermediates, plastics and resins, synthetic fibers, elastomers, organic dyes, organic pigments, detergents, surface active agents, carbon black, and ammonia.	*Energy*
Petroleum	A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include non hydrocarbon compounds, such as additives and detergents, after they have been blended into the products.	*Energy*
Petroleum Additives Panel	ACC group of active developers, manufacturers and marketers of performance enhancing chemicals for use in automotive and industrial lubricants.	*Mechanical, Process, and Operations*
Petroleum Administration for Defense District (PADD)	A geographic aggregation of the 50 States and the District of Columbia into five Districts, with PADD 1 further split into three subdistricts. The PADDs include the States listed below:	*Energy*
Petroleum and other liquids	All petroleum including crude oil and products of petroleum refining, natural gas liquids, biofuels, and liquids derived from other hydrocarbon sources (including coal to liquids and gas to liquids). Not included are liquefied natural gas (LNG) and liquid hydrogen. See liquid fuels.	*Energy*
Petroleum coke	See Coke (petroleum).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Petroleum coke, catalyst	The carbonaceous residue that is deposited on the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon producing heat and CO2. The carbonaceous residue is not recoverable as a product.	*Energy*
Petroleum coke, marketable	Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining.	*Energy*
Petroleum consumption	See Products supplied	*Energy*
Petroleum imports	Imports of petroleum into the 50 states and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.	*Energy*
Petroleum jelly	A semi-solid oily product produced from de-waxing lubricating oil base stocks.	*Energy*
Petroleum Labor Policy Board	one of the boards established during the National Recovery Administration and similar in function to those established in the textile, auto, and steel industries.	*Industrial Relations*
Petroleum play(or "play")	A group of oil prospects that are controlled by the same set of geological circumstances.	*Petroleum Drilling*
Petroleum products	Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.	*Energy*
Petroleum refinery	An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.	*Energy*
Petroleum Resins	Petroleum resins are used in printing inks, adhesives, surface coatings, and rubber compounding. It is obtained as the byproduct from distilled petroleum streams.	*Material Engineering*
Petroleum stocks, primary	For individual products, quantities that are held at refineries, in pipelines and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.	*Energy*
Petroleum Workers, Inc.; Independent Union of (Ind)	See: Petroleum Workers, Inc.; International Union of (Ind)	*Industrial Relations*
Petroleum Workers, Inc.; International Union of (Ind)	this union formerly known as the Independent Union of Petroleum Workers, Inc. (Ind).	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Petroleum	A generic name for hydrocarbons, including crude oil, natural gas liquids, natural gas and their products.	*Petroleum Drilling*
Petty Cash Purchase	A method of purchasing low-value items from a firm's cash on hand system. This is often combined with a C.O.D. approach.	*Procurement*
P-F Interval	A term used in reliability-centered maintenance. The time from when a potential failure (P) is first detected on an asset or component using a selected predictive maintenance task, until the asset or component has failed (F). Reliability-centered maintenance principles state that the frequency with which a predictive maintenance task should be performed is determined by the P-F Interval.	*Reliability Engineering*
PFA	A fluorocarbon polymer used for insulation of electrical wires (trademark of DuPont).	*Electrical*
PFCs	See Perfluorocarbons	*Energy*
PFD	Process Flow Diagram	*Control Engineering*
PFI	port fuel injection	*Petro-Chemical Abbreviations*
PFPE	Perfluoroalkylpolyether	*Petro-Chemical Abbreviations*
PGA	Purchased Gas Adjustment	*Energy*
PGC	Power Generation Company	*Energy*
PGW	See: Guard Workers of America; United Plant	*Industrial Relations*
pH	a value that indicates the acidity of the soil	*Agriculture*
pH	a measure of the acidity of a solution. pH is equal to the negative logarithm of the concentration of hydrogen ions in a solution. A pH of 7 is neutral. Values less than 7 are acidic, and values greater than 7 are basic.	*Chemical*
pH	potential Hydrogen ions. Acidity or alkalinity of the soil is measured by pH. Basically it measures the amount of lime (calcium) contained in your soil. Acid soils are most common in moist climates, alkaline soils are most common in dry climates. A soil with a pH of 7 is considered neutral. A soil with a pH lower than 7.0 is considered acidic, a pH rating above 7 indicates alkalinity.	*Agriculture*
pH Junctions	The Junction of a reference electrode or combination electrode is a permeable membrane through which the fill solution escapes (called the liquid junction).	*General*
pH(S) (Standard pH Scale)	The conventional standard pH scale established on the basis that an individual ionic activity coefficient can be calculated from the Debye-H¸ckel law for primary buffers.	*General Engineering*
PHA	Process hazard analysis.	*Material Process*
Phaneritic	A term used to describe the coarse-grained texture of some igneous rocks.	*Mining*
Phase	One of the characteristics of the electric service supplied or the equipment used. Practically all residential customers have single-phase service. Large commercial and industrial customers have either two-phase or three-phase service.	*Energy*
Phase	Chemically homogenous portion.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Phase alternate line	A television standard used in most of Europe. Similar to NTSC, but uses subcarrier phase alternation to reduce the sensitivity to phase errors that would be displayed as color errors. Commonly used with 626-line, 50Hz scanning systems, with a subcarrier frequency of 4.43362MHz.	*Electrical Engineering*
Phase angle monitoring (PAM)	A device that monitors power-network stresses caused by heavily loaded lines. This is part of the Wide-Area Monitoring System, which relies on a number of phasor measurement units (PMUs) to collect data from strategic positions in the grid. (See also Wide-Area Monitoring System and Phasor Measurement Units.)	*Electrical*
Phase Diagram	A graphical representation of the relationships between environmental constraints, composition, and regions of phase stability, ordinarily under conditions of equilibrium.	*Engineering Physics*
Phase Difference	The time expressed in degrees between the same reference point on two periodic waveforms.	*General*
Phase field	Region of phase diagram corresponding to the existence of a given phase.	*Material Process*
Phase l, ll, lll, IV trials	A series of levels of trials required of drugs before (and after) they are routinely used in clinical practice: Phase I trials assess toxic effects on humans (not many people participate in them, and usually without controls); Phase ll trials assess therapeutic benefit (usually involving a few hundred people, usually with controls, but not always); Phase III trials compare the new treatment against standard (or placebo) treatment (usually a full randomized controlled trial). At this point, a drug can be approved for community use. Phase IV monitors a new treatment in the community, often to evaluate long-term safety and effectiveness.	*Quality Engineering*
Phase Margin	The difference in phase at the frequency where the combined process and controller amplitude ratio is 0 is the PHASE MARGIN.	*Process Control*
Phase Proportioning	A form of temperature control where the power supplied to the process is controlled by limiting the phase angle of the line voltage.	*Electrical*
Phase Proportioning	A form of temperature control where the power supplied to the process is controlled by limiting the phase angle of the line voltage.	*Electronic Process*
Phase reference probe	A device for giving a once-per-shaft-revolution signal.	*Reliability Engineering*
Phase Transformation	a change in the number and/or character of the phases that constitute the microstructure of an alloy.	*Metallurgy*
Phase-locked loop	A phase-locked loop (PLL, or phase lock loop) is a control system that generates a signal that has a fixed relation to the phase of a "reference" signal. A phase-locked loop circuit responds to both the frequency and the phase of the input signals, automatically raising or lowering the frequency of a controlled oscillator until it is matched to the reference in both frequency and phase.	*Electrical Engineering*
Phase-shifting transformer (also known as a quadratic booster)	A specialized type of transformer used on 3-phase power grids (AC) to balance the active (real) and reactive power in the system (see Reactive power, Power factor correction and Three-phase power), preventing the loss of lines through physical overloading.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Phasor Measurement Units (PMUs)	Monitoring devices that are installed at critical nodes in a power network where they collect data on power flow. (See also Wide-Area Monitoring System, Line thermal monitoring.) Signals sent from the units via satellite to a central control room, enabling operators to identify and counteract any instabilities before they spread through the grid.	*Electrical*
Phenol	A white, crystalline compound (C6H5OH) derived from benzene, used in the manufacture of phenolic resins, weed killers, plastics, disinfectants; also used in solvent extraction, a petroleum refining process. Phenol is a toxic material; skin contact must be avoided.	*Lubrication*
Phenol (C6H5OH)	A compound which contains one or more hydroxyl groups attached to an aromatic nucleus. One of the principal ingredients in the production of phenol aldehyde thermosetting plastics. Also, specifically phenol carbolic acid, other phenols are cresol, resorcinol, naphthol, xylenol.	*Material Process*
Phenol formaldehyde resin	Thermosetting resin made by the reaction between phenol and formaldehyde.	*Material Process*
Phenolic	Phenolic plastics are thermosetting resins used in potting compounds, casting resins, and laminating resins. They can also be used for electrical purposes and are a popular binder for holding together plies of wood for plywood.	*Material Engineering*
Phenolic coating	A thermo-setting resin applied to valve interiors and/or exteriors to inhibit corrosion, A plastic material.	*Mechanical*
Phenolics	A generic designation for the entire group of phenol aldehyde plastics.	*Material Process*
Phenolics, Hindered	A group of primary antioxidants used to protect polyolefins against oxidation and thermal degradation.	*Engineering Physics*
Phenoloics	These thermosetting resins are credited with being the first commercialized wholly synthetic polymer or plastic. The basic raw material is usually formaldehyde and phenol. In the uncured and semicured condition, phenolic resins are used as adhesives, casting resins, potting compounds, and laminating resins. As molding powders, phenolic resins can be found in electrical uses.	*Engineering Physics*
Phenoplast	General term for phenol aldehyde resins.	*Material Process*
Phillips v. Rainey	a decision of the New York Court of Appeals which held that the law requiring prison goods to be labeled was invalid since it was in conflict with the commerce clause of the U.S. Constitution.	*Industrial Relations*
Phloem	Vascular plant tissue through which is transported dissolved food and other materials in plants.	*Agriculture*
Phonon	A single quantum of vibrational or elastic energy.	*Engineering Physics*
Phosphate Ester	Any of a group of synthetic lubricants having superior fire resistance. A phosphate ester generally has poor hydrolytic stability, poor compatibility with mineral oil, and a relatively low viscosity index (VI). It is used as a fire-resistant hydraulic fluid in high-temperature applications.	*Lubrication*
Phosphates	Inorganic ions comprised of phosphorous and oxygen.	*Chemical Engineering*
Phosphating	A conversion treatment to produce a thin phosphate-based layer on a steel surface, providing improved corrosion protection and good surface for painting.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Phosphating	forming an adherent phosphate coating on a metal by immersion in a suitable aqueous phosphate solution, commonly used to promote better adhesion of paint to galvanized steel	*Materials Process*
Phosphite, Organic	A group of antioxidants used to protect polyolefins against oxidation and thermal degradation.	*Engineering Physics*
Phosphorescence	Luminescence in which photon emission occurs after more than about ten nanoseconds.	*Material Process*
Phosphoric Acid	The most common acid based on phosphorus sometimes called orthophosphoric acid. Used as a mild bowl acid and in formulations of light-duty detergents.	*Chemistry*
Phosphorous	A chemical element used extensively in motor oil additives to protect the engine. Volatile phosphorous which escapes from the engine into the emissions control system shortens its useful life. Improving emission system durability is an important part of GF-5 requirements. Ensuring phosphorous is retained in the engine is the subject of a new Sequence IIIG test.	*Mechanical, Process, and Operations*
Phosphorus	naturally occurring element commonly found in steel, particularly reactive in molten zinc metal	*Materials Process*
Phossy Jaw	an industrial disease in which there is an eating away of the bones. It used to occur in plants in which phosphorus was a major element in producing goods.	*Industrial Relations*
Photocell	A resistive, bulk effect type of photosensor, the type used when it is desirable to wire several photoreceivers in series or in parallel. The resistance decreases with increasing light intensity.	*Electrical Engineering*
Photoconductor	Semiconductor in which electron hole pairs are produced by exposure to photons.	*Material Process*
Photodegradation	Degradation of plastics due to the action of light. Most plastics tend to absorb high-energy radiation in the ultraviolet portion of the spectrum, which results in the formation of free radicals and causes oxidation, cleavage, and other degradative reactions.	*Engineering Physics*
Photoelasticity	Study of elastic strains by photographic measurements of strains sufficient to cause double refraction in a celluloid or glass model.	*Material Process*
Photo-Engravers' Union of North America; International (AFL-CIO)	an organization of workers which broke away from the International Typographical Union in 1900 and was chartered by the AFL in 1904.	*Industrial Relations*
Photoluminescence	Luminescence caused by photon.	*Material Process*
Photon	A quantum unit of electromagnetic energy.	*Engineering Physics*
Photon	The particle-like packet of energy corresponding to a given wavelength of electromagnetic radiation.	*Material Process*
Photonic material	Optical material in which signal transmission is by photons rather than by the electrons of electronic materials.	*Material Process*
Photoreceiver	A unit consisting of photosensor, focusing lens, and protective enclosure.	*Electrical Engineering*
Photoresist	Polymeric material used in the lithography process.	*Material Process*
Photosensor	A light sensitive portion of a photoelectric control that converts a light signal into an electrical signal. MICRO SWITCH uses photocells and phototransistors.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Photosynthesis	The process by which plants use light energy to make sugars from carbon dioxide and water.	*Agriculture*
Photo-thermal NDT	NDT technique for spayed coatings. A repeated pulse of heat, from a laser source, flows through the coating and substrate. The thermal signature is detected and related to the input signal thereby indicating coating thickness.	*Paint and Coatings*
Phototransistor	A type of photosensor. Typically used where speed of response is important or ambient temperature variations are great.	*Electrical Engineering*
Phototrophs	organisms that use light to generate energy (by photosynthesis) for cellular activity, growth, and reproduction.	*Chemical*
Photovoltaic and solar thermal energy (as used at electric utilities)	Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.	*Energy*
Photovoltaic cell (PVC)	An electronic device consisting of layers of semiconductor materials fabricated to form a junction (adjacent layers of materials with different electronic characteristics) and electrical contacts and being capable of converting incident light directly into electricity (direct current).	*Energy*
Photovoltaic cell net shipments	Represents the difference between photovoltaic cell shipments and photovoltaic cell purchases.	*Energy*
Photovoltaic Cells	Used to directly convert solar radiation into electricity. Materials called semiconductors, usually made from pure silicon, transfer light energy (photons) into electrical energy in a process known as the photoelectric effect.	*Energy*
Photovoltaic module	An integrated assembly of interconnected photovoltaic cells designed to deliver a selected level of working voltage and current at its output terminals, packaged for protection against environmental degradation, and suited for incorporation in photovoltaic power systems.	*Energy*
Photovoltaics	A technology that directly converts light into electricity. The process uses modules, which are usually made up of many cells (thin layers of semiconductors).	*Energy*
Phthalate	Phthalates, or phthalate esters are manufactured from methanol and are used as plasticizers to soften the plastic. They are also used in other non-PVC applications like paints, rubber products, adhesives and some cosmetics.	*Chemical*
Phthalic acid (C6H4 (COOH)2)	Colorless rhombic or monoclinic crystals from water. A dibasic acid used in the production of alkyd resins, plasticizers and dyes.	*Material Process*
Phthalic anhydride (C6H4(CO)2O)	Colorless rhombic needles. Used for the same purposes as phthalic acid.	*Material Process*
Physical Vapor Deposition	A term covering all the vapor deposition processes including Ion plating, It does not include CVD as this is chemical not physical.	*Paint and Coatings*
Physically Handicapped	individuals who have some physical incapacity or have limited use of their limbs which creates difficulty in the performance of work.	*Industrial Relations*
Physically Handicapped, Office of President's Committee on Employment of	the Committee is concerned with the problems of the physically handicapped and attempts to coordinate and establish programs throughout the country to utilize the handicapped as a national asset.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PIB	polyisobutylene	*Petro-Chemical Abbreviations*
PIBA	PIB amine	*Petro-Chemical Abbreviations*
PIBSA	polyisobutyl succinic anhydride	*Petro-Chemical Abbreviations*
Pick	hand tool for loosening coal; or machine picks attached to the drum or a chain to cut the coal or stone.	*Mining*
Pick	Generally refers to the selection or choice of work assignments in the transportation industry.	*Industrial Relations*
Pick box	a component of a cutting unit that holds the cutter pick.	*Mining*
Pick lacing	the arrangement of picks in a cutting unit of a coal getting machine.	*Mining*
Picker	a pin used to trim the wick of an oil lamp. -see also Pricker; or a person employed to pick the stone and rubbish from the coal. - see also Crow picker and Batt picking.	*Mining*
Picket	an individual or person generally assigned by a union, and almost always a member of that organization, to stand or walk near the approaches to a place of work or the exits from which the employees leave the plant.	*Industrial Relations*
Picket Line	the group of pickets posted at plant entrances and gates or marching near the entrances and gates to notify employees of the existence of a labor dispute.	*Industrial Relations*
Picket line	A reference line, marked by pickets or stakes, established on a property for mapping and survey purposes.	*Mining*
Picketing	the actual patrolling at or near the employer's place of business during a strike or other dispute to give notice of the existence of a labor dispute, to publicize it, or to persuade workers to join the union and to discourage or prevent persons from entering or going to work.	*Industrial Relations*
Picketing at Common Site (Situs)	the most difficult cases under the Taft–Hartley Act's secondary-boycott provisions have been those in which a union has picketed a so-called common site or sites-one at which employees of both a struck employer and employees of neutral employers are working.	*Industrial Relations*
Picketing Circular	See: Circular Picketing	*Industrial Relations*
Picketing Informational	a form of publically picketing which has had a rather checkered career both before the National Labor Relations Board and the federal courts.	*Industrial Relations*
Picketing, Mass	See: Mass Picketing	*Industrial Relations*
Picketing, Organizational	See: Organizational Picketing	*Industrial Relations*
Picketing, Peaceful	See: Peaceful Picketing	*Industrial Relations*
Picketing, Secondary	See: Secondary Picketing	*Industrial Relations*
Picketing, Stranger	See: Stranger Picketing	*Industrial Relations*
Pick-face flushing, dust suppression	The spraying of water onto the cutting picks of a coal-cutting machine.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Picking table	a table, which either revolved or was of a long bench type. The coal was tipped onto the table to be cleaned and sorted by the pickers.	*Mining*
Pickle	The chemical or electrochemical removal of surface oxides. Following welding operations, piping is frequently pickled in order to remove mill scale, oxides formed during storage, and the weld discolorations.	*Maintenance and Repair*
Pickling	The liquid process of removing surface oxide and scale from metal which has been hot worked. Treating the surface of iron or steel with acid to remove scale, rust and dirt, preparatory to further processing such as cold rolling, tinning, galvanizing, polishing, etc.	*Metallurgy*
Pickling	Treatment of steel stock with mild acids to remove scale.	*Material Process*
Pick-to-ship cycle time	Pick-to-ship begins when an order is released to be picked from inventory and ends at the time the order is shipped.	*Quality*
Pickup	See **transducer**.	*Reliability Engineering*
Picric acid (NO2)3C6H2OH	Yellow rhombic leaflets from water. An acid catalyst and intermediate inorganic synthesis, as of dyes.	*Material Process*
Picture	a covering of sheet iron, or brattice deals, hung from the roof and shaft framing to protect the onsetters from dripping water at the shaft bottom. Also a similar cover to protect the hewer from water which falls from the roof in wet workings. (N. East).	*Mining*
PID	PID (Proportional, Integral, Derivative) Proportional means changing a variable in proportion to its difference from the set-point. Integral rectifies any small difference in the variable and the set-point. Derivative reduces the other oscillations.	*Control Engineering*
PID	Proportional, integral, derivative. A three mode control action where the controller has time proportioning, integral (auto reset) and derivative rate action.	*Electronic Process*
PID Controller	Controllers are designed to eliminate the need for continuous operator attention. Cruise control in a car and a house thermostat are common examples of how controllers are used to automatically adjust some variable to hold the process variable (or process variable) at the set-point. The set-point is where you would like the process variable to be. Error is defined as the difference between set-point and process variable. (error) = (set-point) - (process variable). The output of PID controllers will change in response to a change in process variable or set-point.	*Process Control*
Piece Rate	a predetermined amount paid to an employee under a wage incentive system for each unit of output.	*Industrial Relations*
Piecework	See: Piece Rate, Wage Payment Plans, Incentive Wage	*Industrial Relations*
Piedmontese	A breed of beef cattle that originated in Italy. Registry is by the Piedmontese Association of North America.	*Agriculture*
Pier	A structure built on posts extending from land out over water, used as a landing place for ships, an entertainment area, a strolling place, etc.; jetty. In a bridge or the like) a support for the ends of adjacent spans.	*Civil Engineering*
Pierhead	The outermost end of a pier or wharf.	*Civil Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Piezoelectric	A dielectric material in which polarization is induced by the application of external forces.	*Engineering Physics*
Piezoelectric coupling coefficient	Fraction of mechanical energy converted to electrical energy by a piezoelectric transducer.	*Material Process*
Piezoelectric effect	Production of a measurable voltage change across a material as a result of an applied stress.	*Material Process*
Piezoelectric (PE) transducer	One which depends upon deformation of its sensitive crystal or ceramic element to generate electrical charge and voltage. Many present-day accelerometers are PE.	*Reliability Engineering*
Piezoelectric Accelerometer	A transducer that produces an electrical charge in direct proportion to the vibratory acceleration.	*General*
Piezoelectricity	An electrical response to mechanical pressure application.	*Material Process*
Piezometric Surface	The water level surface defined from the mapping of water level elevations in wells tapping into a confined aquifer.	*Petroleum Engineering*
Piezoresistance	Resistance that changes with stress.	*Electrical*
Piezoresistance	A change in resistance in a semiconductor, caused by an applied stress to the diaphragm.	*Electrical Engineering*
Piezoresistive (PR) transducer	One whose electrical output depends upon deformation of its semiconductor resistive element, offering greater resistance change than does the wire of a strain-gage transducer, for a given deformation.	*Reliability Engineering*
Pig	A cleaning device placed that is used to scrape residues from the inner wall of oil pipelines. A pig is pushed through the pipeline by the pressure of the oil flowing past. Pipelines can be equipped with pig launch sites and pig traps. These are points at which pigs can be introduced or removed from the pipeline.	*Electrical*
Pig	A device, closely conforming to the pipe bore, which is forced thru a pipeline to clean the pipe of all foreign material and debris. The valves in a pipeline that will be pigged, must be thru-conduit, full port, otherwise the pig will not pass through them.	*Mechanical*
Pig iron	Crude, high-carbon iron produced by reduction of iron ore in a blast furnace.	*Energy*
Pig iron	Crude iron from a blast furnace.	*Mining*
Pigback	a gradual and local thinning of a coal seam due to a roll or irregularity of roof or floor (N. Staffs.).	*Mining*
piggyback	Moving a truck loaded with freight on a rail flatcar.	*Agriculture*
Piggy-back	A bridge conveyor.	*Mining*
Piggy-Back Trucking	a procedure for moving loaded truck trailers to various places on railroad flat cars rather than hauling them over the highway by trucks.	*Industrial Relations*
Pigment	A finely divided, insoluble material that imparts a color to the substance to which it is added, or makes it black, white or gray. Insoluble, colored additive for polymers.	*Material Process*
Pike	another name for a collier's pick. Also called a 'slitter' or a 'mandril'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pilaster	An exterior column support, usually an integral part of the basin wall. Also known as External Pier. Used as a central point to establish the elevation of framework members.	*Facility Engineering*
Piles	Term used in structural engineering for the joint plates.	*Maintenance*
Pill	Term for perform, a firmly compacted mass of molding powder of predetermined weight made by application of high pressure without heat, and used for convenience in loading molds.	*Material Process*
Pillar	an area of stone or coal left in place, unworked, to support the roof. -see also Shaft pillar and Stoop; or an artificial pillar constructed from wooden chocks in-filled with rubble. (Scot.) -see also Chocks.	*Mining*
Pillar	A block of solid ore or other rock left in place to structurally support the shaft, walls or roof of a mine.	*Mining*
Pillar airing	see Coursing.	*Mining*
Pillar and stall	the method of extraction where pillars were left in to support the roof, compared with longwall working, where all the coal is extracted. Later in pillar and stall, the pillars were also extracted, leaving the roof to collapse. Also variously called Straight and pillar, Bord and pillar, Room and pillar, Post and bank and Stoop and room.	*Mining*
Pillar robbing	The systematic removal of the coal pillars between rooms or chambers to regulate the subsidence of the roof. Also termed "bridging back" the pillar, "drawing" the pillar, or "pulling" the pillar.	*Mining*
Pillar Set	A self-contained set of dies; one that does not depend upon the press for proper alignment.	*Metallurgy*
Pillar wood	waste timbers used to fill cavities above the roof supports.	*Mining*
Pillaring back	when a district or mine had been worked to a point were only the pillars were left, the pillars would be extracted and the roof allowed to collapse. The pillars would be extracted working back towards the shaft. Also known as 'drifting back' or 'pillaring out'.	*Mining*
Pillars	Guide posts used in a pillar set.	*Metallurgy*
Pilling Bedworth ratio	Ratio of oxide volume produced to the metal volume consumed in oxidation.	*Material Process*
Pillow Block	A bearing block or housing having a flat mounting surface offset, but parallel to the shaft.	*Equipment*
Pilot	A utility program offering a limited group of customers their choice of certified or licensed energy suppliers on a one year minimum trial basis.	*Energy*
Pilot	A spring loaded pressure regulator used to control the pressure and flow of other larger pressure regulators or instruments.	*Mechanical*
Pilot heading	a roadway driven ahead, sometimes on smaller dimensions, often for the purposes of exploration. Pilot shaft, an exploration shaft.	*Mining*
Pilot Hole	A test well.	*Petroleum Engineering*
Pilot line	A line conducting pilot fluid to a control device or devices.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pilot pressure	Auxiliary pressure used to actuate or control hydraulic components.	*Mechanical, Process, and Operations*
Pilot Pressure	Auxiliary pressure used to actuate or control a component.	*Mechanical, Process, and Operations*
Pilot test	operation of a small-scale version of a larger system to gain information relating to the anticipated performance of the larger system. Pilot test results are typically used to design and optimize the larger system.	*Chemical*
Pilot Valve	A valve used to operate another valve or control.	*Mechanical, Process, and Operations*
Pilot valve	An auxiliary valve used to control the operation of another valve. The controlling stage of a 2-stage valve.	*Mechanical, Process, and Operations*
Pilot-operated regulator	A regulator which is controlled by a second small volume high accuracy regulator or pilot. This arrangement has the advantages of improving performance by minimizing the effects of unbalance and droop. The number of possible applications are also increased since a wide range of pilot configurations are feasible.	*Mechanical*
Pimple	Undesired, small, sharp, or conical elevation on the surface of a plastic whose form resembles a pimple in the common sense. See also Blister.	*Material Process*
PIMS	Process Information Management System	*Control Engineering*
Pin	a distinctive piece of wood about 14 in long used underground by the breakers as a token. One would be put in every full put to denote who had filled it.	*Mining*
Pin box	a long type of cupboard divided into several compartments, kept near the top of the shaft. As each full put came out of the pit and was emptied, the pin would be collected and put into its own pigeonhole in the pin box.	*Mining*
Pin connection	In two dimensions, a pin connection restrains two translation degrees of freedom but does not restrain rotation. Since the rotation degree of freedom is unrestrained at a pin connection, it transfers no moment.	*Engineering Physics*
Pin cracks	small breaks in the coal seam containing water or gas.	*Mining*
Pin Electronics	Electronic circuitry in an automated tester (ATE system) that connects to the device under test. Pin electronics can deliver signals, power, or precise voltages and currents, and can measure the pin's response, drive, and electrical characteristics.	*Electrical Engineering*
Pin number	a collier's number chalked on the side of a tub of coal. (Mids.).	*Mining*
Pin support	In two dimensions, a pin support restrains two translation degrees of freedom but does not restrain rotation. When considering reaction forces, a pin support is usually considered to have two force components: one each about the x and y axes respectively.	*Engineering Physics*
Pinch	A compression of the roof and floor of a coal seam so as to "squeeze" out the coal.	*Mining*
Pinch	A compression of the walls of a vein or the roof and floor of a coal seam so as to "squeeze" out the coal.	*Mining*
Pinch Force	The force exerted by the pinch valve on the tubing in the CLOSED state, usually enough to set a level high enough to occlude flow.	*General Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pinch Force	The force exerted by the pinch valve on the tubing in the CLOSED state, usually enough to set a level high enough to occlude flow.	*Mechanical*
Pinch Gap	The distance between opposed pinching surfaces when a pinch valve is closed.	*General Mechanical*
Pinch Gap	The distance between opposed pinching surfaces when a pinch valve is closed.	*Mechanical*
Pinch Off	Section of blow mold that seals the end of the parison by pinching off excess material.	*Engineering Physics*
Pinch valve	A device used to pinch and unpinch flexible tubing for the purpose of controlling flow.	*General Mechanical*
Pinch valve	A device used to pinch and unpinch flexible tubing for the purpose of controlling flow.	*Mechanical*
Pinching	the movement of the roof due to the action of weight (S. Mids.).	*Mining*
Pinching Surfaces	The surfaces of components in a pinch valve that pinch the tubing, usually the pinch ridge and plunger.	*Mechanical*
Pine Oil	An oil processed from the gum of pine trees. Used in hard surface cleaning and disinfecting, and distinguished by a characteristic aroma. As a disinfectant it is inactive against staphylococci.	*Chemistry*
Pine Oil Cleaner	A liquid hard-surface cleaner containing detergents and pine oil. Used to dissolve oil, fatty acids, paints and tars while disinfecting and sanitizing, and deodorizing with a pine scent.	*Chemistry*
Pinhole	Tiny but apparently very deep hole in the surface of, or through, a thin section of plastic, which usually is round and has a rounded edge.	*Material Process*
Pinhole	Tiny hole in cast, extrusion coating or extruded sheet or blow molded product.	*Engineering Physics*
Pinion	The smaller of two mating or meshing gears; can be either the driving or the driven gear.	*Lubrication*
Pinion shaft	The external input shaft of certain gear operators which drives internal reduction gearing. The pinion shaft can accept a handwheel or power operator.	*Mechanical*
Pinion shaft	The external input shaft of certain gear operators which drive the internal reduction gearing.	*General Mechanical*
Pinkeron Detective Agency	an organization established in the 1870's, best known in the past years for espionage on union activities and for strikebreaking services performed by employers.	*Industrial Relations*
Pinners	large pieces of stone used for building pack-walls underground (N. Staffs.); or small wedge-shaped pieces of wood (N. East).	*Mining*
Pinning	Roof bolting.	*Mining*
Pinnings	bratticing in a heading (N. Staffs.).	*Mining*
Pinpoint Gate	Gate in an injection mold which is approximately 0.030 inch in diameter. This small gate minimizes the size of the mark left on the molded part.	*Engineering Physics*
Pins	beds or layers of ironstone in the coal measures (S. Wales).	*Mining*
Pioneering cloud	the initial cloud of finely suspended coal dust that causes an explosion.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PIP	Piping and Instrumentation Diagram.	*Material Process*
Pipage	Conveyance, as of water, gas, or oil, by means of pipes.	*Civil Engineering*
Pipe	To supply with pipes.	*Civil Engineering*
Pipe Alignment Guide	A restraint in the form of a sleeve or frame that permits the pipeline to move freely only along the axis of the pipe.	*Maintenance and Repair*
Pipe And Profile	Extrusion process by which heavy wall continuous profiles are produced. Die design determines shape of extrudate and designs range from a simple circular shape to complex window channels and moldings.	*Engineering Physics*
Pipe Fittings	Various pipe accessories for coupling pipes and equipment. Fittings include bends, caps, couplings, elbows, flanges, nipples, reducers, tees etc.	*Industrial*
Pipe Supporting Fixtures	Elements that transfer the load from the pipe or structural attachment to the support structure or equipment.	*Maintenance and Repair*
Pipe thread, Dryseal	Pipe threads in which sealing is a function of root and crest interference.	*Mechanical, Process, and Operations*
Pipe thread, Tapered	Pipe threads in which the pitch diameter follows a helical cone to provide interference in tightening.	*Mechanical, Process, and Operations*
Pipeline	A figurative, rather than literal, description of stock necessary in all inventory locations throughout a shipping channel to keep one product on the shelf available for consumer purchase. This includes surplus stock at the store, distributor's warehouse and at shipping point, including all goods in transit between any of these points. Envision this as all the cherries existing at one time from the packing shed to the produce department of a supermarket.	*Agriculture*
Pipeline or Transmission Line	A pipe installed for the purpose of transmitting gases, liquids, slurries, etc., from a source or sources of supply to one or more distribution centers or to one or more large-volume customers; a pipe installed to interconnect source or sources of supply to one or more distribution centers or to one or more large-volume customers; or a pipe installed to interconnect sources of supply.	*Maintenance and Repair*
Pipeline (natural gas)	A continuous pipe conduit, complete with such equipment as valves, compressor stations, communications systems, and meters for transporting natural and/or supplemental gas from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of utilization. Also refers to a company operating such facilities.	*Energy*
Pipeline (petroleum)	Crude oil and product pipelines used to transport crude oil and petroleum products, respectively (including interstate, intrastate, and intracompany pipelines), within the 50 states and the District of Columbia.	*Energy*
Pipeline freight	Refers to freight carried through pipelines, including natural gas, crude oil, and petroleum products (excluding water). Energy is consumed by various electrical components of the pipeline, including, valves, other, appurtenances attaches to the pipe, compressor units, metering stations, regulator stations, delivery stations, holders and fabricated assemblies.	*Energy*
Pipeline fuel	Gas consumed in the operation of pipelines, primarily in compressors.	*Energy*
Pipeline Integrity Management System	The collection of arrangements that collectively ensure the integrity of the pipeline	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pipeline purchases	Gas supply contracted from and volumes purchased from other natural gas companies as defined by the Natural Gas Act, as amended (52 Stat. 821), excluding independent producers, as defined in Paragraph 154.91(a), Chapter I, Title 18 of the Code of Federal Regulations.	*Energy*
Pipeline quality natural gas	A mixture of hydrocarbon compounds existing in the gaseous phase with sufficient energy content, generally above 900 British thermal units, and a small enough share of impurities for transport through commercial gas pipelines and sale to end-users.	*Energy*
Pipeline, distribution	A pipeline that conveys gas from a transmission pipeline to its ultimate consumer.	*Energy*
Pipeline, gathering	A pipeline that conveys gas from a production well/field to a gas processing plant or transmission pipeline for eventual delivery to end-use consumers.	*Energy*
Pipeline, transmission	A pipeline that conveys gas from a region where it is produced to a region where it is to be distributed.	*Energy*
Pipelines, rate regulated	FRS (Financial Reporting System Survey) establishes three pipeline segments: crude/liquid (raw materials); natural gas; and refined products. The pipelines included in these segments are all federally or State rate-regulated pipeline operations, which are included in the reporting company's consolidated financial statements. However, at the reporting company's option, intrastate pipeline operations may be included in the U.S. Refining/Marketing Segment if they would comprise less than 5 percent of U.S. Refining/Marketing Segment net PPE, revenues, and earnings in the aggregate; and if the inclusion of such pipelines in the consolidated financial statements adds less than $100 million to the net PPE reported for the U.S. Refining/Marketing Segment.	*Energy*
Piper	a feeder of gas. (Lancs.).	*Mining*
Piping	Pipes collectively; a system or network of pipes. Material formed into a pipe or pipes.	*Civil Engineering*
Piping	Washing gravel in a hydraulic claim by discharging water upon it through a nozzle.	*Mining*
Piping System	Interconnected piping subject to the same set or sets of design conditions.	*Maintenance and Repair*
Pirn	the drum of a flat rope winding engine.	*Mining*
Piston	A cylindrical part which moves or reciprocates in a cylinder and transmits or receives motion to do work.	*Mechanical, Process, and Operations*
Piston Actuator	A fluid-powered, normally pneumatic device in which the fluid acts upon a movable cylindrical member, the piston, to provide linear motion to the actuator stem. These units are spring or air opposed and operate at higher supply pressures than a spring return actuator.	*Industrial Engineering*
Piston corers	Advanced piston corer, extended core barrel systems	*Petroleum Drilling*
Piston effect	The sealing principle involved in utilizing line pressure to effect a seal across the floating seats of some valves.	*Mechanical*
Piston-Type Cylinder	A cylinder which uses a sliding piston in a housing to produce straight movement.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pit	a colliery; or a circular, oval, square, or oblong vertical excavation descending from the surface. The term shaft is often used synonymously, being either a pit or only a portion of one; or the shaft at a colliery, or coal workings entered by a shaft, or all the underground workings of a colliery.	*Mining*
Pit	Small regular or irregular hole in the surface of a plastic, usually having somewhat like diameter and depth, and often dull or rough at the bottom. see also, Pinhole, short.	*Material Process*
Pit bank or Pitheap	the elevated stage around the top of the winding shaft upon which the tubs or mine-cars were delivered from the cages.	*Mining*
Pit barring	the wooden lining of a shaft.	*Mining*
Pit bottom	the marshalling area around the bottom of the shaft; or the lowest shaft inset to which access could be gained by winding; or the roadway network in the vicinity of an inset from which men and materials are normally wound.	*Mining*
Pit bottom stoop, (Scot.)	see Shaft pillar.	*Mining*
Pit bottomer	a man who worked in the area around the base of the coal-winding shaft e.g. shunting the tubs. Also known as 'bottomers'.	*Mining*
Pit boxes	another term for 'corves'.	*Mining*
Pit brow	see Pit bank.	*Mining*
Pit brow lassies	women and girls who worked at a myriad of tasks around the pit top e.g. loading and off-loading the cage, sorting the coal on the picking tables and in the screens, bagging coal etc.	*Mining*
Pit dirt	a miner was said to be in his 'pit dirt' immediately leaving the pit before washing himself.	*Mining*
Pit drawers	thin pants, shorts or knickers worn by colliers working on the coalface. (Lancs.).	*Mining*
Pit eye	in some areas the pit eye refers to the mouth of the shaft at the surface. In others it is the entrance to workings at the base of the shaft.	*Mining*
Pit eye pillar	the shaft pillar, the pillar of coal left in situ to support the shaft and the buildings of the colliery. (N. East).	*Mining*
Pit fettlers	shaftsmen, men who worked in, inspected and maintained the shaft (N. Staffs.).	*Mining*
Pit frame	the framework of wood or steel that supported the pulleys of the winding ropes over the shaft. (N. East). -see also Head frames, Headsticks and Headgear.	*Mining*
Pit gate	any place in the immediate area of a colliery where the colliers would meet during a dispute, a 'pit-gate meeting'. (Yorks.).	*Mining*
Pit head	the landing at the top of the shaft; or the colliery surface. Also called the 'pit top'.	*Mining*
Pit heap	see Spoil heap.	*Mining*
Pit pan	a miner's coal shovel, also called a Frying pan, Oscar or Durham (N.E & Yorks.).	*Mining*
Pit room	the extent of the underground workings in use or available to be worked.	*Mining*
Pit top	see Pit head.	*Mining*
Pitch	The angle of a rotor measured in the plane of rotation; Symbols: theta, Theta; Typical Units: rad, deg.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pitch	The same as a dip.	*Mining*
Pitch & lead	Pertaining to screw threads. The pitch refers to the measurement between adjacent threads. The lead refers to the distance the screw advances in one complete revolution. Worm gears of gear operators, are also identified by pitch and lead. Speed of operation and torque required are related to pitch and lead.	*Mechanical*
Pitch Circle	A circle the radius of which is equal to the distance from the gear axis to the pitch point.	*Gears*
Pitch cue	Flight director cue to control pitch; in fixed-wing aircraft, a yoke cue; in rotary-wing aircraft, a longitudinal cyclic cue.	*Aeronautical Engineering*
Pitch Diameter	The simple, effective diameter of screw thread. Approximately half way between the major and minor diameters.	*Fastening*
Pitch Line	An imaginary line that divides the upper and lower halves of gear teeth while in the contact area.	*Reliability Engineering*
Pitch Plane	In a pair of gears it is the plane perpendicular to the axial plane and tangent to the pitch surfaces. In a single gear it may be any plane tangent to its pitch surface.	*Gears*
Pitch Point	This is the point of tangency of two pitch circles (or of a pitch circle and a pitch line) and is on the line of centers. The pitch point of a tooth profile is at its intersection with the pitch circle.	*Gears*
Pitch rate	Rate of change of pitch; time derivative of pitch; Symbols: p; Symbols: theta dot; Typical Units: rad/s, deg/s; Dimensions: 1/Time.	*Aeronautical Engineering*
Pitchblende	An important uranium ore mineral. It is black in color, possesses a characteristic greasy luster and is highly radioactive.	*Mining*
Pitcheblende	Uranium oxide (U_3O_8). It is the main component of high-grade African or domestic uranium ore and also contains other oxides and sulfides, including radium, thorium, and lead components.	*Energy*
Pitchel	a long crook or iron bar used when fitting pumps and pumping pipes in a shaft. The pitchel was used to line up the holes in the flanges to allow a nut and bolt to be fitted. (Som.).	*Mining*
Pitchers	loaders or fillers on the coalface; or the men who took up and relayed the tub rails in the workings and along the longwall face. (N. East).	*Mining*
Pitcoal	a general term for the bituminous type of coal.	*Mining*
Pith	The central tissue in stems and roots.	*Agriculture*
Pitot tube	a device used to measure the total pressure of a fluid stream that is essentially a tube attached to a manometer at one end and pointed upstream at the other.	*Chemical*
Pit-rags	after the introduction of the pithead baths, and before the issue of protective clothing, the miners would wear any old clothing until it fell to pieces.	*Mining*
Pits	The area where cars come in for fuel, tires, adjustments and repairs during on-track sessions. The name originated from early racetracks, where the mechanics actually stood in a shallow pit where they could duck if an out-of-control car came their way. Today, mechanics are protected by concrete walls, and the pit lane is segregated from the actual racing surface.	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pitted surfaces	areas of metal where small, sharp cavities exist, usually formed by corrosion	*Materials Process*
Pitter	a horse or pony suitable for underground work.	*Mining*
Pitting	Surface cavities; may be related to fatigue, overload or corrosion.	*Lubrication*
Pitting corrosion	Pitting corrosion is highly localized type of corrosion attack which occurs with a well defined loss of metal at anodic areas. While the overall corrosion is quite slight, perforation of the metal often occurs as a result of the pitting.	*Material Process*
Pitting—corrosion	Corrosion of a metal surface, cofined to a point or small area, that takes the form of cavities	*Paint and Coatings*
Pitting—tribology	A form of wear characterized by the presence of surface cavities the formation of which is attributed to processes such as fatigue, local adhesion, or cavitation.	*Paint and Coatings*
Pittsburgh Plate Glass Case	a decision in which the National Labor Relations Board determined that the appropriate bargaining unit should be all six plants of the Pittsburgh Plate Glass Company.	*Industrial Relations*
Pittsburgh Process	Glass making process developed in 1928 to reduce both cost and distortion	*Physics*
Pitwood	the timber used underground to support the roof.	*Mining*
Pit-Yakkor	a term of abuse applied to pit men (N. East)—see also Yakker.	*Mining*
Pivot Plate	The gusset which attaches the conveyor to the support leg.	*Manufacturing*
Pixel	Picture element. Definable locations on a display screen that are used to form images on the screen. For graphic displays, screens with more pixels provide higher resolution.	*Electrical*
Place in service	A vehicle is placed in service if that vehicle is new to the fleet and has not previously been in service for the fleet. These vehicles can be acquired as additional vehicles (increases the size of the company fleet), or as replacement vehicles to replace vehicles that are being retired from service (does not increase the size of the company fleet).	*Energy*
Place or Stall	the area in a pillar and stall system where the collier extracts the coal. Later extended to mean any place where a man worked the coal, or any job of work at a colliery above or below ground, or in Lancashire, any regular job wherever it may be, or another name for a cabin underground.	*Mining*
Placebo	An inactive substance or procedure administered to a participant, usually to compare its effects with those of a real drug or other intervention, but sometimes for the psychological benefit to the participant through a belief that she is receiving treatment. Placebos are used in clinical trials to blind people to their treatment allocation. Placebos should be indistinguishable from the active intervention to ensure adequate blinding.	*Quality Engineering*
Placer	An alluvial deposit of sand and gravel containing valuable minerals such as gold.	*Mining*
Placer	A deposit of sand and gravel containing valuable metals such as gold, tin or diamonds.	*Mining*
Placing work	the directions given by the overman as to the arrangements for work for the day; also an operation performed by the craneman for the purpose of ascertaining the proportion of the tubs or corves hewed, and from where each barrowman was to put. (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plain Bearing	A relatively simple and inexpensive bearing typically made of two parts. A rotary plain bearing can be just a shaft running through a hole. A simple linear bearing can be a pair of flat surfaces designed to allow motion.	*Lubrication*
Plan	A map showing features such as mine workings or geological structures on a horizontal plane.	*Mining*
Plan for Progress	a program to reduce discrimination in employment, primarily discrimination against Negroes, particularly by companies holding large government contracts.	*Industrial Relations*
Planar defect	Two-dimensional disorder in a crystalline structure, for example, a grain boundary.	*Material Process*
Planar density	The number of atoms per unit area in a given plane in a crystal structure.	*Material Process*
Planck's Constant	A universal constant that has a value of 6.63 x 10-34 J.	*Engineering Physics*
Plane	a roadway along which men, coal and materials are transported by mechanical means or by gravity; or a working place or roadway driven at right-angles to or facing the 'plane joints' or cleat.	*Mining*
Plane course or On the plane	in the direction facing the 'plane joints'.	*Mining*
Plane joints	cracks or fractures in the strata. When they occur in a coal seam they are known as 'cleats or 'slynes'.	*Mining*
Plane of Rotation	Any plane perpendicular to a gear axis.	*Gears*
Plane Separation	Of a balancing machine, is the operation of reducing the correction plane interference ratio for a particular rotor.	*General*
Planetary albedo	The fraction of incident solar radiation that is reflected by the Earth-atmosphere system and returned to space, mostly by back scatter from clouds in the atmosphere.	*Energy*
Plank	strata drained of gas (S. Wales); or another word for a split bar or half bar (N. East).	*Mining*
Plank dam	a water-tight stopping fixed in a heading constructed from balks of fir placed one on top of the other and tightly wedged.	*Mining*
Plank tubbing	shaft lining of wooden planks driven down vertically behind wooden cribs all around the shaft with all the joints tightly sealed to keep back the water.	*Mining*
Planned analyses	Statistical analyses specified in the trial protocol; that is, planned in advance of data collection. In contrast to unplanned analyses. Also called: A priori analyses, Pre-specified analyses	*Quality Engineering*
Planned Downtime	The amount of time officially scheduled in the production plan, which includes, no orders, changeovers and planned maintenance. Planning and scheduling technologies. A variety of software-based advanced planning, scheduling, and optimization systems.	*Maintenance*
Planned Generator	Proposal to install generating equipment at an existing or planned facility or site.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Planned Maintenance	Any maintenance activity for which a pre-determined job procedure is documented, for which all labor, materials, tools, and equipment required to carry out the task are estimated, and their availability assured before commencement of the task. Planned Maintenance is a term commonly used to describe tasks carried out on a regular, scheduled basis. These tasks may be predictive in nature (routine subjective inspections and/or formal condition monitoring activities), or they may be preventative in nature (cleaning/changing filters, checking/adjusting clearances etc).	*Maintenance*
Planned Maintenance	Work can be completed with the least interruption to operations and the most efficient use of maintenance resources.	*Reliability Engineering*
Planned Repair Schedule Compliance	The number of planned repair work orders completed from the daily/weekly schedule divided by the total number of work orders on the schedule.	*Maintenance*
Planned well path	as a function of measured depth, the Cartesian coordinates, inclination, and azimuth that define the preferred spatial existence of a well bore. The planned well path can be piece-wise continuous, meaning it can change abruptly, typically as the result of new information acquired while drilling (e.g. fault crossing).	*Petroleum Drilling*
Planning	The process of determining the resources, methods, and processes needed to perform maintenance work efficiently and effectively.	*Maintenance*
Planning and scheduling technologies	A variety of software-based advanced planning, scheduling, and optimization systems.	*Quality*
Planning authority (electric)	The responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems. NERC definition	*Energy*
Plant	A term commonly used either as a synonym for an industrial establishment or a generating facility or to refer to a particular process within an establishment.	*Energy*
Plant	A facility containing prime movers, electric generators, and other equipment for producing electric energy.	*Energy*
Plant condensate	Liquid hydrocarbons recovered at inlet separators or scrubbers in natural gas processing plants at atmospheric pressure and ambient temperatures. Mostly pentanes and heavier hydrocarbons.	*Energy*
Plant Engineering	A Staff Function Whose Prime Responsibility Is To Ensure That Maintenance Techniques Are Effective, That Equipment Is Designed And Modified To Improve Maintainability, That Ongoing Maintenance Technical Problems Are Investigated, And Appropriate Corrective And Improvement Actions Are Taken. Used Interchangeably With Maintenance Engineering And Reliability Engineering.	*Plant Engineering*
Plant hours connected to load	The number of hours the plant is synchronized to load over a time interval usually of 1 year.	*Energy*
Plant liquids	Those volumes of natural gas liquids recovered in natural gas processing plants.	*Energy*
Plant Migration	The movement of factories to a new location.	*Industrial Relations*
Plant Open House	See: Open House	*Industrial Relations*
Plant or gas processing plant	A facility designated to achieve the recovery of natural gas liquids from the stream of natural gas, which may or may not have been processed through lease separators and field facilities, and to control the quality of the natural gas to be marketed.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plant pathology	The scientific discipline dealing with diseases of plants. Plant pathologists may be associated with departments of plant pathology, agronomy, crop sciences or botany.	*Agriculture*
Plant products	Natural gas liquids recovered from natural gas processing plants (and in some cases from field facilities), including ethane, propane, butane, butane-propane mixtures, natural gasoline, plant condensate, and lease condensate.	*Energy*
Plant Publications	See: Industrial Journalism, House Organ	*Industrial Relations*
Plant Relocation	See: Plant Migration	*Industrial Relations*
Plant Replacement Value (PRV)	See Estimated Replacement Value (ERV).	*Maintenance*
Plant Rules	generally the detailed working rules of an establishment.	*Industrial Relations*
Plant Tours	See: Open House	*Industrial Relations*
Plant Union	generally refers to an organization of employees within a single plant.	*Industrial Relations*
Plant Unit	a bargaining unit which consists of the employees within a single plant.	*Industrial Relations*
Plant use	The electric energy used in the operation of a plant. Included is the energy required for pumping at pump-storage plants.	*Energy*
Plant/Project Engineers	Employees with primary function of planning and executing on-site plant projects (capital and expense).	*Maintenance*
Plantation	Trees planted artificially in an ordered configuration such as equally spaced rows.	*Forestry*
Plant-use electricity	The electric energy used in the operation of a plant. This energy total is subtracted from the gross energy production of the plant.	*Energy*
Plaskon	A trade name for urea-formaldehyde molding plastics.	*Material Process*
Plasma Cutting	A group of cutting processes in which the severing or removal of metals is effected by melting with a stream of hot ionized gas.	*Maintenance and Repair*
Plasma Jet or Plasma Flame	A jet of highly ionized gas usually produced from a plasma torch. An electric arc is struck between a cathode and anode and is then blown through a nozzle to form the flame or jet.	*Paint and Coatings*
Plasma Nitriding	Also called Ion Nitriding. See Nitriding	*Paint and Coatings*
Plasma Spraying	A thermal spraying process in which the heat source is a plasma flame.	*Paint and Coatings*
Plasma Transferred Arc (PTA)	Similar to the plasma spray process in that powder is sprayed through a plasma, but instead of being heated via a neutral plasma (carrying no electric current) the arc is transferred to the substrate (made to be the anode). This is a hot process and produces coatings similar to fused or weld hardfacing coatings.	*Paint and Coatings*
Plastacele	A trade name for cellulose acetate plastics.	*Material Process*
Plaster of Paris	A material made by partially dehydrating gypsum or a natural hydrate form of calcium sulfate, after being mixed with water it sets to form a hard mass. It can be used as a filter.	*Material Process*
Plasterers' and Cement Finishers' International Association of the U.S. and Canada; Operative (AF of L)	See: Plasterers' and Cement Masons' International Association of the United States and Canada; Operative (AFL-CIO)	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plasterers' and Cement Masons' International Association of the United States and Canada; Operative (AFL-CIO)	established in 1864 as the National Plasterers' Organization of the United States, in 1889 it changed its name to the Operative Plasterers' International Association of the United States and Canada.	*Industrial Relations*
Plastic	A solid material in the primary ingredient of which is an organic polymer of high molecular weight.	*Engineering Physics*
Plastic	Any solid material employing organic matter of a high molecular weight as a principal constituent, which can be shaped by heat and pressure during manufacturing or processing into a finished article.	*Electrical*
Plastic Deformation	Deformation that is permanent or non-recoverable after release of the applied load. Occurs when an object does not return to its original shape or size after pressure, stress or load is removed.	*Engineering Physics*
Plastic deformation	Permanent deformation associated with the distortion and reformation of atomic bonds.	*Material Process*
Plastic Dual Inline Package	A DIP package with a molded plastic body.	*Electrical Engineering*
Plastic Flow	Surface deformation of metal as a result of yielding under heavy load.	*Lubrication*
Plastic limit (PL)	the lower limit of the plastic state of a soil.	*Chemical*
Plastic Memory	The tendency of a thermoplastic material which has been stretched while hot to return to its unstretched shape upon being reheated.	*Engineering Physics*
Plastic Reinforcement	(example: inside a box section acting as a beam) raises local stiffness without adding much weight.	*Reliability Engineering*
Plastic soil	one that will deform without shearing (typically silts or clays). Plasticity characteristics are measured using a set of parameters known as Atterberg Limits.	*Chemical*
Plastic wood	A pasty mixture of cellulose nitrate, wood flour, plasticizers, resins, etc., dispersed in volatile solvents.	*Material Process*
Plasticate	To impart flexibility in a plastic through the input of heat and mechanical work as in the plasticating of the resin in an extruder or injection molding machine.	*Engineering Physics*
Plasticity	The ability of a solid material to permanently deform without rupturing under the application of force. (Plastic flow differs from fluid flow in that the shearing stress must exceed a yield point before any flow occurs).	*Lubrication*
Plasticity	That property of a material which determines its rate of deformation under standardized conditions.	*Material Process*
Plasticity index (PI)	the range of water content in which soil is in a plastic state. PI is calculated as the difference between the percent liquid limit and percent plastic limit.	*Chemical*
Plasticize	To soften a material and make it more plastic or more moldable.	*Material Process*
Plasticizer	A low molecular weight polymer additive that enhances flexibility and workability and reduces stiffness and brittleness. A substance incorporated into a material to increase its workability or flexibility. Oils are typically used but the best plasticizers are air pockets.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plasticizer	A high boiling material, usually liquid, added to plastics to produce or increase their plastic flow.	*Material Process*
Plasticizer	Additive for the purpose of softening a polymer.	*Material Process*
Plastics	A broad classification covering a variety of non-metallic, synthetic or organic materials capable of being molded or formed into desired shapes. Typical materials include polyethylene, nylons and tetrafluoroethylenes such as DuPont's Teflon".	*General Mechanical*
Plastisol Coating	Poly-vinyl chloride (PVC) covering for roller tubes to prevent product damage or marking. Usually (#70 durometer) green or (#90 durometer) red in color.	*Manufacturing*
Plate	Wide, flat-rolled steel. It is now generally accepted that steel more than 3 mm (1/8 inch) thick is plate and less than 3 mm is sheet (See Sheet).	*Metallurgy*
Plate girder	An iron or steel beam built up from plates and shapes welded or riveted together, usually including a plate or plates for a web, four angle irons forming two flanges, and a pair of plates to reinforce the flanges.	*Civil Engineering*
Plate mark	A defect in the pressing plate, imparted to the molded material.	*Material Process*
Plate Printers', Die Stampers' and Engravers' Union of North America; International (AFL-CIO)	formed in Boston, Massachusetts, in 1892. The union's jurisdiction was extended over die stampers in 1920.	*Industrial Relations*
Plate tectonics	A geological theory which postulates that the Earth's crust is made up of a number of rigid plates which collide, rub up against and spread out from one another.	*Mining*
Platen	The steel plates on a molding machine to which the mold is attached. Two platens are generally used, one being stationary and the other movable and actuated hydraulically or mechanically to open and close the mold.	*Engineering Physics*
Platen	Mounting plates of a press to which the molding assembly is bolted.	*Material Process*
Plate-Out	The undesirable deposition of additives or pigments on machinery during processing of plastics.	*Engineering Physics*
Platform	Per *MIL-STD-810*, any vehicle, surface or medium that carries an equipment. For example, an aircraft is the carrying platform for internally-mounted avionics equipment and externally-mounted stores. The land is the platform for a ground radar set, and a man for a hand-carried radio.	*Reliability Engineering*
Platform	Structure used in offshore drilling on which the drilling rig, crew quarters and other related items are located.	*Petroleum Drilling*
Platform	An offshore structure that is permanently fixed to the seabed.	*Petroleum Drilling*
Platinel	A non-standard, high temperature platinum thermocouple alloy whose thermoelectric voltage nearly matches a Type K thermocouple (Trademark of Englehard Industries).	*Electrical*
Plating	Any thin metallic coating applied over a metallic substratum.	*Electrical*
Platinum	A noble metal which in its pure form is the negative wire of Type R and Type S thermocouples.	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Platinum	A noble metal which in its pure form is the negative wire of Type R and Type S thermocouples.	*Electronic Process*
Platinum 10% Rhodium	The platinum-rhodium alloy used as the positive wire in conjunction with pure platinum to form a Type S thermocouple.	*Electrical*
Platinum 13% Rhodium	The platinum-rhodium alloy used as the positive wire in conjunction with pure platinum to form a Type R thermocouple.	*Electrical*
Platinum 30% Rhodium	The platinum-rhodium alloy used as the positive wire in conjunction with platinum 6% rhodium to form a Type B thermocouple.	*Electrical*
Platinum 6% Rhodium	The platinum-rhodium alloy used as the negative wire in conjunction with platinum-30% rhodium to form a Type B thermocouple.	*Electrical*
Platinum 6% Rhodium	The platinum-rhodium alloy used as the negative wire in conjunction with platinum-30% rhodium to form a Type B thermocouple.	*Electronic Process*
Platinum 67	To develop thermal emf tables for thermocouples, the National Bureau of Standards paired each thermocouple alloy against a pure platinum wire (designated Platinum 2 prior to 1973, and currently Platinum 67). The thermal emf's of any alloy combination can be determined by summing the "vs. Pt-67" emf's of the alloys, i.e., the emf table for a Type K thermocouple is derived from the Chromel vs. Pt-67 and the Alumel vs. Pt-67 values.	*Electrical*
Play	A set of known or postulated oil and gas accumulations sharing similar geologic, geographic, and temporal properties, such as source rock, migration pathway, timing, trapping mechanism, and hydrocarbon type. A play differs from an assessment unit; an assessment unit can include one or more plays. A play is often used to refer to a natural gas accumulation, i.e., a natural gas shale play. http://energy.cr.usgs.gov/WEcont/chaps/GL.pdf	*Energy*
Play-in	to begin opening out a coalface from the side of a heading. (Leics.).	*Mining*
PLC	A Programmable Logic Controller is a controller which stores instructions to command a device, such as a valve, to which it is connected to start up, operate and shut down.	*Control Engineering*
Pleated Filter	A filter element whose medium consists of a series of uniform folds and has the geometric form of a cylinder, cone, disc, plate, etc. Synonymous with "convoluted" and "corrugated".	*Lubrication*
Plenum	The enclosed space between the eliminators and the fan stack in induced draft towers or the enclosed space between the fan and the filling in forced draft towers.	*Facility Engineering*
Plesiochronous Digital Hierarchy	The time-division multiplexed network used by telecommunications companies to transport phone calls and data over copper cabling. The entire network shares a common frequency throughout its tree-like structure, although phase and time delay variations exists at various points along the edge of the network.	*Electrical Engineering*
Plexyglas	A trade name for methyl methacrylate plastics.	*Material Process*
Plotting paper	See Probability plotting paper	*Reliability Engineering*
Plough	a steel wedge device dragged along the face to shear off a slice (2 to 3 inches thick), or plough the coal; or a scraper cleaning device on a conveyor.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plough packer	a packing device used on a face in which a moving blade ploughs dirt from a static platform and forms it into a gate-side pack.	*Mining*
Plow	to work the soil by turning over the top layer; the machine used to turn the top layer of soil	*Agriculture*
Plow Steel Rope	A specific grade of wire rope.	*Wire Rope & Cable*
Plowing	The formation of grooves by plastic deformation of the softer of two surfaces in relative motion.	*Paint and Coatings*
Plucking	bad surges of the haulage rope during operation.	*Mining*
Plug	A plug closes off the end of a pipe. It is similar to a cap but it fits inside the fitting it is mated to. In a threaded iron pipe steam system, plugs have male threads.	*Industrial*
Plug	A common name for a small offshoot from a large body of molten rock.	*Mining*
Plug	The rotating closure element of a plug valve. Also a threaded fitting used to close off and seal an opening into a pressure containing chamber, e.g., pipe plug.	*Mechanical*
Plug and feathers	multiple wedges used to break rock or bring down coal.	*Mining*
Plug boxes	wooden box channels used to drain water from the shaft sides during shaft lining to stop the cement being washed away from the brickwork.	*Mining*
Plug Flow Reactor	This may be thought of as a long pipe to which the reactants flow in, and the products flow out. In an ideal PFR, the components will be distributed axially, but will have uniform radial distribution.	*Chemical*
Plug Flow Reactor	This may be thought of as a long pipe to which the reactants flow in, and the products flow out. In an ideal PFR, the components will be distributed axially, but will have uniform radial distribution.	*Chemical Engineering*
Plug valve	A quarter turn valve whose closure element is usually a tapered plug having a rectangular port.	*Mechanical*
Plugged-back footage	Under certain conditions, drilling operations may be continued to a greater depth than that at which a potentially productive formation is found. If production is not established at the greater depth, the well may be completed in the shallower formation. Except in special situations, the length of the well bore from the deepest depth at which the well is completed to the maximum depth drilled is defined as "plugged-back footage." Plugged-back footage is included in total footage drilled but is not reported separately.	*Energy*
Plugging back from one zone to another	Plugging back from one zone to another	*Petroleum Drilling*
Plugging of Well	The sealing off of the fluids in the stratum penetrated by a well so that the fluid from one stratum will not escape into another or to the surface.	*Petroleum Drilling*
Plug-o-clay or Plug-o-stemming	a piece of clay used to stem a shothole. (Scot.). -see Stemming and Dolls.	*Mining*
Plum pit	another name for the engine pit. (South West).	*Mining*
Plum pitch	the line of full rise or dip of the strata. (Bris.).	*Mining*
Plumb hole	a hole or depression on the surface caused by subsidence due to undermining. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Plumb Plan	a program named after Glenn E. Plumb, general counsel of the organized railroad workers in 1919. The program provided for nationalization of operating control through a 15-member board of directors.	*Industrial Relations*
Plumbing and Pipe Fitting Industry of the United States and Canada; International Association of Journeymen and Apprentices of the (AFL-CIO)	first organized in October 1889 and known as the International Association of Plumbers, Steam Fitters and Gas Fitters, which consisted of Knights of Labor locals and a few independent craft unions.	*Industrial Relations*
Plume	Visible exhaust from a cooling tower. (See Fogging.)	*Facility Engineering*
Plum-bulking	the full dip of a seam or the strata. (South West).	*Mining*
Plum-end	a heading that is driven on the end or end-on. (Yorks.).	*Mining*
Plum-hatching	the full rise of a seam or the strata. (South West).	*Mining*
Plunge	The vertical angle a linear geological feature makes with the horizontal plane.	*Mining*
Plunger	The component of a pinch valve that translates during a change of state and pinches the tubing.	*General Mechanical*
Plunger	A cylindrically shaped part which has only one diameter and is used to transmit thrust. A ram.	*Mechanical, Process, and Operations*
Plunger (RAM) Cylinder	A cylinder in which the piston has the same cross-sectional area as the piston rod.	*Mechanical, Process, and Operations*
Plus Sieve	The portion of a powder sample retained on a sieve of specified number. (See minus sieve.)	*Paint and Coatings*
Plutonic	Refers to rocks of igneous origin that have come from great depth.	*Mining*
Plutonium (Pu)	A heavy, fissionable, radioactive, metallic element (atomic number 94) that occurs naturally in trace amounts. It can also result as a byproduct of the fission reaction in a uranium-fuel nuclear reactor and can be recovered for future use.	*Energy*
Ply	A single thickness of steel forming part of a structural joint.	*Maintenance*
Ply	The number of single yarns twisted together to form a ply yarn. Also, the number of ply yarns twisted together to form of cord. The individual yarn in a ply yarn or cord. one of the several layers of fabric. A sheet of layer of veneer.	*Material Process*
Plywood	A product made up of layers of veneer bonded with glue, often bonded with synthetic resin. Alternate layers have grain at right angles to increase strength and to reduce the tendency to shrink and split.	*Material Process*
PM	Power Marketer	*Energy*
PM10	particulate matter less than 10 microns diameter	*Petro-Chemical Abbreviations*
PM2.5	particulate matter less than 2.5 microns diameter	*Petro-Chemical Abbreviations*
PMA	polymethacrylate	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PMAA	Petroleum Marketers Association of America	*Petro-Chemical Abbreviations*
PMI	Positive material identification - A method for cross checking the identity of a piece of material, often using a portable spectrometer, usually with x-rays (TN 9266, nuclear analyzer) or a welding arc (Arc Met 900, optical spectrometer).	*Mechanical*
PMI Positive material identification	a method for cross checking the identity of a piece of material, often using a portable spectrometer, usually with x-rays (TN 9266, nuclear analyzer) or a welding arc (Arc Met 900, optical spectrometer).	*General Mechanical*
PML	See: Pattern Makers' League of North America (AFL-CIO)	*Industrial Relations*
PMS	Process safety management.	*Material Process*
PN	A diode consisting of one N: type region and one P: type region.	*Electrical Engineering*
p-n junction	Boundary between adjacent regions of p-type and n-type material in a solid-state electronic device.	*Material Process*
PNA	polynuclear aromatic	*Petro-Chemical Abbreviations*
PNA (polynuclear aromatic)	Any of numerous complex hydrocarbon compounds consisting of three or more benzene rings in a compact molecular arrangement. Some types of PNA's are formed in fossil fuel combustion and other heat processes, such as catalytic cracking.	*Lubrication*
PNET	The Danish fieldbus. The Profibus organization is seeking to integrate this in the common Profibus PA protocol.	*Control Engineering*
Pneumatic	Pertaining to, or using, air or gas.	*Mechanical*
Pneumatic 3-Way Control Valve	Typically a 3-way solenoid valve used to send actuating air pressure to a pneumatic pinch valve.	*Mechanical*
Pneumatic device	A device moved or worked by air pressure.	*Energy*
Pneumatic packing	see Pack.	*Mining*
Pneumatic Pinch Valves	A type of pinch valve that uses pneumatic pressure to actuate the plunger.	*Mechanical*
Pneumatic test	A test in which a valve is tested with air - usually a seat closure test.	*General Mechanical*
Pneumatic test	A test in which a valve is tested with air - usually a seat closure test.	*Mechanical*
Pneumatic Valve	A valve for controlling gas flow or pressure.	*Mechanical, Process, and Operations*
Pneumatics	Engineering science pertaining to gaseous pressure and flow.	*Engineering Physics*
Pneumoconiosis	a chronic disease of the lungs arising from breathing in coal dust.	*Mining*
Pneumoconiosis	A chronic disease of the lung arising from breathing coal dust.	*Mining*
PNGV	Partnership for a New Generation of Vehicles (US)	*Petro-Chemical Abbreviations*
PO	Propylene oxide	*Petro-Chemical Abbreviations*
POC	Point Of Care	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pock mark	Definitely shaped indentation. Term not recommended. See Pit.	*Material Process*
Pock Marks	Imperfections on the surface of a blow molded article consisting of irregular contact of the blown parison with the mold surface. Contributory factors are insufficient blowing pressure, entrapment of air or gases, and condensation of moisture on the mold surface.	*Engineering Physics*
Pocket	A cavity filled with ore, or a rich deposit of precious metal.	*Mining*
Pockets	These are cavities in the earth, filled with ore, or a rich deposit of gold.	*Mining*
Point	Unit of value of a stock as quoted by a stock exchange. May represent one dollar, one cent or one-eighth of a dollar, depending on the stock exchange.	*Mining*
Point Defect	A crystalline defect associated with one or, at most, several atomic sites.	*Engineering Physics*
Point defect	Zero- dimensional disorder in a crystalline structure, associated primarily with solid-state diffusion.	*Material Process*
Point estimate	The results (e.g. mean, mean difference, odds ratio, risk ratio or risk difference) obtained in a sample (a study or a meta-analysis) which are used as the best estimate of what is true for the relevant population from which the sample is taken.	*Quality Engineering*
Point lattice	See Crystal (Bravais) lattice.	*Material Process*
Point Of Origin	The location where a transportation company receives a shipment from the shipper.	*Procurement*
Point Plan	the point plan or point system is one of the most frequently used in job evaluations. It requires the use of a point manual which contains a scale against which the specifications and the job are compared, factor by factor, in actual determination of their point values.	*Industrial Relations*
Point(s) of Delivery	Point(s) for interconnection on the Transmission Provider's System where capacity and/or energy are made available to the end user.	*Energy*
Point(s) of Receipt	Point(s) of connection to the transmission system where capacity and/or energy will be made available to the transmission providers.	*Energy*
Point-of-Load	Point-of-load (POL) power supplies solve the challenge of high peak current demands and low noise margins, required by high-performance semiconductors such as microcontrollers or ASICs, by placing individual power supply regulators (linear or DC-DC) close to their point of use.	*Electrical Engineering*
Point-Source Contamination or Point-Source Pollution	Water pollution from a single point.	*Petroleum Engineering*
Point-to-Point Transmission Service	Reservation and/or transmission of energy from point(s) of receipt to point(s) of delivery.	*Energy*
Poise	The standard unit of absolute viscosity in the c.g.s. (centimeter-gram-second) system. It is the ratio of the shearing stress to the shear rate of a fluid and is expressed in dyne seconds per square centimeter; 1 centipoise equals .01 poise.	*Mechanical, Process, and Operations*
Poise (absolute viscosity)	A measure of viscosity numerically equal to the force required to move a plane surface of one square centimeter per second when the surfaces are separated by a layer of fluid one centimeter in thickness. It is the ratio of the shearing stress to the shear rate of a fluid and is expressed in dyne seconds per square centimeter (DYNE SEC/CM2); 1 centipoise equals .01 poise.	*Oil Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Poise (P)	Measurement unit of a fluid's resistance to flow, i.e., viscosity, defined by the shear stress (in dynes per square centimeter) required to move one layer of fluid along another over a total layer thickness of one centimeter at a velocity of one centimeter per second. This viscosity is independent of fluid density, and directly related to flow resistance.	*Lubrication*
Poison, Industrial	See: Industrial Disease, Industrial Poison	*Industrial Relations*
Poisson distribution	A statistical distribution with known properties used as the basis of analysing the number of occurrences of relatively rare events occurring over time.	*Quality Engineering*
Poisson Ratio	The ratio between the strain of expansion in the direction of force and the strain of contraction perpendicular to that force v = -Et/E1.	*General*
Poisson's Ratio	For elastic deformation, the negative ratio of lateral and axial strains that result from an applied axial stress.	*Engineering Physics*
Poka Yoke	It is a Japanese term which translates roughly to mistake proofing. It is a manufacturing technique of preventing errors from occurring by designing the manufacturing process, equipment and tools in such a way that an operation literally cannot be performed incorrectly.	*Reliability Engineering*
Poka-yoke	"Fail-safing" techniques to eliminate errors or quality-related production defects as far upstream in the process as possible. Example: requiring completed components to pass through a customized opening to ensure that dimensions do not exceed tolerance limits. Also includes methods to check equipment operating conditions prior to making a part. A major objective is to minimize the need for rework.	*Quality*
Pokering	a term used for hand spraying in dust suppression – using sprays to direct water to specific sources of dust where the adjacent strata are adversely affected by wetting.	*Mining*
POL	Physician Office Laboratory	*Quality*
Poland China	A breed of hogs. Registry is with the Poland China Record Association.	*Agriculture*
Polar	interaction in which the electron density around adjacent atoms is asymmetric	*Physics*
Polar Compound	A chemical compound whose molecules exhibit electrically positive characteristics at one extremity and negative characteristics at the other. Polar compounds are used as additives in many petroleum products. Polarity gives certain molecules a strong affinity for solid surfaces; as lubricant additives (oiliness agents), such molecules plate out to form a tenacious, friction-reducing film. Some polar molecules are oil-soluble at one end and water-soluble at the other end; in lubricants, they act as emulsifiers, helping to form stable oil-water emulsions. Such lubricants are said to have good metal-wetting properties. Polar compounds with a strong attraction for solid contaminants act as detergents in engine oils by keeping contaminants finely dispersed.	*Lubrication*
Polar diagram	Plot of intensity of reflected light from a surface.	*Material Process*
Polar Molecule	A molecule in which there exists a permanent electric dipole moment by virtue of the asymmetrical distribution of positively and negatively charged regions.	*Engineering Physics*
Polarity	In electricity, the quality of having two oppositely charged poles, one positive one negative.	*Electronic Process*

Term	Definition	*Industry*
Polarization	The inability of an electrode to reproduce a reading after a small electrical current has been passed through the membrane. Glass pH electrodes are especially prone to polarization errors caused by small currents flowing from the pH meter input circuit and from static electrical charges built up as the electrodes are removed from the sample solution, or when the electrodes are wiped.	*General*
Polarization	The inability of an electrode to reproduce a reading after a small electrical current has been passed through the membrane. Glass pH electrodes are especially prone to polarization errors caused by small currents flowing from the pH meter input circuit and from static electrical charges built up as the electrodes are removed from the sample solution, or when the electrodes are wiped.	*Electronic Process*
Polarization (electronic)	For an atom, the displacement of the center of the negatively charged electron cloud relative to the positive nucleus, which is induced by an electric field.	*Engineering Physics*
Polarization (ionic)	Polarization as a result of the displacement of anions and cations in opposite directions.	*Engineering Physics*
Polarization (orientation)	Polarization resulting from the alignment (by rotation) of permanent electric dipole moments with an applied electric field.	*Engineering Physics*
Polarized light	The phenomenon whereby light rays are limited to one plane of vibration.	*Material Process*
Polarized Photoelectric Controls	The controls that emit a visible LED beam and use a special lens which filters the beam of light so that it is projected in one plane only. The control responds only to the de: polarized reflected light from corner: cube type reflectors (FE: RR1) or special polarized reflective tape.	*Electrical Engineering*
Pole	The number of completely separate circuits that can pass through a switch at one time. A single pole switch can control only one circuit at a time. A double pole switch can control two independent circuits (such as a 120 volt AC heater and a 6 volt DC lamp) at the same time. The number of poles is completely independent of the number of throws and number of breaks.	*Electrical Engineering*
Pole	This historic term refers to the driver who starts at the front of the field on the inside of the front row by virtue of the fastest qualifying time. The term originated at horse tracks, where many of the original races were held on dirt. The finish and distance markers of a horse track are marked by poles set on the inside edge of the track.	*NASCAR*
Pole/Tower type	The type of transmission line supporting structure.	*Energy*
Pole-mile	A unit of measuring the simple length of an electric transmission/distribution line/feeder carrying electric conductors, without regard to the number of conductors carried.	*Energy*
Pole timber	Trees from 5 to 7 inches in diameter at breast height.	*Forestry*
Poling	building gob walls or packs using old propwood and debris to support the roadway through the gob in longwall working; or a temporary support built to protect the rippers until the permanent road support is put into place, a 'horse head'—see also Lofting. Also another term for 'Runners'. (N. Staffs.).	*Mining*
Poling boards	boards slotted behind roof supports to hold back loose ground. The boards can be impregnated with flame suppressive chemicals.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Polishing	The finishing of metal surfaces with a compound impregnated in the surfaces of a hard fabric faced wheel which rotates at high speed. Also see "BUFFING"	*Metallurgy*
Polishing (Bore)	Excessive smoothing of the surface finish of the cylinder bore or cylinder liner in an engine to a mirror-like appearance, resulting in depreciation of ring sealing and oil consumption performance.	*Lubrication*
Polishing pond	The last in a series of settling ponds through which mill effluent flows before being discharged into the natural environment.	*Mining*
Political Action, Union	activities of a union directed to electing pro-union individuals to political office-federal, state, or local-and to effect the adoption of legislation opposed by unions.	*Industrial Relations*
Political Education, Union	basically, a term of art. It does involve "educating" union members in mechanics of using their franchise, that is, how to register and how to vote, but the thrust of such education is the election of political candidates who will support legislation desired by organized labor (or its leaders) and opposes legislation that labor opposes.	*Industrial Relations*
Poll tomahawk	see Dresser.	*Mining*
Polled	The term simply means to cut off or shorten a growth. As applied to cattle in contemporary use, the term usually means naturally hornless cattle. Some breeds, such as Hereford, may be either horned, or polled. Polled Herefords are considered, however, a separate breed.	*Agriculture*
Pollinate	to fertilize by transferring pollen from the anther to the stigma of a flower	*Agriculture*
Pollution	When contamination concentration levels restrict the use of groundwater.	*Petroleum Engineering*
Poly pak stem seal	An O-ring energized lip-seal which replaces O-ring stem seals in certain gate valves. Also used for stem seals in some ball valves.	*Mechanical*
Polyalkylene Glycol	Mixtures of condensation polymers of ethylene oxide and water. They are any of a family of colorless liquids with high molecular weight that are soluble in water and in many organic solvents. They are used in detergents and as emulsifiers and plasticizers. PAG-based lubricants are used in diverse applications where petroleum oil-based products do not provide the desired performance – and because they are fire-resistant and will not harm workers or the environment.	*Lubrication*
Polyamide-Imide	Polyamide-imide is used in the automotive, aerospace, and heavy equipment industries.	*Material Engineering*
Polyaromatic hydrocarbon	aromatic hydrocarbons containing more than one fused benzene ring. Polyaromatic hydrocarbons are commonly designated PAH.	*Chemical*
Polyarylates	Polyarylates are used in appliance, automotive, and electrical applications such as outdoor lighting because they are resistant to heat.	*Material Engineering*
Polybutenes	The family of polymers of isobutene, butene-1, and butene-2. Depending on molecular weight, they range from oils through tacky waxes, crystalline waxes, and rubbery solids.	*Engineering Physics*
Polybutylene	Polybutylene is a thermoplastic that is resistant to creep, chemicals, and cracking, while being very flexible. It is typically used in packaging film and pipe.	*Material Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Polycarbonate	Polycarbonate is a thermoplastic that was first developed in 1957. It was originally created as a means of competing against die-cast metals. Polycarbonates are tough, strong, and rigid, yet ductile. They can be maintained over a wide range of loading rates and temperatures and are excellent electrical insulators. They are transparent and, therefore, are often used in the creation of water bottles. They are also used for electrical purposes, glazing, and appliances. In addition, they can be processed in numerous ways, including extrusion, injection molding, rotational molding, and blow molding.	*Material Engineering*
Polycarbonate	Polymers derived from the direct reaction between aromatic and aliphatic dihydroxy compounds with phosgene, or by the ester exchange reaction with phosgene-derived precursors. When the aromatic dihydroxy is bisphenol A, the resulting polycarbonate is thermoplastic—the most commonly used form. Such polycarbonates have high impact strength, good heat resistance, low water absorption, and good electrical properties. They are transparent, and may be injection molded, extruded, thermoformed, and blow molded.	*Engineering Physics*
Polychloroprene	A polymer of chlorobutadiene, the latter prepared from acetylene and hydrogen chloride.	*Material Process*
Polychloroprene	Chemical name for neoprene A rubber-like compound used for jacketing where wire and cable will be subject to rough usage, moisture, oil, greases, solvents and chemicals.	*Electrical*
Polycrystalline	Referring to crystalline materials that are composed of more than one crystal or grain.	*Engineering Physics*
Polyester	A condensation polymer formed by the interaction of polyhydric alcohols and polybasic acids. They are used in some coatings and the manufacture of glass-fiber products. See Alkyd resin.	*Paint and Coatings*
Polyester Resins	A family of polyesters in which the polyester backbones are saturated and hence unreactive. The most common commercial types are polyethylene terephthalate (PET), a thermoplastic which may be extruded, injection or blow molded. Unsaturated Unsaturated polyesters thermoset and used in the reinforced plastics industry for applications such as boats, auto components, etc.	*Engineering Physics*
Polyethylene	Polyethylene came to the forefront during World War II, when it was used for underwater cable coating. It was then used as an insulating material for other military purposes, such as radar cable. After the war was over, it was put to commercial use and has become one of the most popular forms of plastic. In fact, it was the first plastic in the United States to sell more than billion pounds a year. It remains the most popular plastic in the country, being found in drums, containers, pipe, toys, housewares, shopping bags, trash bags, garment bags, packaging films, gasoline tanks, and coatings.	*Material Engineering*
Polyethylene	A thermoplastic material composed of polymers of ethylene.	*Electrical*
Polyethylene Terephthalate	Since its development in the 1940s, PET's excellent tensile, thermal, mechanical, optical and electrical properties have continued to earn it new markets. Properties: Transparent and strong, tough and stiff, PET offers both excellent gas and moisture barrier properties, and is resistant to heat, mineral oils, solvent and acids (but not bases). PET is widely used in fibers, soft drink and other beverage bottles and films. Applications: Most commonly associated with	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	bottles, PET is used also in a number of non-packaging film applications, including photographic and x-ray films, audio and video tapes, solar control films, and business card laminations. It is also used in metalized packages for potato chips and similar foods, and sterile medical wraps. Good heat resistance means it can be used in oven-proof films, microwaveable food trays and boil-in bags.	
Polyforming	The thermal conversion of naphtha and gas oils into high-quality gasoline at high temperatures and pressure in the presence of recirculated hydrocarbon gases.	*Petroleum Engineering*
Polyfunctional	Polymer with more than two reaction sites for each mer, resulting in a network molecular structure.	*Material Process*
Polyglycols	Polymers of ethylene or propylene oxides used as a synthetic lubricant base. Properties include very good hydrolytic stability, high viscosity index (VI), and low volatility. Used particularly in water emulsion fluids.	*Lubrication*
Polyhydric alcohol	An alcohol that contains more than one hydroxyl group, e.g., CH2OH–CH2OH.	*Material Process*
Polyimides	Polymides are a thermoset plastic that first appeared in the 1960s. They are typically used in laminates, enamels, gears, adhesives, bushings, covers, valve seats, piston rings, and solutions such as laminating varnish.	*Material Engineering*
Polyisobutylene	See Polybutene.	*Engineering Physics*
Polymer	When individual molecules (monomers) link up in a chain-like fashion, they form a polymer. The chemical reaction that forms a polymer is called polymerization.	*Chemical*
Polymer	When individual molecules (monomers) link up in a chain-like fashion, they form a polymer. The chemical reaction that forms a polymer is called polymerization.	*Chemical Engineering*
Polymer Process Aid (PPA)	Additives incorporated into plastics as a modifier to aid in the extrusion of film, pipe, sheet, etc.	*Engineering Physics*
Polymerization	The reaction by which single molecules are linked to form large molecules without change in fundamental chemical composition. Chemical process in which individual molecules (monomers) are converted to large molecular weight molecules (polymers).	*Material Process*
Polymerization	A chemical reaction in which the molecules of a simple substance (monomer) are linked together to form large molecules whose molecular weight is a multiple of that of the monomer.	*Engineering Physics*
Polymerize	The property of certain organic chemicals to undergo a change, in which the individual molecules combine to form larger and heavier molecules, and the substance becomes rubbery or plastic. The six chemicals listed below all have this quality. Some polymerize spontaneously, others require the aid of a catalyst. Six chemical are butadiene, styrene, acrylonitrile, isobutylene, chloroprene, isoprene.	*Material Process*
Polymers	Naturally occurring or synthetic compounds consisting of large molecules made up of a linked series of repeated simple monomers covalently bonded together, covalently bonded chains of molecules with the small monomer units repeated from end to end	*Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Polymers Between Contacts	The compounds having long: chain molecular structure, formed from simple organic contaminants on contacts, under the influence of contact wipe and the catalytic effect of the contact material.	*Electrical Engineering*
Polymorphism	The ability of a solid material to exist in more than one form or crystal structure.	*Engineering Physics*
Polynuclear aromatic hydrocarbon	synonymous with polyaromatic hydrocarbon. Designated PNA.	*Chemical*
Polyol Ester	A synthetic lubricant base, formed by reacting fatty acids with a polyol (such as a glycol) derived from petroleum. Properties include good oxidation stability at high temperatures and low volatility. Used in formulating lubricants for turbines, compressors, jet engines, and automotive engines.	*Lubrication*
Polyolefin	A polymer derived by polymerization of relatively simple olefins. Polyethylene and polyisoprene are important polyolefins.	*Lubrication*
Polyolefins	The class of polymers made by polymerizing relatively simple olefins, including ethylene, propylene, butenes, isoprenes, and pentenes.	*Engineering Physics*
Polyphenylene Oxide	Polyphenylene Oxide is an engineered thermoplastic used in business machine parts, automotive parts, appliances, and electronics.	*Material Engineering*
Polyphenylene Sulfide	Polyphenylene sulfide is heat and chemical resistant. It also has a good retention of mechanical properties at high temperatures and are very stiff. Therefore, they are often used in automotive and electronic parts.	*Material Engineering*
Polypropylene	Polypropylene is a highly used thermoplastic that was first developed in Europe and brought to the United States in 1957. It is fairly rigid, has a low density, excellent chemical resistance, electrical properties, and has a heat distortion temperature of 150 to 200 degrees Fahrenheit. In addition, it is very simple to process. It is most often used in automotive parts, packaging, carpeting, and appliances.	*Material Engineering*
Polypropylene	A thermoplastic polymer of propylene.	*Electrical*
Polyproylene	A tough; lightweight, rigid-plastic made by the polymerization of high-purity propylene gas in the presence of an organometallic catalyst at relatively low pressures and temperatures.	*Engineering Physics*
Polystyrene	A polymer of styrene that is a rigid, transparent thermoplastic with good physical and electrical insulating properties, used in molded products, foams, and sheet materials.	*Energy*
Polystyrene	A thermoplastic synthetic resin, polymer of styrene.	*Material Process*
Polysulfide	A polysulfide is a compound of some other chemical with four or more (many) sulfur molecules.	*Material Process*
Polythene	Hydrocarbon resin resulting from the polymerization of ethylene.	*Material Process*
Poly-Tier Support	Supporting members capable of supporting more than one level of conveyor at a time. Each tier has vertical adjustment for leveling the conveyor.	*Manufacturing*
Polyurethanes	Polyurethanes have been around since 1954 and are very versatile. In fact, they are available in rubbers, adhesives, sealants, coatings, and flexible or rigid foams. Most are considered to be thermosets, though some are thermoplastics. The foam version is created by reacting polyols and isocyanates, which are then introduced to a blowing agent. The foams can be made to be rigid, flexible,	*Material Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	or tough, depending on the purpose. Polyurethanes also have protective qualities, making them great for use as coatings for metals, wood, rubber, concrete, leather, paper, and plastic. Their toughness and resistance to abrasion also make them ideal for gaskets and seals, printing rolls, drive and conveyor belts, cable insulation, and solid tires.	
Polyvinil acetal	Products derived from polyvinyl esters in which part or all of the acid groups have been replaced by acetal and hydroxyl groups, available in several types depending on the aldehyde or aldehydes used, e.g., Formwar, Alwar, Butwar, etc..	*Material Process*
Polyvinyl Acetate	A thermoplastic material composed of polymers of vinyl acetate in the form of a colorless solid. Used extensively in adhesives for paper and fabric coatings.	*Engineering Physics*
Polyvinyl Acetate (PVAc) and Other Vinyls	Polyvinyl acetate, which is a thermoplastic, is used to create solid vinyl acetate. It is typically used in paints, adhesives, coatings, and packaging.	*Material Engineering*
Polyvinyl Alcohol	A thermoplastic material composed of polymers of the hypothetical vinyl alcohol.	*Engineering Physics*
Polyvinyl Chloride	Polyvinyl Chloride, commonly referred to as PVC or vinyl, was first invented in Germany around 1910. It didn't become a useful product in the United States, however, until the late 1920s. It became particularly useful during World War II when it was used as a substitute for rubber, which was in short supply. Polyvinyl Chloride is resistant to abrasion and is both weather and chemical resistant. Today, it is commonly found in upholstery, wall coverings, flooring, siding, pipe, and even apparel. In fact, vinyl is perhaps the best known of all plastics.	*Material Engineering*
Polyvinyl Chloride	Thermoplastic compounds formed by polymerization or copolymerization of vinyl or vinylidene chlorides and vinyl esters.	*Engineering Physics*
Polyvinyl chloride (PVC)	A polymer of vinylchloride. Tasteless, odorless, insoluble in most organic solvents. A member of the family vinyl resin, used in soft flexible films for food packaging and in molded rigid products, such as pipes, fibers, upholstery, and bristles.	*Energy*
Polyvinyl Chloride (PVC)	A thermoplastic material composed of polymers of vinyl chloride, which may be rigid or elastomeric, depending on specific formulation.	*Electrical*
POMH	See: Post Office and Postal Transportation Service Mail Handlers, Watchman and Messengers; National Association of (AFL-CIO)	*Industrial Relations*
Pom-Pom	the nickname for the Siskel coal-cutter, one of the earliest coal-cutting machines.	*Mining*
POMV	See: Post Office Motor Vehicle Employees; National Federation of (AFL-CIO)	*Industrial Relations*
Pondage	The amount of water stored behind a hydroelectric dam of relatively small storage capacity; the dam is usually used for daily or weekly control of the flow of the river.	*Energy*
Pontianac	A dark fossilized natural resin from New Caledonia, used in the manufacture of varnishes.	*Material Process*
Pontoon	A float for a derrick, landing stage, etc.	*Civil Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Pontoon bridge	A bridge supported by pontoons.	*Civil Engineering*
Pony	A small horse; i.e., one that remains small as an adult. There is no precise size. Each breed association has its own size standard.	*Agriculture*
Pony of the Americas	A recent breed that traces to birth of a foal in 1954. It was from an Arab/Appaloosa mare accidentally bred to a Shetland stallion. The colt had unique color markings (white with black paint smears all over his body) and other striking features. The characteristics proved to be heritable and a breed association was formed. To be registered as a Pony of the Americas, the pony has to be between 46 and 56 inches tall. The head was to be small and dished as the Arab. Body has to be muscled as a Quarter Horse; and the coloring has to be that of an Appaloosa, visible at 40 feet. The breed is prized as a first horse on which children can gain experience and confidence.	*Agriculture*
Pony truss	A through bridge truss having its deck between the top and bottom chords and having no top lateral bracing.	*Civil Engineering*
Pony truss	A through bridge truss having its deck between the top and bottom chords and having no top lateral bracing.	*Civil Engineering*
Pooching	Pooching is a term sometimes used to describe the effect of the area immediately surrounding a tapped hole being raised up as a result of the tension from the stud. Tapped holes are often bored out for the first couple of threads to eliminate this problem.	*Maintenance*
Pool	In general, a reservoir. In certain situations, a pool may consist of more than one reservoir.	*Energy*
Pool leader	the man in charge of a team of men. (Scot.).	*Mining*
Pool or Poil	to hole or undercut. (Scot.).	*Mining*
Pool Purchase	A purchase involving two or more locations which provides that definite or guaranteed minimum quantities of specified items be purchased at fixed prices during a stated period. Pool purchases normally are made on a regularly scheduled basis one or more times a year.	*Procurement*
Pool site	One or more spent fuel storage pools that has a single cask loading area. Each dry cask storage area is considered a separate site.	*Energy*
PoolCo	This will serve as a model for the restructured electric industry that combines the functions of an ISO and a Power Exchange. In its least flexible form, a PoolCo also prohibits direct transactions between buyers and sellers (i.e. all producers selling to the Pool and all consumers buy from the Pool.)	*Energy*
Pooling or land pooling	A legal process that allows exploration and production companies to compel unwilling land and mineral rights holders to lease or sell their land and/or mineral rights for exploration, drilling, or pipeline installation if enough of their neighbors have already agreed. Government agencies require a minimum number of acres of land before granting a well permit; with pooling, companies can collect smaller tracts of land that will accumulate to this total minimum acreage. Pooling is not a law in Pennsylvania, but there are legal proposals to make it so.	*Petroleum Drilling*
Pooling shares	See escrowed shares.	*Mining*

Term	Definition	Industry
POP	population of vehicles	*Petro-Chemical Abbreviations*
Pop-Out Roller	A special load carrying roller mounted in such a manner as to pop out when foreign objects are introduced between the belt and the roller.	*Equipment*
Poppet	That part of certain valves which prevents flow when it closes against a seat.	*Mechanical, Process, and Operations*
Poppet head	a small head gear used over a shallow pit.	*Mining*
Poppet Valve	A valve design in which the seating element autopops open to obtain free flow in one direction and immediately reseats, when flow reverses.	*Mechanical, Process, and Operations*
Population	[In research:] The group of people being studied, usually by taking samples from that population. Populations may be defined by any characteristics e.g. geography, age group, certain diseases.	*Quality Engineering*
Population-weighted Degree Days	Heating or cooling degree days weighted by the population of the area in which the degree days are recorded. To compute national population-weighted degree days, the Nation is divided into nine Census regions comprised of from three to eight states that are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree day readings for each region are multiplied by the corresponding population weight for each region, and these products are then summed to arrive at the national population weighted degree day figure.	*Energy*
Porcelain Enamel	A coating of ceramic-type material that is fired or fused to a steel base and used in sinks, bathtubs, etc. This differs from the vitreous china used in toilets.	*Chemistry*
Porcelan	A ceramic formed from baked clay glazed with a fusible substance.	*Material Process*
Porcelan enamel	Silicate glass coating on a metal substrate for the purpose of shielding the metal from a corrosive environment.	*Material Process*
Porch	the arching at the pit bottom. The inset. (Yorks.).	*Mining*
Pore	A small channel or opening in a filter medium which allows passage of fluid.	*Oil Analysis*
Pore Rating/Nominal/ Absolute	Expressed as microns and/or Daltons, membrane filters are given pore ratings to provide the end user with an indication of their filtering capabilities. Nominal Rating is arbitrary describing particulate size ranges for which a filter manufacturer claims some percentage removal. Absolute Rating is the diameter of the largest hard spherical particle that will pass through a filter under specified test conditions. Comparisons of filters should not be based upon nominal ratings that vary from manufacturer to manufacturer, but upon absolute ratings which are based on the largest opening in the filter medium.	*Pollution Engineering*
Pore size distribution	The ratio of the number of effective holes of a given size to the total number of effective holes per unit area expressed as a percent and as a function of hole size.	*Oil Analysis*
Pore size distribution	The ratio of the number of holes of a given size to the total number of holes per unit area expressed as a percent and as a function of hole size.	*Mechanical, Process, and Operations*
Pore space	The open spaces or voids of a rock taken collectively. It is a measure of the amount of liquid or gas that may be absorbed or yielded by a particular formation.	*Energy*

Term	Definition	*Industry*
Pore volume	(1) the total volume of pore space in a given volume of rock or sediment. Pore volume usually relates to the volume of air or water that must be moved through contaminated material in order to flush the contaminants. (2) the volume of water (or air) that will completely fill all of the void space in a given volume of porous matrix. Pore volume is equivalent to the total porosity. The rate of decrease in the concentration of contaminants in a given volume of contaminated porous media is directly proportional to the number of pore volumes that can be exchanged (circulated) through the same given volume of porous media.	*Chemical*
Pork bellies	meat from the belly area of a pig; used for bacon	*Agriculture*
Pork Chopper	an old term, now used mostly in good humored banter. Originally, it may have been limited to a union organizer, or union staff member who had organizing as one of his duties, since in pointing out the benefits of unionization he emphasized the tangiable results included more money to buy food (pork chops).	*Industrial Relations*
Porosity	A defect found in castings or welds consisting of gas bubbles or voids in the solidified metal.	*General Mechanical*
Porosity	the volume fraction of a rock or unconsolidated sediment not occupied by solid material but usually occupied by water and/or air.	*Chemical*
Porosity	The percentage of void in a porous rock compared to the solid formation.	*Petroleum Drilling*
Porosity (void fraction)	The ratio of pore volume to total volume to a filter medium expressed as a percent.	*Mechanical, Process, and Operations*
Porphyry	Any igneous rock in which relatively large crystals, called phenocrysts, are set in a fine-grained groundmass.	*Mining*
Porphyry	A rock consisting of a compact base from which which crystals of feldspar are disseminated.	*Mining*
Porphyry copper	A deposit of disseminated copper minerals in or around a large body of intrusive rock.	*Mining*
Port	a town or city where ships are loaded with products to be shipped overseas	*Agriculture*
Port	A signal input (access) or output point on a computer.	*Electronic Process*
Port Lines	See Spider Lines	*Metallurgy*
Portable Conveyor	Any type of transportable conveyor, usually having supports which provide mobility.	*Manufacturing*
Portable Data Terminal (PDT)	Handheld terminal, 35-46 keys, scanner. Information is kept within the terminal as you scan the item. When done, terminal is put in a cradle. Than the information is exported to a PC.	*Gears*
Portable electric heater	A heater that uses electricity and that can be picked up and moved.	*Energy*
Portable fan	Box fans, oscillating fans, table or floor fans, or other fans that can be moved.	*Energy*
Portable kerosene heater	**A** heater that uses kerosene and that can be picked up and moved.	*Energy*
Portable Support	Supporting members which provides conveyor mobility by use of casters or wheels.	*Manufacturing*
Portal	The surface entrance to a tunnel or adit.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Portal	The structure surrounding the immediate entrance to a mine; the mouth of an adit or tunnel.	*Mining*
Portal bus	Track-mounted, self-propelled personnel carrier that holds 8 to 12 people.	*Mining*
Portal-to-Portal Pay	payments for time actually spent by an employee-originally on coal mine company premises-from the time of his entrance at the gate to the time he returned to the gate, which therefore included the time it took to reach the face of the mine and return as well as the time actually worked at the face.	*Industrial Relations*
Portal-to-Portal Pay Act	the statute passed by Congress in 1947 to limit the liabilities under the Wage and Hour law based on portal-to-portal pay claims.	*Industrial Relations*
Porters; Bortherhood of Sleeping Car (AFL-CIO)	an organization of sleeping car porters.	*Industrial Relations*
Portfolio	A list of financial assets.	*Mining*
Port-Guided	A valve plug or cage where the flow control orifice is in the shape of a slot or port.	*Industrial Engineering*
Portland cement	Calcium aluminosilicate used as matrix for aggregate in concrete.	*Material Process*
Position	Location, usually in fixed earth coordinates such latitude and longitude; location, either scalar or vector, often with subscripts such as ENU or XYZ to denote source or coordinate frame; time integral of velocity; Symbols: p,P,x,y,z; Typical Units: ft,nmi; Dimensions: Length.	*Aeronautical Engineering*
Position	a specific office or job.	*Industrial Relations*
Position indicator	Any external device which visually indicates the open and closed position of valve.	*General Mechanical*
Position Sensing	Using electronic sensors to monitor the valve's position and provide electronic feedback indicating the valve's position to a human user or computer.	*Mechanical*
Position Switch	A switch that is normally fitted on the actuator to detect extremes of valve travel. The switch is normally electric.	*Industrial Engineering*
Position Transmitter	A device that is mechanically connected to the valve stem and will generate and transmit either a pneumatic or electric signal that represents the valve stem position.	*Industrial Engineering*
Position update	To cause navigation sensors, devices, or algorithms to reset position to value known to be more accurate due to inaccuracies and drift in the devices and algorithms.	*Aeronautical Engineering*
Positioner	A device used to position a valve with regard to a signal. The positioner compares the input signal with a mechanical feedback link from the actuator. It then produces the force necessary to move the actuator output until the mechanical output position feedback corresponds with the pneumatic signal value. Positioners can also be used to modify the action of the valve (reverse-acting positioner), alter the stroke or controller input signal (split-range positioner), increase the pressure to the valve actuator (amplifying positioner) or alter the control valve flow characteristic (characterised positioner).	*Industrial Engineering*
Positioning Weld	A weld made in a joint which has been so placed as to facilitate the making of the weld.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Positive charge carrier	Charge carrier with a positive electrical charge.	*Material Process*
Positive Crankcase Ventilation (PCV)	System for removing blow-by gases from the crankcase and returning them through the carburetor intake manifold to the combustion chamber where the recirculated hydrocarbons are burned. A PC valve controls the flow of gases from the crankcase to reduce hydrocarbon emissions.	*Lubrication*
Positive Crowned Pulley	A pulley which tapers equally from both ends toward the center, the diameter being the greatest at the center. The crown aids in belt tracking.	*Manufacturing*
Positive displacement	A characteristic of a pump or motor which has the inlet positively sealed from the outlet so that fluid cannot recirculate in the component.	*Mechanical, Process, and Operations*
Positive mold	One designed to have total applied pressure to the piece being molded, and permitting little or no escape of material.	*Material Process*
Positive predictive value	[In screening/diagnostic tests:] A measure of the usefulness of a screening/diagnostic test. It is the proportion of those with a positive test result who have the disease, and can be interpreted as the probability that a positive test result is correct. It is calculated as follows: PPV = Number with a positive test who have disease/Number with a positive test. [In trial searching:] See also: Precision	*Quality Engineering*
Positive Strike	a work stoppage which takes place on the basis of specific desires and demands of the employees for change.	*Industrial Relations*
Positive study	A study with results indicating a beneficial effect of the intervention being studied. The term can generate confusion because it can refer to both statistical significance and the direction of effect; studies often have multiple outcomes; the criteria for classifying studies as negative or positive are not always clear; and, in the case of studies of risk or undesirable effects, 'positive' studies are ones that show a harmful effect.	*Quality Engineering*
Positive Temperature Coefficient	An increase in resistance due to an increase in temperature.	*Electrical*
POSM	See: Post Office and General Services Maintenance Employees; National Association of (Ind)	*Industrial Relations*
Possible Reserves	Those reserves which at present cannot be regarded as 'probable' but are estimated to have a significant but less than 50% chance of being technically and economically producible.	*Petroleum Drilling*
Possible reserves	Valuable mineralization not sampled enough to accurately estimate its tonnage and grade, or even verify its existence. Also called "inferred reserves."	*Mining*
Possible reserves	Those reserves which at present cannot be regarded as 'probable' but are estimated to have a significant but less than 50% chance of being technically and economically producible.	*Petroleum Drilling*
Possum Belly	On a drilling rig, an open tank where drilling fluid and cuttings return to after coming up from downhole. From the possum belly the fluid enters the shale shakers, which remove the cuttings so the fluid can be re-circulated again.	*Petroleum Drilling*
Post	The vertical member of a timber set.	*Mining*
Post and bank	see Pillar and stall.	*Mining*

Term	Definition	*Industry*
Post and Stall	a method of pillar and stall working which was used in moderately thick seams. The stall was driven with a narrow opening off the heading and then widened out. In this way a post or pillar of coal was left to support the junctions. (Yorks.).	*Mining*
Post Guide	Normally associated with top and bottom-guided valves where the upper and lower sections of the plug, the post, are guided in the valve by a guide bush.	*Industrial Engineering*
Post Office and General Services Maintenance Employees; National Association of (Ind)	an independent organization of general service maintenance employees, formerly known as the National Association of Post Office Maintenance Employees (Ind).	*Industrial Relations*
Post Office and Postal Transportation Service Mail Handlers, Watchmen and Messengers; National Association of (AFL-CIO)	the union formerly was known as the National Association of Post Office and Railway Mail Service Mail Handlers (AF of L)	*Industrial Relations*
Post Office Clerks; National Association of (Ind)	See: Post Office Craftsmen; United National Association of (Ind)	*Industrial Relations*
Post Office Craftsmen; United National Associatin of (Ind)	the organization merged with the National Federation of Post Office Clerks (AFL-CIO) to form the United Federation of Post Office Clerks (AFL-CIO).	*Industrial Relations*
Post Office Motor Vehicle Employees; National Federation of (AFL-CIO)	formerly unaffiliated, the union received its AFL-CIO charter in June 1958.	*Industrial Relations*
Post Pffcie Clerks; National Federation of (AFL-CIO)	organized in Chicago in August 1906 and chartered by the AF of L.	*Industrial Relations*
Post Weld Heat Treatment	(PWHT) Heat treating process used after welding. It involves heating the weld deposit and base metal area affected to a nominated temperature long enough to reduce residual stress. This process, may also serve to satisfy NACE MR-0175 requirements for equipment used in H2S Service.	*Petroleum Engineering*
Postal Clerks Union; National (Ind)	See: Postal Union; National (Ind)	*Industrial Relations*
Postal Clerks; United Federation of (AFL-CIO)	the consolidated organization which includes the former National Federation of Post Office Clerks (AFL-CIO), the United National Association of Post Office Craftsmen (Ind), and the National Postal Transport Association (AFL-CIO)	*Industrial Relations*
Postal Employees; National Alliance of (Ind)	an independent organization or postal employees.	*Industrial Relations*
Postal Supervisors; National Association of (Ind)	an organization of postal supervisors.	*Industrial Relations*
Postal Transport Association; National (AFL-CIO)	one of the organizations which merged in 1961 to form the United Federation of Postal Clerks (AFL-CIO).	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Postal Union; National (Ind)	Name was formerly the National Postal Clerks Union (Ind).	*Industrial Relations*
Postconsumer Materials	A material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. Postconsumer materials are part of the broader category of recovered materials.	*Environmental Engineering*
Post-Employment Questionnaire	an employee questionnaire used at any time subsequent to actual hiring of the individual.	*Industrial Relations*
Posterior	Hind or hindmost; opposite of anterior.	*Forestry*
Posterior distribution	The outcome of Bayesian statistical analysis. A probability distribution describing how likely different values of an outcome (e.g. treatment effect) are. It takes into account the belief before the study (the prior distribution) and the observed data from the study.	*Quality Engineering*
Postheating	The application of heat to a fabricated or welded section subsequent to a fabrication, welding, or cutting operation. Postheating may be done locally, as by induction heating; or the entire assembly may be postheated in a furnace.	*Maintenance and Repair*
Posting	extracting posts or pillars in post and stall working. (Yorks.).	*Mining*
Posting	the practice in manufacturing plants of calling attention to jobs which may be vacant or to which transfers or promotions may be available.	*Industrial Relations*
Posting holes	a short, narrow heading between two main headings. (Yorks.). Also called a 'Cut-through'. -see also Bolt.	*Mining*
Posting of Notices	See: Bulletin Boards, Posting	*Industrial Relations*
Postmasters of the United States; National League of (Ind)	and organization of independent postmasters, formerly known as the National League of District Postmasters of the United States (Ind).	*Industrial Relations*
Post-mining emissions	Emissions of methane from coal occurring after the coal has been mined, during transport or pulverization.	*Energy*
Post-treatment	subjecting the steel to specific processes after it has been galvanized (see quenching, phosphating, and chromating)	*Materials Process*
Postweld Heat Treatment	Any heat treatment subsequent to welding.5	*Maintenance and Repair*
Pot coal	see Pat coal.	*Mining*
Potable	Suitable for drinking.	*Filtration*
Potable Water	Water fit for human consumption. Conforms to the drinking water standards of federal, state, and local authorities for human consumption.	*Petroleum Engineering*
Potash	Potassium compounds mined for fertilizer and for use in the chemical industry.	*Mining*
Potential consumption	The total amount of consumption that would have occurred had the intensity of consumption remained the same over a period of time.	*Energy*
Potential Energy	Energy related to the position or height above a place to which fluid could possibly flow.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Potential Failure	A Term Used In Reliability Centered Maintenance. An Identifiable Condition Which Indicates That A Functional Failure Is Either About To Occur, Or In The Process Of Occurring.	*Management*
Potential peak reduction	The potential annual peak load reduction (measured in kilowatts) that can be deployed from Direct Load Control, Interruptible Load, Other Load Management, and Other DSM Program activities. (Please note that Energy Efficiency and Load Building are not included in Potential Peak Reduction.) It represents the load that can be reduced either by the direct control of the utility system operator or by the consumer in response to a utility request to curtail load. It reflects the installed load reduction capability, as opposed to the Actual Peak Reduction achieved by participants, during the time of annual system peak load.	*Energy*
Potentiometer	1. A variable resistor often used to control a circuit. 2. A balancing bridge used to measure voltage.	*Electrical*
Potentiometer	1. A variable resistor often used to control a circuit. 2. A balancing bridge used to measure voltage.	*Electronic Process*
Potentiometric Surface	An imaginary surface representing the total head of groundwater in a confined aquifer defined by the level to which water will rise in a well.	*Petroleum Engineering*
Pothead	An insulator used in making a sealed joint between an underground cable and an overhead line.	*Electrical*
Pothole	A hole formed in pavement, as by excessive use or by extremes of weather.	*Civil Engineering*
Potters; International Brotherhood of Operative (AFL-CIO)	first organized in East Liverpool, Ohio, in December 1890, the union was formerly known as the National Brotherhood of Operative Potters (AF of L).	*Industrial Relations*
Pottery	Burned clayware ceramic.	*Material Process*
Potting	Applying a hydrostatic seal and mechanical reinforcement by means of a thermosetting liquid, which cures either at room temperature or at a slightly elevated temperature.	*Electrical*
Pounce	see Bump.	*Mining*
Pound hole	catchment or tank from which water was pumped.	*Mining*
Pounds (district heat)	A weight quantity of steam, also used to denote a quantity of energy in the form of steam. The amount of usable energy obtained from a pound of steam depends on its temperature and pressure at the point of consumption and on the drop in pressure after consumption.	*Energy*
Pounson	dense soft clay underlying coal seams (N. Wales). –see also Warrant.	*Mining*
Pour Point	The lowest temperature at which a liquid will pour under specified conditions.	*Lubrication*
Pour point	The lowest temperature at which a fluid will flow under specific conditions.	*Mechanical, Process, and Operations*
Pour Point Depressant	Additive used to lower the pour point or low-temperature fluidity of a petroleum product.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	Industry
Pour Stability	The ability of a pour depressed oil to maintain its original ASTM pour point when subjected to long-term storage at low temperature approximating winter conditions.	*Lubrication*
Pour-Point Suppressants	Prevent insoluble wax molecules in oil from building a honeycomb (lattice-like structure) at colder temperatures. Particularly useful for paraffinic oils. Gives useful ability to pour at lower temperatures.	*Lubrication*
Pout, Punch or Puncher	a tool, a type of long-handled pick, used when withdrawing timber out of a dangerous place.	*Mining*
Powder	a general term for explosives used in the mine.	*Mining*
Powder Coating	A polymeric coating deposited via electrostatic attraction	*Paint and Coatings*
Powder Injection Angle	The angle from which the powder is injected into the plasma jet in plasma spraying.	*Paint and Coatings*
Powder metallurgy	Processing technique	*Material Process*
Powder monkey	an assistant to the shotfirer, usually a young boy who carried the powder box and kept a tally of how much powder was being used. He would also make the dolls or plugs of stemming for the shot holes.	*Mining*
Powder River Basin	Consists of the Montana counties of Big Horn, Custer, Powder River, Rosebud, and Treasure and the Wyoming counties of Campbell, Converse, Crook, Johnson, Natrona, Niobrara, Sheridan, and Weston.	*Energy*
Powder room	a store for explosives on the surface also known in Scotland as the 'ammo' store.	*Mining*
Power	The rate of producing, transferring, or using energy, most commonly associated with electricity. Power is measured in watts and often expressed in kilowatts (kW) or megawatts (mW). Also known as "real" or "active" power. See Active Power, Apparent Power, Reactive Power, Real Power	*Energy*
power	Work per unit time. Measured in horsepower (hp) or watts (Joules per second).	*Mechanical, Process, and Operations*
Power	The rate at which energy is transferred.	*Energy*
Power (electrical)	An electric measurement unit of power called a voltampere is equal to the product of 1 volt and 1 ampere. This is equivalent to 1 watt for a direct current system, and a unit of apparent power is separated into real and reactive power. Real power is the work-producing part of apparent power that measures the rate of supply of energy and is denoted as kilowatts (kW). Reactive power is the portion of apparent power that does not work and is referred to as kilovars; this type of power must be supplied to most types of magnetic equipment, such as motors, and is supplied by generator or by electrostatic equipment. Voltamperes are usually divided by 1,000 and called kilovoltamperes (kVA). Energy is denoted by the product of real power and the length of time utilized; this product is expressed as kilowatt hours.	*Energy*
Power Added Efficiency	In an RF power amplifier, power added efficiency (PAE) is defined as the ratio of the difference of the output and input signal power to the DC power consumed.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Power amplifier	An amplifier used to drive significant power levels. An audio amplifier that drives a loudspeaker and the final stage of a transmitter are common examples.	*Electrical Engineering*
Power ascension	The period of time between a plant's initial fuel loading date and its date of first commercial operation (including the low-power testing period). Plants in the first operating cycle (the time from initial fuel loading to the first refueling), which lasts approximately 2 years, operate at an average capacity factor of about 40 percent.	*Energy*
Power Belt Curve	A curve conveyor which utilizes a belt, driven by tapered pulleys.	*Equipment*
Power beyond	An adapting sleeve which opens a passage from once circuit to another. Often installed in a valve port which is normally plugged.	*Mechanical, Process, and Operations*
Power Capacity	**Power capacity** - In terms of generation, the capacity of a power plant is the maximum power that installation is capable of producing. It does not account for periods of inactivity due to maintenance work, for example. Nuclear power stations have low maintenance requirements and few shutdowns (as do all "baseload" power plants), which enable them to achieve about 90 percent productivity. Gas-fired power stations, which are more expensive to run, often operate well below capacity, ramping up to full productivity only during periods of high demand. This means that their productivity may be only 20 - 30 percent of the plant's actual capacity. The relationship between capacity and output is known as the "capacity factor," where 100 percent is the theoretical maximum. As an example, the hydropower station on the Itaipu dam in Brazil has a total generating capacity of 14,000 megawatts and could therefore theoretically produce 122,640,000 megawatt-hours of electricity per year (14,000 MW x 8,760 hours = 122.6 million MWh). The Itaipu dam actually produced 91,651,808 MWh of electricity in 2009. The actual production divided by the theoretical maximum production gives Itaipu a capacity factor of 74.7 percent. (See also Base-load power plant.)	*Electrical*
Power Circuit Fault Zone	The system of conductors and connections running from the point of origin of testing to connections at the motor.	*Reliability Engineering*
Power Consumption	The maximum wattage used by a device within its operating range during steady-state signal condition.	*Process Control*
Power Conveyor	Any type of conveyor which requires power to move its load.	*Equipment*
Power curve	A line on a power function graph that describes the performance of a certain control rule and N.	*Quality*
Power Dissipation	The units = Watts/milliwatts (DC) or Volt: Amps (AC). The amount of power that is consumed and converted to heat in normal operation. Supply Voltage (max) x Supply Current	*Electrical Engineering*
Power Exchange	This is a commercial entity responsible for facilitating the development of transparent spot prices for energy capacity, and/or ancillary services.	*Energy*
Power exchange generation	Generation scheduled by the power exchange. See definition for power exchange.	*Energy*
Power exchange load	Load that has been scheduled by the power exchange and is received through the use of transmission or distribution facilities owned by participating transmission owners.	*Energy*

Term	Definition	*Industry*
Power factor	The ratio of real power (kilowatt) to apparent power kilovolt-ampere for any given load and time.	*Energy*
Power factor	Power factor is a measure of an electrical circuit's effectiveness in doing useful work on a scale of zero (lowest) to 1 (highest). It reflects how much the waveforms of voltage and current are in phase, usually measured at the customer's load. When the voltage and current are significantly out of phase, as is common in industrial environments with many electric motors, the current will be high even at relatively low power levels. The economic result of this low power factor is expensive electrical losses on the circuit and underutilization of the circuit's power transfer capability. In these cases the customer or the electric utility may deploy additional capacitor banks near the customer load, restoring the power factor to or near unity and improving system utilization. (See also Power factor correction.)	*Electrical*
Power factor correction (reactive power compensation)	Depending on the type of equipment a consumer connects to the electricity supply (whether there is a net consumption or generation of reactive power), power factor varies. Unless this variation is corrected, higher currents are drawn from the grid, leading to grid instability, higher costs and reduced transmission capacity. Most utilities impose penalties on consumers who fail to correct errant power factors. (See also Power factor.)	*Electrical*
Power Fail	A feature in a microprocessor supervisory circuit that provides early warning to the microprocessor of imminent power failure.	*Electrical Engineering*
Power Generation Company	A competitive company that operates and maintains existing generation plants. The company may own the generation plants or may interact with the short-term market for electric power on behalf of plant owners.	*Energy*
Power Grid	A network of power lines and associated equipment used to transmit and distribute electricity over a geographic area.	*Energy*
Power loader	a machine for cutting (shearing) and loading coal, more commonly any longwall cutter loader or shearer.	*Mining*
Power loss	The difference between electricity input and output as a result of an energy transfer between two points.	*Energy*
Power losses	This term generally refers to electrical energy that is lost to inefficiencies in transmission, distribution, or in the use of electricity. As electricity flows through a conductor, individual electrons collide with the atoms of the conductor and transfer energy to them, causing them to heat up. This heat is lost to the atmosphere in the form of thermal radiation. Some power is also lost to electromagnetic radiation.	*Electrical*
Power Marketer	An entity, such as a supply coordinator or broker, that obtains energy from any source or combination of sources, including independent generators, utility system power or spot purchases, for delivery to a utility or end user.	*Energy*
Power marketers	Business entities engaged in buying and selling electricity. Power marketers do not usually own generating or transmission facilities. Power marketers, as opposed to brokers, take ownership of the electricity and are involved in interstate trade. These entities file with the Federal Energy Regulatory Commission (FERC) for status as a power marketer.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Power Marketers	Entities engaged in buying and selling electricity.	*Energy*
Power operator	Powered valve operators are of the following general types - Electric Motor, Pneumatic or Hydraulic Motor, Pneumatic or Hydraulic Cylinder. Operators can either be adapted directly to the valve stem or side mounted on existing gear or scotch-yoke operators.	*Mechanical*
Power pack	the main hydraulic pumping unit that supplied the powered roof supports along the coalface.	*Mining*
Power pack	An integral power supply unit usually containing a pump, reservoir, relief valve and directional control.	*Mechanical, Process, and Operations*
Power Plant	A generating station where electricity is produced.	*Energy*
Power Pool	Two or more interconnected electric systems that agree to coordinate operations.	*Energy*
Power production plant	All the land and land rights, structures and improvements, boiler or reactor vessel equipment, engines and engine-driven generator, turbo generator units, accessory electric equipment, and miscellaneous power plant equipment are grouped together for each individual facility.	*Energy*
Power Purchase Agreement	This refers to a contract entered into by an independent power producer and an electric utility. The power purchase agreement specifies the terms and conditions under which electric power will be generated and purchased. Power purchase agreements require the independent power producer to supply power at a specified price for the life of the agreement. While power purchase agreements vary, their common elements include: specification of the size and operating parameters of the generation facility; milestones in-service dates, and contract terms; price mechanisms; service and performance obligations; dispatchability options; and conditions of termination or default.	*Energy*
Power shovel	removes overburden and loads coal by means of a digging bucket mounted at the end of an arm suspended from a broom. The shovel digs by pushing the bucket forward and upward. It does not dig below the level at which it stands.	*Energy*
Power spectral density or PSD	Describes the power of random vibration intensity, in mean-square acceleration per frequency unit, as g^2/Hz or m^2/s^3. Acceleration spectral density or ASD is preferred abroad.	*Reliability Engineering*
Power Supply	Supply: A separate unit or part of a circuit that supplies power to the rest of the circuit or to a system.	*Electrical*
Power transfer limit	The maximum power that can be transferred from one electric utility system to another without overloading any facility in either system.	*Energy*
Power unit	A combination of pump, pump drive, reservoir, controls and conditioning, components which may be required for its application.	*Oil Analysis*
Power unit, hydraulic	A combination of components to facilitate fluid storage and condition- ing, and delivery of the fluid under conditions of controlled pressure and flow to the discharge port of the pump, including maximum pressure controls and sensing devices when applicable. Circuitry components, although sometimes mounted on the reservoir, are not considered part of the power unit.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PowerCap	A special surface-mount package with access to the internal cavity via an openable top. This packaging scheme allows easy upgrade of NV RAMs without having to change the PCB hardware layout. The user can simply open the lid and swap out the IC.	*Electrical Engineering*
Powered Feeder	A driven length of belt conveyor, normally used to move product horizontally onto an incline conveyor.	*Equipment*
Powered supports	the hydraulically powered supports on the modern coalface, also called 'chocks' or 'shields'.	*Mining*
Power-function graph	A graphical presentation of the performance characteristics of QC procedures that describes the probability for rejection (on the y-axis) versus the size of analytical error occurring (on the x-axis) for stated control rules and numbers of control measurements.	*Quality*
Powerhouse	A structure at a hydroelectric plant site that contains the turbine and generator.	*Energy*
Power-over-Ethernet	A means for delivering power to a remote device using the same cable lines used to deliver Ethernet data.	*Electrical Engineering*
Powt	a long iron rod that is a combination of a battering ram and a hook, used for withdrawing props.	*Mining*
PPD	pour point depressant	*Petro-Chemical Abbreviations*
PPDSE	See: Plate Printers', Die Stampers' and Engravers' Union of North America; International (AFL-CIO)	*Industrial Relations*
PPE	See: Protection Employees; Independent Union of Plant (Ind)	*Industrial Relations*
PPE	Personal Protective Equipment refers to protective clothing, eye-wear, shoes, gloves and other items worn by workers in the oil field to protect them from injury. The typical PPE which is required of all employees on a modern drilling rig consist of ANSI approved safety glasses, steel toe boots, flame retardant clothing, ear plugs and a hard hat.	*Petroleum Drilling*
PPE, additions to	The current year's expenditures on property, plant, and equipment (PPE). The amount is predicated upon each reporting company's accounting practice. That is, accounting practices with regard to capitalization of certain items may differ across companies, and therefore this figure in FRS (Financial Reporting System) will be a function of each reporting company's policy.	*Energy*
PPF	See: Plumbing and Pipe Fitting Industry of the United States and Canada; United Association of Journeymen and Apprentices of the (AFL-CIO)	*Industrial Relations*
PPG	See Publishing Policy Group (PPG)	*Quality Analysis*
PPI	Producer Price Index	*Energy*
PPM	Abbreviation for "parts per million," sometimes used to express temperature coefficients. For instance, 100 ppm is identical to 0.01%.	*Electrical*
PPO	Polyphthalamide	*Petro-Chemical Abbreviations*
PRA	See Probability Risk Assessment.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pragmatic trial	A trial that aims to test a treatment policy in a 'real life' situation, when many people may not receive all of the treatment, and may use other treatments as well. This is as opposed to an explanatory trial, which is done under ideal conditions and is trying to determine whether a therapy has the ability to make a difference at all (i.e. testing its efficacy). See also: Explanatory trial	*Quality Analysis*
PRBS	Pseudorandom binary (bit) sequence	*Electrical Engineering*
PRBS (Pre-Bias Soft Start)	A power-supply feature that prevents discharging of the output capacitor when the power supply starts up. Discharging the output capacitor could create either start up oscillation problems at cold start or large voltage disturbances on the output voltage bus at hot plug-in. Pre-bias soft start is an important feature in redundant power-supply systems, parallel power supply modules, battery back-up voltage buses, and other applications where multiple power sources supply one node.	*Electrical Engineering*
Pre Soak	A soaking operation, to remove stains, that precedes the regular laundering process.	*Chemistry*
Pre Spot	Removal of stains before more extensive carpet cleaning.	*Chemistry*
Pre-alloyed Powder	A powder composed of two or more elements which are alloyed in the powder manufacturing process and in which the particles are of the same nominal composition throughout.	*Paint and Coatings*
Preamble Clause	a section of a collective bargaining agreement which precedes the substantive terms and which suggests that the parties, in consideration of the mutual promises made, will maintain certain basic attitudes and conditions in order to carry out on the terms of the agreement.	*Industrial Relations*
Precambrian Shield	The oldest, most stable regions of the earth's crust, the largest of which is the Canadian Shield.	*Mining*
Precautionary Statement	Warnings on product labels to alert users to potential harmful hazards associated with using the product.	*Chemistry*
Precedent Value	in courts of law, the precedent value of a decision is measured by the degree to which it is followed or sanctioned in subsequent cases involving the same or similar issues.	*Industrial Relations*
Precharge Pressure	The pressure of compressed gas in an accumulator prior to the admission of liquid.	*Mechanical, Process, and Operations*
Precious metal	Generally corrosion resistant metal or alloy, such as gold, platinum, and their alloys.	*Material Process*
Precipitate	Particles separated from a fluid as a result of a chemical or physical change. PRECIPITATION NUMBER - The number of milliliters of precipitate formed when 10 ml. of lubricant	*Mechanical, Process, and Operations*
Precipitate n	A solid substance thrown out of solution as the result of chemical change effected by the addition of a reagent. v. To separate a substance from solution by chemical action of a reagent.	*Material Process*
Precipitation hardened stainless steel	Corrosion resistant ferrous alloy that has been strengthened by precipitation hardening.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Precipitation Hardening	Hardening and strengthening of a metal alloy by extremely small and uniformly dispersed particles that precipitate from a supersaturated solid solution.	*Engineering Physics*
Precipitation hardening	Development of obstacles to dislocation motion, and thereby, increased hardness, by the controlled precipitation of a second phase.	*Material Process*
Precision	Measure of exactness, possibly expressed in number of digits, for example, computed to the nearest millimeter; Compare: accuracy.	*Aeronautical Engineering*
Precision Snap Acting Switch	An electromechanical switch having predetermined and accurately controlled characteristics and having a spring loaded quick make and break contact action.	*Electrical Engineering*
Preconsumer Materials	Materials generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings.	*Environmental Engineering*
Precure	A rough surface in molding, caused by the resin setting up before proper pressure is applied to the mold. Term not recommended. See Short.	*Material Process*
Pre-cutting	the process of using a coal-cutter in advance of a cutter-loader in machine mining. The process was sometimes found necessary when working hard coal.	*Mining*
Predictive maintenance	A type of condition-based maintenance emphasizing early prediction of failure using non-destructive techniques such as vibration analysis, thermography, and wear debris analysis.	*Oil Analysis*
Predictive Maintenance (PdM)	A maintenance process based on machinery inspection, monitoring, and prediction. Machine stops for maintenance are planned depending on the predictions (condition-based). The terms Condition Based Maintenance, On-Condition Maintenance and Predictive Maintenance are often used interchangeably. See Condition-Based Maintenance.	*Maintenance*
Predictive Maintenance (PdM)	An equipment maintenance strategy based on measuring the condition of equipment in order to assess whether it will fail during some future period, and then taking appropriate action to avoid the consequences of that failure. Equipment condition can be measured through a variety of methods, including condition monitoring technologies/techniques, statistical process control or through the human senses.	*Reliability Engineering*
Predictive value	In screening and diagnostic tests, the probability that a person with a positive test is a true positive (i.e., does have the disease), or that a person with a negative test truly does not have the disease. The predictive value of a screening test is determined by the sensitivity and specificity of the test, and by the prevalence of the condition for which the test is used.	*Analysis*
Prediscovery costs	All costs incurred in an extractive industry operation prior to the actual discovery of minerals in commercially recoverable quantities; normally includes prospecting, acquisition, and exploration costs and may include some development costs.	*Energy*
Predisposition	The weakening of an organism by some factor(s) of either the physical or biotic environment so as to render the organism more susceptible to a pathogen.	*Forestry*
Predrying	Drying the molding compound to remove moisture, before charging the mold.	*Material Process*
Preece Test	A recognized standard of testing the galvanized coating on a wire.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Preemption, Doctrine of	the doctrine of federal preemption in the relations affecting interstate commerce has been spelled out in a series of more than 20 decisions handed down by the U.S. Supreme Court since the passage of the Taft-Hartley Act in 1947.	*Industrial Relations*
Preexponential constant	Temperature independent term that appears before the exponential term of the Arrhenius equation.	*Material Process*
Preferential Hiring	a form of union security under which the employer agrees to give first preference to individuals who are members of the union or made available by the union, so long as the union is able to supply the necessary employees, both as to number and quality.	*Industrial Relations*
Preferential Shop	a company or shop which by agreement with the union gives preference in hiring to union members as against equally qualified or competent non-union members.	*Industrial Relations*
Preferred numbers	A numerical series derived from a geometric progression, frequently used to select and standardize sizes for a series of things. It is sometimes referred to as the "R" series in favor of its developer, Col. Charles Renard, a French engineer.	*Mechanical, Process, and Operations*
Preferred orientation	Alignment of a given crystallographic direction in adjacent grains of a microstructure as the result of cold rolling,	*Material Process*
Preferred shares	Shares of a limited liability company that rank ahead of common shares, but after bonds, in distribution of earnings or in claim to the company's assets in the event of liquidation. They pay a fixed dividend but normally do not have voting rights, as with common shares.	*Mining*
Preferred-orientation microstructure	Grain structure in a polycrystalline material in which the grains tend to have a common crystallographic orientation.	*Material Process*
Prefill Valve	A valve which permits full flow from a tank to a "working" cylinder during the advance portion of a cycle, permits the operating pressure to be applied to the cylinder during the working portion of the cycle, and permits free flow from the cylinder to the tank during the return portion of the cycle.	*Mechanical, Process, and Operations*
Pre-flux	the process of fluxing steel before it enters the galvanizing kettle as opposed to using a top-flux layer, which would be located on top of the molten zinc in the kettle	*Materials Process*
Preform	Powder cold pressed into a pellet to facilitate mold loading.	*Material Process*
Preform	The formation of an intermediate part to be formed into the final part.	*Engineering Physics*
Preformed Strands	Strand in which the wires are permanently formed during fabrication into the helical shape they will assume in the strand.	*Wire Rope & Cable*
Preformed Wire Rope	Wire rope in which the strands are permanently formed during fabrication into the helical shape they will assume in the wire rope.	*Wire Rope & Cable*
Pregnant solution	A solution containing dissolved extractable mineral that was leached from the ore; uranium leach solution pumped up from the underground ore zone though a production hole.	*Energy*
Pregwood Proprietary name. See	Pregwood Proprietary name. See	*Material Process*
Preheater	Exchanger used to heat hydrocarbons before they are fed to a unit.	*Petroleum Engineering*

Term	Definition	*Industry*
Preheating	The application of heat to a base metal immediately prior to a welding or cutting operation.	*Maintenance and Repair*
Preignition	Ignition of the fuel/air mixture in a gasoline engine before the spark plug fires. Often caused by incandescent fuel or lubricant deposits in the combustion chamber, it wastes power and may damage the engine.	*Lubrication*
Preliminary permit (hydroelectric power)	A single site permit granted by the FERC (Federal Energy Regulatory Commission), which gives the recipient priority over anyone else to apply for a hydroelectric license. The preliminary permit enables the recipient to prepare a license application and conduct various studies for economic feasibility and environmental impacts. The period for a preliminary permit may extend to 3 years.	*Energy*
Preload	The tension created in a fastener when first tightened. Reduces after a period of time due to embedding and other factors.	*Maintenance*
Premise	A proposition helping to support a conclusion	*Management Discussion*
Premium	Cost of an option and/or an amount added to a base price for a material, i.e. added cost beyond the base Comex, LME and/or producer and manufacturer prices.	*Metallurgy*
Premium freight	Air or other expedited shipment method that increases the standard cost of filling a customer order.	*Quality*
Premium gasoline	Gasoline having an antiknock index (R+M/2) greater than 90. Includes both leaded premium gasoline as well as unleaded premium gasoline.	*Energy*
Premium Money (Push Money)	a form of incentive payment to sales people in the retail trades.	*Industrial Relations*
Premium Pay	sometimes referred to as penalty pay. An extra rate which is paid to the individual for holiday and Sunday work, for work on late shifts, for overtime, or for specially hazardous, dangerous, or unpleasant work.	*Industrial Relations*
Premium Wage System	any incentive wage system which provides a bonus or premium for work in excess of the norm or for extra exertion and effort.	*Industrial Relations*
Prentice Hall, Inc.	one of the major private labor information services in the United States.	*Industrial Relations*
Prepaid Freight	Transportation charges are paid by the supplier at the point of shipment.	*Procurement*
Preparation plant	A mining facility at which coal is crushed, screened, and mechanically cleaned.	*Energy*
Prepayment Plan	a wage plan under the Wage and Hour Law which provides for constant wages form pay period to pay period.	*Industrial Relations*
Prepreg	Continuous fiber reinforcement pre-impregnated with a polymer resin which is then partially cured.	*Engineering Physics*
Preproduction costs	Costs of prospecting for, acquiring, exploring, and developing mineral reserves incurred prior to the point when production of commercially recoverable quantities of minerals commences.	*Energy*
Preretirement Education	programs established for workers who are close to retirement or who are anticipating early retirement.	*Industrial Relations*
Prerogative	See: Management Prerogatives	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Prescribed or controlled burn	The use of fire under specific environmental conditions to achieve forest management objectives such as reducing hazardous fuels or controlling unwanted vegetation.	*Forestry*
Present use valuation	Property tax relief classification based on the land's productivity for agriculture, horticulture, or forestry production rather than for market value.	*Forestry*
Present Value	The amount of money required to secure a specified cash flow on a future date at a given rate of return.	*Energy*
Present Worth Factor	The adjustment factor that discounts a sum of future dollars back to the current year.	*Energy*
Preservation	Maintaining forests in an undisturbed, unmanaged state.	*Forestry*
Presidential Advisory Committee on Labor Management Policy	by Executive Order 10918 issued February 16, 1961, President Kennedy established the Presidential Advisory Committee on Labor Management Policy.	*Industrial Relations*
Presidential Railroad Commission	the 15-man commission appointed by President Eisenhower to study the general problem of the need for rule changes and the efficient operation of the railroads.	*Industrial Relations*
Presidential Seizure	the authority of the President as Commander and Chief to seize certain properties when necessary to protect the national interest.	*Industrial Relations*
President's Committee on Employment of Physically Handicapped	See: Physically Handicapped, Office of the President's Committee on Employment of	*Industrial Relations*
President's Committee on Equal Employment Opportunity	a committee established by Executive Order 10925 issued on March 6, 1961, by President Kennedy.	*Industrial Relations*
President's Committee on Youth Employment	See: Youth Employment, President's Committee on	*Industrial Relations*
President's Council of Economic Advisers	See: Council of Economic Advisers	*Industrial Relations*
Press against a rotating drum-shaped part called a brake drum	press against a rotating drum-shaped part called a brake drum.	*Mechanical Engineering*
Press polish	Finish for sheet stock produced by contact, under heat and pressure, with a very smooth metal that gives plastic a high sheet.	*Material Process*
Pressing	See "HOT PRESS FORGING"	*Metallurgy*
Pressure	Pressure is a similar idea to stress, the force intensity at a point, except that pressure means something acting on the surface of an object rather than within the material of the object. When discussing the pressure within a fluid, the meaning is equivalent to stress.	*Engineering Physics*
Pressure	The force applied to, or distributed over a surface expressed in terms of force to area ratio.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pressure Angle	The angle between a tooth profile and a radial line at its pitch point. In involute teeth, pressure angle is often described as the angle between the line of action and the line tangent to the pitch circle. Standard Pressure Angles are established in connection with standard gear-tooth proportions. A given pair of involute profiles will transmit smooth motion at the same velocity ratio even when the center distance is changed. Changes in center distance, however, in gear design and gear manufacturing operations, are accompanied by changes in pitch diameter, pitch, and pressure angle. Different values of pitch diameter and pressure angle therefore may occur in the same gear under different conditions. Usually in a gear design, and unless otherwise specified, the pressure angle is the standard pressure angle at the standard pitch diameter, and is standard for the hob or cutter used to generate teeth. The Operating Pressure Angle is determined by the center distance at which a pair of gears operates. The Generating Pressure Angle is the angle at the pitch diameter in effect when the gear is generated. Other pressure angles may be considered in gear calculations. In gear cutting tools and cutters, the pressure angle indicates the direction of the cutting edge as referred to some principal direction. In oblique teeth, that is helical, spiral, etc., the pressure angle may be specified in the transverse, normal, or axial plane. For a spur gear or a straight bevel gear, in which only one direction of cross-section needs to be considered, the general term pressure angle may be used without qualification to indicate transverse pressure angel. In spiral bevel gears, unless otherwise specified, pressure angle means normal pressure angle at the mean cone distance.	*Gears*
Pressure class	A pressure rating expressed as a dimensionless number. The class rating charts give actual pounds per square inch maximum allowable pressure at a given temperature.	*Mechanical*
Pressure Control Valve	A pressure control valve whose primary function is to limit system pressure.	*Lubrication*
Pressure Cooker Test	A Pressure Cooker Test (PCT) tests a part under high temperature, humidity, and pressure conditions. Also called an Autoclave Test or Pressure Pot Test (PPOT).	*Electrical Engineering*
Pressure core sampler	A tool designed to retrieve a sediment core sample from depth under pressure. [4]	*Petroleum Drilling*
Pressure Drop	Resistance to flow created by the element (media) in a filter. Defined as the difference in pressure upstream (inlet side of the filter) and downstream (outlet side of the filter).	*Oil Analysis*
Pressure drop	The decrease in pressure along the direction of flow in a piping system, caused by fluid friction, restrictions, and by change-of-direction fittings. Pressure drop is related to velocity, specific gravity, viscosity and to the size and roughness of the pipe interior. See "Differential Pressure."	*Mechanical*
Pressure gradient	a pressure differential in a given medium (e.g., water or air) which tends to induce movement from areas of higher pressure to areas of lower pressure.	*Chemical*
Pressure Grouting	A process confining grout within the borehole or casing by using retaining plugs in packers and applying pressure to drive grout slurry into the annular space or zone to be grouted.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pressure Head	From the definition of pressure, the expression p/w is the pressure head. It can be defined as the height of the fluid above a point, and it is normally measured in feet.	*Maintenance and Repair*
Pressure line filter	A filter located in a line conducting working fluid to a working device or devices.	*Oil Analysis*
Pressure Load	Pressure necessary to produce a forging, generally expressed in tons.	*Metallurgy*
PRESSURE OVERRIDE	The difference between the cracking pressure of a valve and the pressure reached when the valve is passing full flow.	*Mechanical, Process, and Operations*
Pressure pads	Reinforcement **of** hardened	*Material Process*
Pressure plate	A side plate in a vane pump or motor cartridge on the pressure port side.	*Mechanical, Process, and Operations*
Pressure Range	The pressure limits over which the pressure sensor is calibrated or specified.	*Electrical Engineering*
Pressure reducing regulator	Regulator designed to control downstream pressure. See "REGULATOR."	*Mechanical*
Pressure Reducing Valve	A pressure control valve which limits outlet pressure.	*Mechanical, Process, and Operations*
Pressure Roll	In extrusion coating, a roll used to apply pressure to consolidate the substrate and the plastic film with which it has been coated.	*Engineering Physics*
Pressure Roller	A roller used for holding the driving belt in contact with the load carrying rollers in a belt drive live roller conveyor.	*Equipment*
Pressure Sealed Bonnet	A type of bonnet design where the fluid pressure is used to produce the seal between the body and bonnet.	*Industrial Engineering*
Pressure Sensing Valve	A device similar to an electrical pressure switch, in which a signal to be sensed enters a control point, and actuates a mechanism which, at the proper pressure level, causes	*Mechanical, Process, and Operations*
Pressure Sensor	A device that converts an input pressure into an electrical output.	*Electrical Engineering*
Pressure Sequence Valve	A pressure control valve which directs flow in a preset sequence	*Mechanical, Process, and Operations*
Pressure Supply	The pressure at the supply port of the device.	*Process Control*
Pressure switch	A switch (usually electric) activated by a rise or drop in pressure. A transducer.	*Mechanical*
Pressure Switch	An electric switch operated by fluid pressure.	*Lubrication*
Pressure test	A test using specified pressures of liquid or gases, which can be used to check sealing, integrity, design standards, etc. of a particular product.	*Mechanical*
Pressure, absolute	The sum of atmospheric and gage pressures.	*Oil Analysis*
Pressure, Absolute	The pressure measured relative to absolute zero pressure (perfect vacuum). The output of the absolute sensor will change as a result of barometric pressure change. Thus it can be used as a barometer.	*Electrical Engineering*
Pressure, Ambient	The pressure of the medium surrounding a device.	*Process Control*
Pressure, burst	The pressure which creates loss of fluid through the component due to the fracture of the component.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pressure, Charge	The pressure at which replenishing fluid is forced into a fluid power system. PRESSURE, CRACKING - The pressure at which a pressure operated valve begins to pass fluid.	*Mechanical, Process, and Operations*
Pressure, Differential	The pressure between two points of measurement.	*Electrical Engineering*
Pressure, Gage	The pressure measured relative to ambient pressure. The output of a gage pressure sensor, contrasted to an absolute pressure sensor, does not change with a change of barometric pressure.	*Electrical Engineering*
Pressure, Process	The pressure of the process medium at the sensing element.	*Process Control*
Pressure, rated	The qualified operating pressure which is recommended for a component or a system by the manufacturer.	*Oil Analysis*
Pressure, Reference	The pressure relative to which a differential sensor measures pressure. Ambient pressure is a specific case of reference pressure.	*Electrical Engineering*
Pressure, Static	The average pressure on the inputs of a differential pressure sensor (sometimes referred to as common mode or working pressure).	*Electrical Engineering*
Pressure, system	The pressure which overcomes the total resistances in a system. It includes all losses as well as useful work.	*Oil Analysis*
Pressure, Working	'Maximum Service Pressure' the maximum pressure that specific units of equipment such as spools, valves, wellheads etc. should experience in use. API 6A specifies that the Maximum Service Pressure be marked on all equipment (the pressure rating limited by the lowest pressure connector on the equipment).	*Petroleum Engineering*
Pressure-regulating valve	A valve that releases or holds process-system pressure (that is, opens or closes) either by preset spring tension or by actuation by a valve controller to assume any desired position between fully open and fully closed.	*Petroleum Engineering*
Pressure-Temperature Ratings	The maximum allowable working pressures at specified temperatures. For steel valves, the ratings are defined by "classes" and found in ASME B16.34. For iron and bronze valves, the ratings are defined in the applicable MSS specifications.	*Mechanical*
Pressure-Temperature Ratings	The maximum allowable working pressures at specified temperatures. For steel valves, the ratings are defined by "classes" and found in ASME B16.34. For iron and bronze valves, the ratings are defined in the applicable MSS specifications.	*General Mechanical*
Pressurized-water reactor (PWR)	A nuclear reactor in which heat is transferred from the core to a heat exchanger via water kept under high pressure, so that high temperatures can be maintained in the primary system without boiling the water. Steam is generated in a secondary circuit.	*Energy*
Prestressed concrete	An aggregate composite (concrete) in which steel bars have been embedded prior to the setting of the cement. Release of tension on the bars after the concrete hardens places the material under a residual, compressive stress. The material is a more crack resistant as a result.	*Material Process*
Prestressing	An incorrect reference to PRESTRETCHING.	*Wire Rope & Cable*
Prestretching	Subjecting a wire rope or strand to tension prior to its intended application, for an extent and over a period of time sufficient to remove most of the CONSTRUCTIONAL STRETCH.	*Wire Rope & Cable*
Pretravel	The distance through which the plunger moves when traveled from the free position to the operating point.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pre-treatment	subjecting steel to specific processes before galvanizing	*Materials Process*
Prevailing Torque	The torque required to run a nut down a thread on certain types of nuts designed to resist vibration loosening. The resistance can be provided by a plastic insert or a noncircular head.	*Maintenance*
Prevailing Torque Nut	A type of lock nut which has a prevailing torque to assist in preventing self loosening. There are two main categories of prevailing torque nuts, all metal and nylon insert. All metal torque prevailing nuts generally gain a prevailing torque by distorting the threads at the top of the nut by some means. Nylon insert torque prevailing nuts ultilize a nylon (or other polymer) insert to achieve a prevailing torque.	*Maintenance*
Prevalence	The proportion of persons with a particular disease within a given population at a given time.	*Analysis*
Prevalence study	A type of cross-sectional study that measures the prevalence of a characteristic.	*Quality Analysis*
Prevention and Protection (P&P)	Minimum preventive and protective measures covers measures which should be considered in addition to the basic measures, but which may, or may not, be specified, depending on the designer's assessment of the risks and the magnitude of the resulting fire and explosion.	*Material Process*
Preventive Maintenance	A maintenance process based on preventing unexpected events from occurring by employing proper maintenance procedures, clean environment, etc. Maintenance is mostly done during planned machine stops (fixed intervals). Emphasis is placed on replacing, overhauling, or remanufacturing an item at a fixed interval, regardless of its condition at the time. Scheduled restoration tasks and scheduled discard tasks are both examples of Preventive Maintenance tasks.	*Maintenance*
Preventive Maintenance (PM)	An equipment maintenance strategy that is based on replacing, overhauling, repairing or remanufacturing an item at a fixed interval, regardless of its condition at the time. The impetus is to perform the work as a way to avert mechanical failures and avoid unscheduled downtime.	*Reliability Engineering*
Preventive Maintenance Optimization (PMO)	A methodology which focuses on improving maintenance effectiveness and efficiency through the review and/or rationalization of programs or tasks. Through such work, from one-third to two-thirds of planned maintenance procedures can be eliminated or combined.	*Reliability Engineering*
Preventive maintenance program for heating and/or cooling equipment	**A** HVAC conservation feature consisting of a program of routine inspection and service for the heating and/or cooling equipment. The inspection is performed on a regular basis, even if there are no apparent problems.	*Energy*
Preventive Maintenance Schedule Compliance	The number of preventive maintenance work orders completed from the daily/weekly schedule divided by the total number of preventive maintenance work orders on the schedule.	*Maintenance*
Preventive/Predictive Work	Scheduled, preplanned preventive and predictive (condition-based) inspections and work orders.	*Maintenance*
Price	The amount of money or consideration-in-kind for which a service is bought, sold, or offered for sale.	*Energy*
Price Cap	Situation where a price has been determined and fixed.	*Energy*
Price Schedules	Agreements designated as optional for supply of goods or services to the University. Such agreements are not used in lieu of securing competition.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Price to Beat	Retail Electric Providers affiliated with pre-existing investor-owned utilities are required to offer residential and small commercial customers in its former service area a "price to beat." This is a price that is 6% lower than the rate charged by its affiliated electric utility on January 1, 1999. The Retail Electric Provider cannot adjust this price until either (a) 36 months after retail competition is introduced or (b) 40% of the customers in its affiliated Transmission and/or Distribution Service Provider area have switched to another retailer.	*Energy*
Price Transparency	Market prices for generation and transmission service made available to the public so that customers know how much they will pay for power supply and transportation in a deregulated market.	*Energy*
Price-to-earnings ratio	The current market price of a stock divided by the company's net earnings per share for the year.	*Mining*
Prick	a pick. (Scot.); or to hole by hand in a layer of soft fireclay beneath the coal seam.	*Mining*
Pricker	a pointed brass or copper rod about 3 feet long, the point was inserted into the powder cartridge, then the cartridge and pricker were inserted into the shot hole; or a tool for trimming the wick on an oil lamp. -see also Picker; or a long iron rod or poker used to loosen and bring down the top coal in the Staffordshire Thick Coal (S. Staffs.); or a holing pick.	*Mining*
Pricking or Pricking dirt	a thin layer of soft shale often found between the bottom of a seam and the floor. It was used to prick in when undercutting. A great advantage to the hewer. –see Holing dirt.	*Mining*
Primary Bond	Interatomic bonds that are relatively strong and for which bonding energies are relatively large.	*Engineering Physics*
Primary bond	Relatively strong bond between adjacent atoms resulting from the transfer or sharing of outer orbital electrons.	*Material Process*
Primary Circuit	This is the distribution circuit (less than 69,000 volts) on the high voltage side of the transformer.	*Energy*
Primary coal	All coal milled and, when necessary, washed and sorted.	*Energy*
Primary deposits	Valuable minerals deposited during the original period or periods of mineralization, as opposed to those deposited as a result of alteration or weathering.	*Mining*
Primary Device	Part of a flowmeter which is mounted internally or externally to the fluid conduit and produces a signal corresponding to the flowrate and from which the flow may be determined.	*General Engineering*
Primary Device	Part of a flowmeter which is mounted internally or externally to the fluid conduit and produces a signal corresponding to the flowrate and from which the flow may be determined.	*Electronic Process*
Primary Element	The system element that quantitatively converts measured variable energy into a form suitable for measurement.	*Process Control*
Primary energy	Energy in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, coal can be converted to synthetic gas, which can be converted to electricity; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See Primary energy production and Primary energy consumption.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Primary energy consumption	Consumption of primary energy. (Energy sources that are produced from other energy sources, e.g., coal coke from coal, are included in primary energy consumption only if their energy content has not already been included as part of the original energy source. Thus, U.S. primary energy consumption does include net imports of coal coke, but not the coal coke produced from domestic coal.) The U.S. Energy Information Administration includes the following in U.S. primary energy consumption: coal consumption; coal coke net imports; petroleum consumption (petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel); dry natural gas excluding supplemental gaseous fuels consumption; nuclear electricity net generation (converted to Btu using the nuclear plants heat rates); conventional hydroelectricity net generation (converted to Btu using the fossil-fuels plant heat rates); geothermal electricity net generation (converted to Btu using the fossil-fuels plant heat rates), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fuels plant heat rates), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fuels plant heat rates); wood and wood-derived fuels consumption; biomass waste consumption; fuel ethanol and biodiesel consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatt hour).	*Energy*
Primary energy consumption expenditures	Expenditures for energy consumed in each of the four major end-use sectors, excluding energy in the form of electricity, plus expenditures by the electric utilities sector for energy used to generate electricity. There are no fuel-associated expenditures for associated expenditures for hydroelectric power, geothermal energy, photovoltaic and solar energy, or wind energy. Also excluded are the quantifiable consumption expenditures that are an integral part of process fuel consumption.	*Energy*
Primary energy demand	The annual primary energy demand is the key figure in the German Energy Savings Directive (EnEV) and the energy performance certificate. It indicates how many kWh of energy need to be obtained from an energy source e.g. coal or natural gas to cover a building 's heating and hot water requirements.	*Thermal Management*
Primary energy production	Production of primary energy. The U.S. Energy Information Administration includes the following in U.S. primary energy production: coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; dry natural gas excluding supplemental gaseous fuels production; nuclear electricity net generation (converted to Btu using the nuclear plant heat rates); conventional hydroelectricity net generation (converted to Btu using the fossil-fuels plant heat rates); geothermal electricity net generation (converted to Btu using the fossil-fuels plant heat rates), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fuels plant heat rates), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fuels plant heat rates); wood and wood-derived fuels consumption; biomass waste consumption; and biofuels feedstock.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Primary Failure	A failure not caused either directly or indirectly by another failure or fault.	*Reliability Engineering*
Primary flight control system (PFCS)	The most basic part of the flight controls operated by a pilot, including wheel (fixed wing), yoke (fixed wing), cyclic (rotary wing), pedals (fixed wing and rotary wing), throttle (fixed wing), and collective (rotary wing).	*Aeronautical Engineering*
Primary fuels	Fuels that can be used continuously. They can sustain the boiler sufficiently for the production of electricity.	*Energy*
Primary Function	A Term Used In Reliability Centered Maintenance. The Primary Functionality Required Of An Asset - The Reason The Asset Was Acquired. For Example It Is Likely That The Primary Function Of A Pump Is To Pump A Specified Liquid At A Specified Rate Against A Specified Head Of Pressure.	*Plant Engineering*
Primary metropolitan statistical area (PMSA)	A component area of a Consolidated metropolitan statistical area consisting of a large urbanized county or cluster of counties (cities and towns in New England) that demonstrate strong internal economic and social links in addition to close ties with the central core of the larger area. To qualify, an area must meet specified statistical criteria that demonstrate these links and have the support of local opinion.	*Energy*
Primary or Primitive Rocks	Consist of the various kinds of slate, quartz, serpentine, granite and gneiss; they are the lowest group of rocks, are irregularly crystallized, and contain a few animal relics. Prospecting- Hunting for mineral lodes or placers.	*Mining*
Primary outcome	The outcome of greatest importance. See also: Outcome	*Quality Engineering*
Primary recovery	The crude oil or natural gas recovered by any method that may be employed to produce them where the fluid enters the well bore by the action of natural reservoir pressure (energy or gravity).	*Energy*
Primary recovery	Recovery of oil or gas from a reservoir purely by using the natural pressure in the reservoir to force the oil or gas out.	*Petroleum Drilling*
Primary roof	The main roof above the immediate top. Its thickness may vary from a few to several thousand feet.	*Mining*
Primary Standard (NBS)	The standard reference units and physical constants maintained by the National Bureau of Standards upon which all measurement units in the United States are based.	*Electrical*
Primary standard material	"Substance of known chemical composition and sufficient purity to be used in preparing a primary standard solution" [IFCC]. "Solution used as calibration standard in which the concentration is determined solely by dissolving a weighed amount of primary standard material in an appropriate solvent, and making a stated volume or weight" [IFCC].	*Quality*
Primary Standards	Aqueous pH buffer solutions established by the National Bureau of Standards within the 2.5 to 11.5 pH range of ionic strength less than 0.1 and which provide stable liquid junction potential and uniformity of electrode sensitivity.	*General*
Primary study	'Original research' in which data are collected. The term primary study is sometimes used to distinguish it from a secondary study (re-analysis of previously collected data), meta-analysis, and other ways of combining studies (such as economic analysis and decision analysis). Also called: Original study	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Primary transportation	Conveyance of large shipments of petroleum raw materials and refined products usually by pipeline, barge, or ocean-going vessel. All crude oil transportation is primary, including the small amounts moved by truck. All refined product transportation by pipeline, barge, or ocean-going vessel is primary transportation.	*Energy*
Primary units	A standard set of four units to which all units can be resolved; primary units are Mass(M), Length(L), Time(theta), and Temperature(T); for example, standard units for velocity might be kt (nmi/hr), ft/s, m/s, mph, but primary are always Length/Theta; sometimes written with negative subscripts.	*Aeronautical Engineering*
Prime Cost	Direct materials cost plus direct labor cost.	*Procurement*
Prime Mover	A device such as an engine or water wheel that drives an electric generator.	*Energy*
Prime radius of curvature	Radius of the earth in the east/west direction at a given position; Synonyms: earth radius east/west; Symbols: rho sub P; Typical Units: ft; Dimensions: Length.	*Aeronautical Engineering*
Prime supplier	A firm that produces, imports, or transports selected petroleum products across State boundaries and local marketing areas, and sells the product to local distributors, local retailers, or end users.	*Energy*
Primer (booster)	A package or cartridge of explosive which is designed specifically to transmit detonation to other explosives and which does not contain a detonator.	*Mining*
Primitive	Crystal structure having atoms located at unit cell corners only.	*Material Process*
Principal Axes	The axes of maximum and minimum normal stress.	*General*
Principal Quantum Number (n)	Describes the major shell in which the electron is located	*Physics*
Principle Reference Planes	These are a pitch plane, axial plane, and transverse plane, all intersecting at a point and mutually perpendicular.	*Gears*
Print Contrast	Ratio of the difference of reflected light between the bars and spaces of a bar code. Print Contrast equals Space Reflectance minus Bar Reflectance divided by Space Reflectance.	*Gears*
Printed Circuit Board	A printed circuit board, or PC board, or PCB, is a non-conductive material with conductive lines printed or etched. Electronic components are mounted on the board and the traces connect the components together to form a working circuit or assembly.	*Electrical Engineering*
Printers	In order to create a barcode for an item, it must be produced by a printer. All printers have a media width, amount of speed and duty cycle. Below are the two main types of printers.	*Gears*
Prior Approval	Approval to commit may be delegated to an operating department by buyer or supervisor with the assurance that the appropriate paper work will follow.	*Procurement*
Priority	The relative importance of a job. A safety problem has a higher priority than an energy improvement job.	*Maintenance*
Priority Flow Divider Valve	A valve which directs oil to one circuit at a fixed rate and dumps excess flow into another circuit.	*Mechanical, Process, and Operations*
Private fueling facility	A fueling facility which normally services only fleets and is not open to the general public.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Private Mobile Radio	Radio bands generally for use within a defined user group, such as the emergency services or by the employees of a mining project.	*Electrical Engineering*
Private placement	Sale of shares to individuals or corporations outside the normal market, at a negotiated price. Often used to raise capital for a junior exploration company.	*Mining*
Privately owned electric utility	A class of ownership found in the electric power industry where the utility is regulated and authorized to achieve an allowed rate of return.	*Energy*
Pro Forma Invoice	A document prepared in advance of a sale to provide evidence of the final form and amount of invoice.	*Procurement*
Pro rata	In proportion, usually to ownership, income or contribution.	*Mining*
Proactive	Action before a stimulus (opposite of reactive). A proactive maintenance department acts before a breakdown.	*Maintenance*
Proactive environmental practices	The efforts of plant management to adopt, at its own fiscal and chronological pace, leading-edge environmental practices that reduce pollutants, emissions, etc., prior to regulatory actions that necessitate these actions.	*Quality*
Proactive Maintenance	The combination of operator-performed maintenance, preventive maintenance, and predictive maintenance activities whereby maintenance is conducted to prevent, eliminate, delay or reduce maintenance before failure [McKenna, T. and Oliverson, R., "Glossary Of Maintenance And Reliability Terms", Gulf Publishing Company, ISBN 0-88415-360-6 (1997)]. The application of analytical methods, tools, and techniques to eliminate failures, extend component life, mitigate consequences, minimize downtimes, and optimize all resources. It consists of systematic identification and elimination of potential problems in all aspects of reliability, availability and maintainability [Hansen, R.C., "Overall Equipment Effectiveness - A Powerful Production/Maintenance Tool For Increased Profits", Industrial Press, ISBN 0-8311-3138-1 (2001)].	*Maintenance*
Proactive Maintenance	A maintenance strategy for stabilizing the reliability of machines or equipment. Its central theme involves directing corrective actions aimed at failure root causes, not active failure symptoms, faults, or machine wear conditions. A typical proactive maintenance regiment involves three steps: (1) setting a quantifiable target or standard relating to a root cause of concern (e.g., a target fluid cleanliness level for a lubricant), (2) implementing a maintenance program to control the root cause property to within the target level (e.g., routine exclusion or removal of contaminants), and (3) routine monitoring of the root cause property using a measurement technique (e.g., particle counting) to verify the current level is within the target.	*Lubrication*
Proactive Reliability Maintenance TM (PRM)	A strategy that addresses failures and implements the processes necessary to prevent recurrence. At the process foundation is a systematic method to benchmark asset productivity and implement corrective actions that reduce total life cycle costs. In short, PRM enables an organization to take complete control over what is happening on the plant floor. The Proactive Reliability process is based on four key steps: (1) Predictive Maintenance, (2) Diagnostics and Root Cause Analysis, (3) Key Performance Indicators, and (4) Operational Review. In industry, PRM is partly compared to design-out maintenance. For example, reactive maintenance only takes action when a pump breaks down, and in a preventive maintenance setting, the pump is cleaned, re-lubricated, etc.,	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	at regular intervals (x operating hours). In a predictive maintenance setting, the pump may be monitored on-line. When vibration levels increase, maintenance actions are initiated. Applying design-out maintenance means the pump is "redesigned" with a different type of lubricant or bearing.	
Probabalistic Risk Assessment	A "Top-Down" Approach Used To Apportion Risk To Individual Areas Of Plant And Equipment, And Possibly To Individual Assets So As To Achieve An Overall Target Level Of Risk For A Plant, Site Or Organization. These Levels Of Risk Are Then Used In Risk-Based Techniques, Such As Reliability Centered Maintenance And Hazop, To Assist In The Development Of Appropriate Equipment Maintenance Strategies, And To Identify Required Equipment Modifications.	*Management*
Probabalistic Safety Assessment	Similar To Probabalistic Risk Assessment, Except Focused Solely On Safety Related Risks.	*Management*
Probabilistic Risk Assessment (PRA)	A "top-down" approach used to apportion risk to individual areas of plant and equipment, and possibly to individual assets to achieve an overall target level of risk for a plant, site, or organization. These levels of risk are then used in risk-based techniques, such as reliability-centered maintenance, risk-based maintenance, and Hazop, to assist the development of appropriate equipment maintenance strategies, and to identify required equipment modifications.	*Reliability Engineering*
Probabilistic vibration	(As compared to **Deterministic vibration**), one whose magnitude at any future time can only be predicted on a statistical basis.	*Reliability Engineering*
Probability	The chance or risk of something happening.	*Quality Engineering*
Probability density function (pdf)	A mathematical model that describes the probability of events occurring over time. This function is integrated to obtain the probability that the event time takes a value in a given time interval. In life data analysis, the event in question is a failure, and the pdf is the basis for other important reliability functions, including the reliability function, the failure rate function and the mean life.	*Reliability Engineering*
Probability distribution	The function that gives the probabilities that a variable equals each of a sequence of possible values. Examples include the binomial distribution, normal distribution and Poisson distribution. See also: Distribution	*Quality Engineering*
Probability for error detection, Ped	A performance characteristic of a QC procedure that describes how often an analytical run will be rejected when results contain errors in addition to the inherent imprecision of the measurement procedure. Ideally, Ped should be 1.00 for errors that are medically significant. In practice, we generally aim for a Ped of 0.90 when selecting and designing QC procedures.	*Quality*
Probability for false rejection, Pfr	A performance characteristic of a QC procedure that describes how often an analytical run will be rejected when there are no errors occurring, except for the inherent imprecision of the measurement procedure. Ideally, Pfr should be 0.00. In practice, we generally aim for a Pfr of 0.05 or less.	*Quality*
Probability plot	A type of plot that linearizes a distribution's cdf, allowing the user to manually plot failure time vs. estimated unreliability. Provided that the plotted points fall on a relatively straight line (thus indicating that the chosen distribution is a good fit), the parameter estimates can be obtained from scales on the plot. This is a crude, time-consuming method of fitting a distribution to failure data, but it was practically the only method available prior to the widespread use of computers.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Probability plotting paper	A specially designed type of graph paper that allows the user to plot failure time vs. unreliability as a linear function. Plotting paper constructions varies from distribution to distribution. Probability plotting papers that have been generated by ReliaSoft's software are available on the Web athttp://www.weibull.com/GPaper/index.htm.	*Reliability Engineering*
Probability, p	The likelihood an event will occur, usually stated as a decimal fraction between 0 and 1, 0 meaning that the event will never occur and 1 meaning that the event will always occur. For example, p = 0.05 means there is a 5% chance that an event will occur. Commonly used in quality control to describe the chance that a run will be rejected.	*Quality*
Probable (indicated) reserves, coal	Reserves or resources for which tonnage and grade are computed partly from specific measurements, samples, or production data and partly from projection for a reasonable distance on the basis of geological evidence. The sites available are too widely or otherwise in appropriately spaced to permit the mineral bodies to be outlined completely or the grade established throughout.	*Energy*
Probable energy reserves	Estimated quantities of energy sources that, on the basis of geologic evidence that supports projections from **proved reserves**, can reasonably be expected to exist and be recoverable under existing economic and operating conditions. Site information is insufficient to establish with confidence the location, quality, and grades of the energy source. Note: This term is equivalent to "Indicated Reserves" as defined in the resource/reserve classification contained in the U.S. Geological Survey Circular 831, 1980. Measured and indicated reserves, when combined, constitute **demonstrated reserves**.	*Energy*
Probable Reserves	Those reserves which are not yet proven but which are estimated to have a better than 50% chance of being technically and economically producible.	*Petroleum Drilling*
Probable reserves	Valuable mineralization not sampled enough to accurately estimate the terms of tonnage and grade. Also called "indicated reserves."	*Mining*
Probable reserves	Those reserves which are not yet proven but which are estimated to have a better than 50% chance of being technically and economically producible.	*Petroleum Drilling*
Probe	A generic term that is used to describe many types of temperature sensor.	*Electrical*
Probe	A generic term that is used to describe many types of temperature sensors.	*Electronic Process*
Problem-solving methodologies	A variety of approaches to problem solving, including the Deming Circle (Plan-Do-Check-Act), used by all persons working in the same team or organization. Considered fundamental to teamwork.	*Quality*
Procaryotes	a cellular organism in which the nucleus has no limiting membrane.	*Chemical*
Procedure Qualification Record	(PQR) A document detailing the testing program undergone to validate the Welding Procedure Specification (WPS). The PQR contains records of the performance of all factors called out in the 'WPS' including the test results of all, volumetric, mechanical, and surface tests made test welds performed to prove that production welds carried out in conformance with the 'WPS' meet the specified requirements. Example specification:- ASME SEC. IX QW-200.2.	*Petroleum Engineering*
Process	The collective functions performed in and by the equipment in which the variable(s) is (are) to be controlled.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Process	The assembly of series of operation.	*Material Process*
Process analysis	Process analysis is the scientific methods to the recognition and definition of process systems and the development of methods for their solution.	*Material Process*
Process Analytical Technology (PAT)	as defined by the United States Food and Drug Administration, PAT is a mechanism to design, analyze, and control pharmaceutical manufacturing processes through the measurement of critical process parameters, which affect critical quality attributes. The concept actually gains a clearer understanding of processes by defining and monitoring their critical process parameters, in order to improve productivity by enhancing consistency and minimizing rejects.	*Electrical*
Process automation	The term process automation is used to refer to an automation system, the principal purpose of which is to automate or support the operator of a manufacturing process. Such a process can be the manufacturing or treatment of any goods made in a continuous or quasi-continuous manner such as fuel, paper, cement, steel, chemicals, food.	*Electrical*
Process capability	An industrial term used to describe how the inherent variability of a production process under stable operation compared to the allowable variation. SEcrit is an index of process capability for an analytical testing process.	*Quality*
Process Control	A General term that refers to the control of any process (i.e. a chemical process).	*Maintenance*
Process control monitoring systems	Process control monitoring systems responds to conditions in which one or more process variables are outside the normal operating range, but there is no safety reason to discontinue operation	*Material Process*
Process control operating system	Process control operating system is used in specified operation of the plant in its normal operating range.	*Material Process*
Process control safety system	Process control safety system monitors a process safety variable and take actions if the variable goes outside the admissible error range.	*Material Process*
Process cooling and refrigeration	The direct process end use in which energy is used to lower the temperature of substances involved in the manufacturing process. Examples include freezing processed meats for later sale in the food industry and lowering the temperature of chemical feedstocks below ambient temperature for use in reactions in the chemical industries. Not included are uses such as air-conditioning for personal comfort and cafeteria refrigeration.	*Energy*
Process Failure Mode and Effects Analysis (PFMEA)	A methodology for assessing the weaknesses of production processes and the potential effects of process failures on the product being produced.	*Electrical Engineering*
Process flow diagram (PFD)	Block flow diagram or simplified process flow diagram.	*Material Process*
Process fuel	All energy consumed in the acquisition, processing, and transportation of energy. Quantifiable process fuel includes three categories natural gas lease and plant operations, natural gas pipeline operations, and oil refinery operations.	*Energy*
Process heating or cooling demand-side management (DSM) program	A DSM program designed to promote increased electric energy efficiency applications in industrial process heating or cooling.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Process heating or cooling waste heat recovery	An energy conservation system whereby some space heating or water heating is done by actively capturing byproduct heat that would otherwise be ejected into the environment. In nonresidential buildings, sources of waste heat include refrigeration/air-conditioner compressors, manufacturing or other processes, data processing centers, lighting fixtures, ventilation exhaust air, and the occupants themselves. Not to be considered is the passive use of radiant heat from lighting, workers, motors, ovens, etc., when there are no special systems for collecting and redistributing heat.	*Energy*
Process historian	A process historian is a mechanism for storing data relating to a particular process. The data stored by modern historians typically include time-stamped information from a variety of traceable sources. The data are used for modeling, optimization and auditing purposes.	*Electrical*
Process Industry	an industry in which raw materials are treated and converted into products by means of a series of stages (or processes). Process industries include oil and gas refining, pharmaceutical and chemical production, water and sewerage treatment etc.	*Electrical*
Process information, and/or actuate	process information, and/or actuate.	*Mechanical, Process, and Operations*
Process Manufacturing	The manufacturer of products such as chemicals, gasoline, beverages and food products that typically are produced in "batch" quantities rather than discrete units. Many process operations require inputs such as heat, pressure, and time (for thermal or chemical conversion).	*Maintenance*
Process Meter	A panel meter with sizeable zero and span adjustment capabilities, which can be scaled for readout in engineering units for signals such as 4–20 mA, 10–50 mA and 1–5 V.	*Electrical*
Process model	Process model is a symbolic represent of the process with its inputs-process-outputs states.	*Material Process*
Process modeling	Process modeling is an inductive process for tasks such as design, control and optimization or in explaining the behavior of the process.	*Material Process*
Process Oil	An oil that serves as a temporary or permanent component of a manufactured products. Aromatic process oils have good solvency characteristics; their applications include proprietary chemical formulations, ink oils, and extenders in synthetic rubbers. Naphthenic process oils are characterized by low pour points and good solvency properties. Paraffinic process oils are characterized by low aromatic content and light color.	*Lubrication*
Process operation and hazards	Process operation and hazards	*Material Process*
Process operation and hazards	a procedure for the systematic, critical, examination of the operability of a	*Material Process*
Process parameter	A property of the process and its environment, that can be assigned arbitrary numerical values.	*Material Process*
Process simulation	The study of a process or its part by mathematical model or its physical model.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Process stability	Used here to characterize the performance of the measurement procedure in terms of the frequency of analytic runs having medically important errors (f) that invalidate the medical usefulness.	*Quality*
Process system	The assemblage of elements which are tied together by common flows of materials and/or information.	*Material Process*
Process Variable	An aspect of the processed product which changes during processing, e.g. temperature. Some variables can be measured, but in some processes some variables can only be judged by dead reckoning.	*Control Engineering*
Process	process.	*Material Process*
Processed gas	Natural gas that has gone through a processing plant.	*Energy*
Processing	Uranium-recovery operations whether at a mill, an in situ leach, byproduct plant, or other type of recovery operation.	*Energy*
Processing	Treatment of a material into a form convenient for engineering applications.	*Material Process*
Processing gain	The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.	*Energy*
Processing loss	The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.	*Energy*
Processing of uranium	The recovery of uranium produced by nonconventional mining methods, i.e., in situ leach mining, as a byproduct of copper or phosphate mining, or heap leaching.	*Energy*
Processing plant	A surface installation designed to separate and recover natural gas liquids from a stream of produced natural gas through the processes of condensation, absorption, adsorption, refrigeration, or other methods and to control the quality of natural gas marketed and/or returned to oil or gas reservoirs for pressure maintenance, repressuring, or cycling.	*Energy*
ProCite	A software package designed to manage bibliographic references.	*Quality Engineering*
Procurement	Procurement includes such duties as specification development, value analysis, supplier market research, negotiation, buying activities, contract administration, and perhaps inventory control, traffic, receiving, and stores.	*Procurement*
Procurement Card (Or Purchasing Card)	A payment method whereby requisitioners are empowered to deal directly with suppliers for low-dollar, high-frequency, typically MRO-type purchases, by using a card issued by a bank or major credit card provider. The cards reduce paperwork and enable purchasing and accounts payable personnel to focus on more value-added activities.	*Procurement*
Procurement Cycle Time	Total elapsed time from the initiation of a parts requisition until receipt of the part on-site.	*Reliability Engineering*
Procuring Agency	Any Federal agency, or any state agency or agency of a political subdivision of a state, that is using appropriated Federal funds for procurement.	*Environmental Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Produced by the original vehicle manufacturer	produced by the original vehicle manufacturer.	*Mechanical Engineering*
Produced water	After the drilling and fracturing of the well are completed, water is produced along with the natural gas. Some of this water is returned fracturing fluid and some is natural formation water. These produced waters move back through the wellhead with the gas.	*Petroleum Drilling*
Produced Water	Water that comes up a well with the oil and gas. Produced water is usually high in salinity. It is often the force that drives the oil and gas to the surface. After leaving the well, the produced water is separated from the oil and gas. Also referred to as overboard water, formation water, saltwater and oilfield brine.	*Petroleum Drilling*
Producer	A company engaged in the production and sale of natural gas from gas or oil wells with delivery generally at a point at or near the wellhead, the field, or the tailgate of a gas processing plant. For the purpose of company classification, a company primarily engaged in the exploration for, development of, and/or production of oil and/or natural gas.	*Energy*
Producer and distributor coal stocks	Producer and distributor coal stocks consist of coal held in stock by producers/distributors at the end of a reporting period.	*Energy*
Producer contracted reserves	The volume of recoverable salable gas reserves committed to or controlled by the reporting pipeline company as the buyer in gas purchase contracts with the independent producer as seller, including warranty contracts, and which are used for acts and services for which the company has received certificate authorization from the Federal Energy Regulatory Commission.	*Energy*
Producer cost of service allowance	An allowance against royalties to cover the costs of gathering and processing natural gas for sale, and the costs of conserving conservation gas.	*Petroleum Engineering*
Producer	A farmer, rancher or orchardist. The term usually is preceded by an adjective that describes the nature of the operation, such as potato producer.	*Agriculture*
Producing property	A term often used in reference to a property, well, or mine that produces wasting natural resources. The term means a property that produces in paying quantities (that is, one for which proceeds from production exceed operating expenses).	*Energy*
Product Analysis	The chemical analysis of a material done on a finished component to show compliance with the material specifications. Usually has tolerances defined for each element to allow for differences in the completed product compared to the molten metal.	*General Mechanical*
Product Costs	All costs that are involved in the purchase or manufacture of goods. In the case of manufactured goods, these costs consist of direct materials, direct labor, and manufacturing overhead. Also see Inventoriable costs.	*Procurement*
Product Data Management (PDM)	Software-based systems that link, manage, and organize product-related data from various sources-both internally and externally (from suppliers)-across various computer platforms, divisions, departments, and geographic locations. PDM incorporates CAD files, manufacturing data, and documents to reduce engineering design times; ensures timely access to consistent up-to-date product information; and improves information flow, cross-functional communications, and support services.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Product Footprint	The surface of the product that comes in contact with the belt, rollers, or wheels of the conveyor.	*Manufacturing*
Product Stop	A mechanical barrier to interrupt the flow of product on an active conveyor, that is, without shutting down the conveyor. Typically, a product stop is pneumatically actuated. Also known as Case Stop.	*Equipment*
Product supplied	Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows field production, plus refinery production, plus imports, plus unaccounted-for crude oil (plus net receipts when calculated on a PAD District basis) minus stock change, minus crude oil losses, minus refinery inputs, and minus exports.	*Energy*
Product-development cycle	Sometimes called "time to market," this is the period of time from the start of design/development work to commercial product availability.	*Quality*
Production	The act or process of generating electric energy.	*Energy*
Production capacity	The amount of product that can be produced from processing facilities.	*Energy*
Production Costing	A method used to determine the most economical way to operate a given system of power resources under given load conditions.	*Energy*
Production costs	Costs incurred to operate and maintain wells and related equipment and facilities, including depreciation and applicable operating costs of support equipment and facilities and other costs of operating and maintaining those wells and related equipment and facilities. They become part of the cost of oil and gas produced. The following are examples of production costs (sometimes called lifting costs): costs of labor to operate the wells and related equipment and facilities; repair and maintenance costs; the costs of materials, supplies, and fuels consumed and services utilized in operating the wells and related equipment and facilities; the costs of property taxes and insurance applicable to proved properties and wells and related equipment and facilities; the costs of severance taxes. Depreciation, depletion, and amortization (DDA) of capitalized acquisition, exploration, and development costs are not production costs, but also become part of the cost of oil and gas produced along with production (lifting) costs identified above. Production costs include the following subcategories of costs: well workers and maintenance; operating fluid injections and improved recovery programs; operating gas processing plants; ad valorem taxes; production or severance taxes; other, including overhead.	*Energy*
Production expenses	Costs incurred in the production of electric power that conform to the accounting requirements of the Operation and Maintenance Expense Accounts of the FERC Uniform System of Accounts.	*Energy*
Production Part Approval Process	Used by automotive industry for acceptance of new products for release and use on automobiles.	*Electrical Engineering*
Production payments	A contractual arrangement providing a mineral interest that gives the owner a right to receive a fraction of production, or of proceeds from the sale of production, until a specified quantity of minerals (or a definite sum of money, including interest) has been received.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Production plant liquids	The volume of liquids removed from natural gas in natural gas processing plants or cycling plants during the year.	*Energy*
Production Shutdown Mode	A term that describes the mode in which a production process shuts down after a malfunction. Delayed shutdown: the production shuts down or produces off specification, completely or partially, after a specific time (Production Shutdown Delayed Time, PSDT). Immediate shutdown: the production shuts down or produces off specification, completely or partially, immediately after the failure occurs.	*Maintenance*
Production, crude oil	The volumes of crude oil that are extracted from oil reservoirs. These volumes are determined through measurement of the volumes delivered from lease storage tanks or at the point of custody transfer, with adjustment for (1) net differences between opening and closing lease inventories and (2) basic sediment and water. Crude oil used on the lease is considered production.	*Energy*
Production, lease condensate	The volume of lease condensate produced. Lease condensate volumes include only those volumes recovered from lease or field separation facilities.	*Energy*
Production, natural gas	The volume of natural gas withdrawn from reservoirs less (1) the volume returned to such reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; less (2) shrinkage resulting from the removal of lease condensate; and less (3) nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable. Volumes of gas withdrawn from gas storage reservoirs and native gas, which has been transferred to the storage category, are not considered production. Flared and vented gas is also considered production. (This differs from "Marketed Production" which excludes flared and vented gas.)	*Energy*
Production, natural gas liquids	Production of natural gas liquids is classified as follows:	*Energy*
Production, natural gas, dry	The volume of natural gas withdrawn from reservoirs during the report year less:	*Energy*
Production, natural gas, wet after lease separation	The volume of natural gas withdrawn from reservoirs less (1) the volume returned to such reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; less (2) shrinkage resulting from the removal of lease condensate; and less (3) nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable. Note: Volumes of gas withdrawn from gas storage reservoirs and native gas that has been transferred to the storage category are not considered part of production. This production concept is not the same as marketed production, which excludes vented and flared gas.	*Energy*
Production, oil and gas	The lifting of oil and gas to the surface and gathering, treating, field processing (as in the case of processing gas to extract liquid hydrocarbons), and field storage. The production function shall normally be regarded as terminating at the outlet valve on the lease or field production storage tank. If unusual physical or operational circumstances exist, it may be more appropriate to regard the production function as terminating at the first point at which oil, gas, or gas liquids are delivered to a main pipeline, a common carrier, a refinery, or a marine terminal.	*Energy*
Production, wet after lease separation	See production, natural gas, wet after lease separation.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Productive capacity	The maximum amount of coal that a mining operation can produce or process during a period with the existing mining equipment and/or preparation plant in place, assuming that the labor and materials sufficient to utilize the plant and equipment are available, and that the market exists for the maximum production.	*Energy*
Productive Time	A period of time when the equipment is performing its intended function. This includes regular production (including loading and unloading of product), rework, work for third parties, and engineering runs done in conjunction with production.	*Maintenance*
Productivity	The primary definition here is annual dollar value of shipments per employee.	*Maintenance*
Productivity	The ratio of measured outputs over measured inputs.	*Reliability Engineering*
Productivity change	The plant-wide change in annual value-added per employee, based on total employment in the plant, not just direct labor. Value-added should be calculated by subtracting cost of purchased materials, components, and services from value of shipments. The Best Plants entry form also includes a secondary calculation, which many manufacturers prefer to use: "increase in sales per employee."	*Quality*
Proeutectic	Phase that forms by precipitation in a temperature range above the eutectic temperature.	*Material Process*
Proeutectoid	Phase that forms by solid state precipitation in a temperature	*Material Process*
Professional Services	Infrequent, technical, and/or unique functions performed by independent contractors whose occupation is the rendering of such services. While not limited to licentiates, the services are considered "professional," and the contract may run to partnerships, firms, or corporations as well as individuals.	*Procurement*
Profibus	The German fieldbus, not to be confused with the common European fieldbus Profibus PA.	*Control Engineering*
Profibus PA	This is the name agreed on a common European Fieldbus for process automation, still disputed by mainly American companies. Its main pusher in the industry is Siemens.	*Control Engineering*
Proficiency sample	"A specimen containing analytes of unknown concentration or identification that is sent to laboratories participating in testing programs in order to independently verify the laboratory technical competency." [CLSI]	*Quality*
Proficiency testing criteria for acceptable performance, PT criteria	Defined limits about a target value (TV) that are used to classify analytical performance as acceptable or not. CLIA defines PT criteria for about 80 regulated analytes, using a format of TV ± a stated %, TV ± a fixed concentration, or TV ± 3 SD, where the SD is usually a group standard deviation from a PT survey. These PT criteria should be interpreted as total error criteria because only single measurements can be made on PT specimens and the test result is subject to both random and systematic errors.	*Quality*
Proficiency testing, PT	"A program in which multiple specimens are periodically sent to members of a group of laboratories for analysis and/or identification; in which each laboratory's results are compared with those of other laboratories in the group and/or with an assigned value, and reported to the participating laboratory and others." [CLSI]	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Profit	The income remaining after all business expenses are paid.	*Energy*
Profit and loss statement	The income statement of a company detailing revenues minus total costs to give total profit.	*Mining*
Prognosis	The possible outcomes of a disease or condition and the likelihood that each one will occur.	*Analysis*
Prognostic factor	Demographic, disease-specific, or co-morbid characteristics associated strongly enough with a condition's outcomes to predict accurately the eventual development of those outcomes. Compare with risk factors. Neither prognostic or risk factors necessarily imply a cause and effect relationship.	*Analysis*
Prognostics Preventive Maintenance Clock	The parameter that initiates the Preventive Maintenance (PM) task list for scheduling (usually buildings and assets in regular use). Assets that are used irregularly may use other production measures such as pieces, machine hours, or cycles. The ability to predict or forecast the future condition of a component, or system of components in terms of failures or degraded condition to satisfactorily conform to operational requirements.	*Reliability Engineering*
Program	A list of instructions that a computer follows to perform a task.	*Electrical*
Program cost	Utility costs that reflect the total cash expenditures for the year, reported in nominal dollars, that flowed out to support DSM (demand-side management) programs. They are reported in the year they are incurred, regardless of when the actual effects occur.	*Energy*
Program Life	The length of time that the utility will be actively involved in promoting a demand-side management program (i.e. financing the marketing activities and the incentives of the program.)	*Energy*
Program Maturity	The time it takes for the full benefits of a demand-side management measure or program to be realized.	*Energy*
Programmable Logic Controller (PLC)	A device that is pre-programmed to accept relay ladder logic instructions and perform these instructions to control the equipment operation.	*Equipment*
Programmable logic controller (PLC, or programmable controller)	These are electronic devices used to control equipment, especially in automation. They are small, programmable units that can receive information from output devices, such as sensors in a control system, and transmit signals to input devices, such as actuators, that can effect changes in the control system.	*Electrical*
Programmable Logic Controller (PLC, or Programmable Controller)	is a ruggedized, microprocessor-based system which provides factory or plant automation by monitoring sensors and controlling actuators in real time.	*Electrical Engineering*
Progressive dipping	the act of dipping steel more than once in cleaning solutions and molten zinc metal in order to produce a coating that covers the entire surface of the steel; commonly done when the steel article/fabrication is too large to fit entirely into the kettle in one dip	*Materials Process*
Project Evaluation & Review Technique (PERT) Chart	Scheduling Tool Which Shows In Flow Chart Format The Interdependencies Between Project Activities.	*Management*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Project Financing	This is the most commonly used method to finance the construction of independent power facilities. Typically, the developer pledges the value of the plant and part or all of its expected revenues as collateral to secure financing from private lenders.	*Energy*
Project hazard analysis	Project process hazard analysis is one part of comprehensive project safety program that will include pilot-plant safety reviews, preliminary hazard analysis, pre-process hazard analysis, implementation of management of change, confirmation of the as built status for piping and equipment, procurement and construction quality assurance, pre-startup safety reviews and possibly a follow-up process hazard analysis before plant startup.	*Material Process*
Proleg	Any process or appendage that serves the purpose of a leg; specifically, the fleshy, unjointed, ventral abdominal projections of caterpillars and certain sawfly larvae.[1] Fin.Swe.	*Forestry*
Prom	A magical experience for many high school aged adolescents providing an opportunity to explore the very nature of the universe and all things good as well as an occasion which brings about much angst to parents of said teens. Reluctantly also a time when young men wear garish suits and young women appear ultra provocative (See Gypsy Wedding).	*Breakroom*
PROM (Programmable Read-Only Memory)	A device with information placed into it during manufacture that cannot be altered by the computer. It can, however, be reprogrammed using special equipment.	*Electrical Engineering*
Proof Load	The proof load of a nut is the axially applied load the nut must withstand without thread stripping or rupture. The proof load of a bolt, screw or stud is the specified load the product must withstand without permanent set.	*Maintenance*
Proof of screen	A process aimed at showing that a screen is effective in identifying existing defects in a product. The screen must not damage good products.	*Reliability Engineering*
Proof pressure	A hydrostatic test pressure, usually 1 ½ times the rated working pressure, applied to an assembled valve to verify the structural integrity of the pressure containing parts. Synonymous with hydrostatic shell test. (Table 5.1, API-6D).	*Mechanical*
Proof Pressure	The specified pressure which may be applied to the sensing element of a transducer without causing a permanent change in the output characteristics.	*General*
Proof Pressure	see Overpressure.	*Electrical Engineering*
Prop	A stick, rod, pole, beam, or other rigid support.	*Civil Engineering*
Prop drawer	a tool designed for withdrawing roof supports from a safe distance. Over the years there have several different types in use, e.g. the 'puncher' or 'pout', the 'ringer and chain' and the most universally used being the 'Sylvester', which was also known as the 'gab lock'; or the man employed to draw out timber for re-use; or to allow the roof of the waste to cave in. Also called a 'prop maul', (N. East).	*Mining*
Prop key	a key or prop spanner used for pumping up and lowering hydraulic props.	*Mining*
Prop maul	see Prop drawer.	*Mining*
Prop	Coal mining term for any single post used as roof support. Props may be timber or steel; if steel--screwed, yieldable, or hydraulic.	*Mining*

Term	Definition	Industry
Propane (C3 H8)	Aliphatic hydrocarbon gas used as a fuel gas in thermal spray processes.	*Paint and Coatings*
Propane (C_3H_8)	A straight-chain saturated (paraffinic) hydrocarbon extracted from natural gas or refinery gas streams, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of -44 degrees Fahrenheit. It includes all products designated in ASTM Specification D1835 and Gas Processors Association specifications for commercial (HD-5) propane.	*Energy*
Propane air	A mixture of propane and air resulting in a gaseous fuel suitable for pipeline distribution.	*Energy*
Propane, consumer grade	A normally gaseous paraffinic compound (C_3H_8), which includes all products covered by Natural Gas Policy Act Specifications for commercial and HD-5 propane and ASTM Specification D 1835. Excludes: feedstock propanes, which are propanes not classified as consumer grade propanes, including the propane portion of any natural gas liquid mixes, i.e., butane-propane mix.	*Energy*
Propellant	An agent used to expel contents from an aerosol under pressure.	*Chemistry*
Property	Observable characteristic of a material.	*Material Process*
Property averaging	Determination of the overall property, such as elastic modulus, of a composite material as the geometrical average of the properties of the individual phases.	*Material Process*
Property Class	A designation system which defines the strength of a bolt or nut. For metric fasteners, property classes are designated by numbers where increasing numbers generally represent increasing tensile strengths. The designation symbol for bolts consists of two parts: 1. The first numeral of a two digit symbol or the first two numerals of a three digit symbol approximates 1/100 of the minimum tensile strength in MPa. 2. The last numeral approximates 1/10 of the ratio expressed as a percentage between minimum yield stress and minimum tensile stress. Hence a fastener with a property class of 8.8 has a minimum tensile strength of 800 MPa and a yield stress of 0.8x800=640 MPa. The designation system for metric nuts is a single or double digit symbol. The numerals approximate 1/100 of the minimum tensile strength in MPa. For example a nut of property class 8 has a minimum tensile strength of 800 MPa. A bolt or screw of a particular property class should be assembled with the equivalent or higher property class of nut to ensure that thread stripping does not occur.	*Maintenance*
Prop-free front	on a longwall machine operated face where the roof supports are concentrated on the gob side of the conveyor, there are no supports between the conveyor and the coalface, this area between coalface and the last row of roof supports is called the 'prop free front'. This system is necessary where armored-flexible-conveyors are used to carry a power-loader machine or shearer.	*Mining*
Proportional Band	The "P" of PID controllers. With proportional band, the controller output is proportional to the error or a change in process variable. Proportional Band = 100/Gain.	*Process Control*
Proportional Band	The change in the controller error signal required to produce a full range change in output due to proportional control action. It is the reciprocal of gain expressed as a percentage - PB(%) = 100/k.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Proportional Control	A mode of control using an algorithm which causes the output of a controller to change in a linear fashion as the error signal (process variable—setpoint difference) changes. See also "Control Action, Proportional."	*Electrical Engineering*
Proportional Flow Divider Valve	A valve which directs oil to all its circuits at all times.	*Mechanical, Process, and Operations*
Proportional Gain	This is the "P" part of the PID controller. See gain. (of the controller). (Proportional gain)=100/(Proportional Band).	*Process Control*
Proportional hazards model	[In survival analysis:] A statistical model that asserts that the effect of the study factors (e.g. the intervention of interest) on the hazard rate (the risk of occurrence of an event, such as death, at a point in time) in the study population is multiplicative and does not change over time. Also called: Cox model	*Quality Engineering*
Proportional Integral Derivative	These are variable parameters used in a thermal chamber control system.	*Reliability Engineering*
Proportional Integrative Differential (PID) Control	Proportional Integrative Differential (PID) control is a straightforward, common automatic control method. The name refers to the manipulation of the signal used for feedback. For example, a temperature measurement signal is fed back to a heater. Simpler alternatives are P, PI or PD control.	*Maintenance*
Proportional interest in investee reserves	The proportional interest at the end of the year in the reserves of investees that are accounted for by the equity method.	*Energy*
Proportional Limit	The point on a stress-strain curve at which the straight line proportionality between stress and strain ceases.	*Engineering Physics*
Proportional Limit	The greatest stress which a material is capable of sustaining without deviation from proportionality of stress and strain (Hooke's law). It is expressed in force per unit area, usually pounds per square inch.	*Engineering Physics*
Proportionial flow	In a filter, the condition in which part of the flow passes through the filter element in proportion to pressure.	*Mechanical, Process, and Operations*
Proportioning Band	A temperature band expressed in degrees within which a temperature controller's time proportioning function is active.	*Electrical*
Proportioning Control Mode	A time proportioning controller where the amount of time that the relay is energized is dependent upon the system's temperature.	*Electrical*
Proportioning Control plus Derivative Function	A time proportioning controller with a derivative function. The derivative function senses the rate at which a system's temperature is either increasing or decreasing and adjusts the cycle time of the controller to minimize overshoot or undershoot.	*Electrical*
Proportioning Control plus Integral	A two-mode controller with time proportioning and integral (auto reset) action. The integral function automatically adjusts the temperature at which a system has stabilized back to the set point temperature, thereby eliminating droop in the system.	*Electrical*
Proportioning Control plus Integral	A two-mode controller with time proportioning and integral (auto reset) action. The integral function automatically adjusts the temperature at which a system has stabilized back to the setpoint temperature, thereby eliminating droop in the system.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Proportioning Control with Integral and Derivative Function	Three mode PID controller. A time proportioning controller with integral and derivative functions. The integral function automatically adjusts the system temperature to the set point temperature to eliminate droop due to the time proportioning function. The derivative function senses the rate of rise or fall of the system temperature and automatically adjusts the cycle time of the controller to minimize overshoot or undershoot.	*General*
Proposal	An offer made by one party to another as a basis for negotiations, prior to the creation of a contract.	*Procurement*
Proposed rates	New electric rate schedule proposed by an applicant to become effective at a future date.	*Energy*
Proposition	a statement expressing the topic of the debate (resolution)	*Management Discussion*
Proppant	Typically fine to medium grained quartz sand or a synthetic material. This is pumped into Eagle Ford Shale wells during the hydraulic fracturing or fracing process. Proppant stays in the formation to hold tiny cracks and channels open and allows oil and gas to flow out around the material. Frac sand is hauled to the Eagle Ford Shale from as far away as Minnesota, where it is mined from stratas of sand which have the ideal properties required for use in oil and gas wells, namely resistance to crushing at extreme pressure and a spherical shape. The two main types of frac sand used in the Eagle Ford Shale are Brady Brown (from the hill country of Texas) and Ottawa White, from states such as Minnesota.	*Petroleum Drilling*
Proppant/propping agent	A granular substance (sand grains, aluminum pellets, or other material) that is carried in suspension by the fracturing fluid and that serves to keep the cracks open when fracturing fluid is withdrawn after a fracture treatment.	*Petroleum Drilling*
Propping agent	An additive to the frack fluid, often sand or other granular substance, that props open micro-fractures of the shale, allowing gas to seep into the well bore.	*Petroleum Drilling*
Props	individual straight support members set between the roof and floor as a support. Also called 'Trees'.	*Mining*
Props and bars	pit props and steel bars used to support the roof on the face. –see also Arms.	*Mining*
Propylene (C3 H6)	Hydrocarbon gas used as a fuel gas in thermal spray processes. Higher flame temperature than hydrogen and propane.	*Paint and Coatings*
Propylene (C_3H_6)	An olefinic hydrocarbon recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Propylene is an important petrochemical feedstock.	*Energy*
Prorated Bills	The computation of a bill based upon proportionate distribution of the applicable billing schedule. A prorated bill is less than 25 days or more than 38 days.	*Energy*
Proration	The restriction of production by a state regulatory commission, usually on the basis of market demand. In Louisiana the proration of natural gas is allowed to prevent physical and economic waste and to protect correlative rights.	*Petroleum Drilling*
Prospect	A mining property, the value of which has not been proved by exploration.	*Mining*
Prospect	A mining property, the value of which has not been determined by exploration.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Prospecting	The search for an area of probable mineralization; the search normally includes topographical, geological, and geophysical studies of relatively large areas undertaken in an attempt to locate specific areas warranting detailed exploration. Prospecting usually occurs prior to the acquisition of mineral rights.	*Energy*
Prospecting costs	Direct and indirect costs incurred to identify areas of interest that may warrant detailed exploration. Such costs include those incurred for topographical, geological, and geophysical studies; rights of access to properties in order to conduct such studies, salaries, equipment, instruments, and supplies for geologists, including geophysical crews, and others conducting such studies; and overhead that can be identified with those activities.	*Energy*
Prospective study	Study design where one or more groups (cohorts) of individuals who have not yet had the outcome event in question are monitored for the number of such events which occur over time.	*Analysis*
Prospectus	A document filed with the appropriate securities commission detailing the activities and financial condition of a company seeking funds from the public through the issuance of shares.	*Mining*
Prosthesis	Device for replacing a missing body part.	*Material Process*
Protecting of corrosion Protecting the	Protecting of corrosion Protecting the	*Material Process*
Protection Head	An enclosure usually made out of metal at the end of a heater or probe where connections are made.	*Electrical*
Protection Tube	A metal or ceramic tube, closed at one end into which a temperature sensor is inserted. The tube protects the sensor from the medium into which it is inserted.	*General*
Protective coating	A barrier between a metal and its corrosive environment. Protective coating are probably the most widely used and, at the same time, the most controversial material employed for minimizing corrosion of steel and certain other materials.	*Material Process*
Protective Device	Devices And Assets Intended To Eliminate Or Reduce The Consequences Of Equipment Failure. Some Examples Include Standby Plant And Equipment, Emergency Systems, Safety Valves, Alarms, Trip Devices, And Guards.	*Management*
Protective sleeves	A circular "pipe like" sleeve inserted in place of the ball and seats of a top entry ball valve. This protective sleeve remains in place inside the valve during valve installation and ultimate pigging of a pipeline to clear debris from the line before placing the pipeline into service. Once the pipeline has been purged of all debris, the protective sleeve is removed entirely from the ball valve cavity and operating trim (i.e. ball and seats) is then installed for normal service conditions.	*Mechanical*
Protein	A long chain or chains of amino acids linked by peptide bonds.	*Agriculture*
Protein	Complex nitrogenous compounds found in living organisms, and made up of amino acids. The molecular weight varies from 30,000 to over 15,000,000.	*Material Process*
Proto	a type of self contained breathing apparatus used in mines rescue.	*Mining*
Protocol	A set of rules to govern system-to-system use. For example, a protocol might specify communication method, transmission rate, data format or error check method.	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Protocol	A formal definition that describes how data is to be exchanged.	*Electronic Process*
Proton	Positively charged subatomic particle located in the atomic nucleus.	*Material Process*
Proton induced x-ray emission (PIXE)	Chemical analysis by the use of characteristic x-ray photons produced by exposure to high energy protons.	*Material Process*
Proton precession magnetometer	A geophysical instrument which measures magnetic field intensity in terms of vertical gradient and total field.	*Mining*
Protozoa	single-celled, eucaryotic microorganisms without cell walls. Most protozoa are free-living although many are parasitic. The majority of protozoa are aerobic or facultatively anaerobic heterotrophs.	*Chemical*
Protractor	An instrument used for measuring the size of an angle.	*Math*
Prove	to ascertain the position of a seam of coal when it has been thrown down or up by a fault, or the nature of the strata in a district by boring or sinking.	*Mining*
Proved (measured) reserves, coal	Reserves or resources for which tonnage is computed from dimensions revealed in outcrops, trenches, workings, and drill holes and for which the grade is computed from the results of detailed sampling. The sites for inspection, sampling, and measurement are spaced so closely and the geologic character is so well defined that size, shape, and mineral content are well established. The computed tonnage and grade are judged to be accurate within limits that are stated, and no such limit is judged to be different from the computed tonnage or grade by more than 20 percent.	*Energy*
Proved energy reserves	Estimated quantities of energy sources that analysis of geologic and engineering data demonstrates with reasonable certainty are recoverable under existing economic and operating conditions. The location, quantity, and grade of the energy source are usually considered to be well established in such reserves. Note: This term is equivalent to "Measured Reserves" as defined in the resource/reserve classification contained in the U.S. Geological Survey Circular 831, 1980. Measured and indicated reserves, when combined, constitute demonstrated reserves.	*Energy*
Proven Field	An oil and/or gas field whose physical extent and estimated reserves have been determined.	*Petroleum Drilling*
Proven field	An oil and/or gas field whose physical extent and estimated reserves have been determined.	*Petroleum Drilling*
Proven Reserve	The quantity of oil or gas that is proven to be technically and economically feasible to recover.	*Petroleum Engineering*
Proven Reserves	Those reserves which on the available evidence are virtually certain to be technically and economically producible, such as those having a better than 90% chance of being produced.	*Petroleum Drilling*
Proven reserves	Reserves that have been sampled extensively by closely spaced diamond drill holes and developed by underground workings in sufficient detail to render an accurate estimation of grade and tonnage. Also called "measured reserves."	*Mining*
Proven reserves	Those reserves which on the available evidence are virtually certain to be technically and economically producible (i.e. having a better than 90% chance of being produced).	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Provide improved recovery systems	Provide improved recovery systems.	*Energy*
Provider of Last Resort	A legal obligation (traditionally given to utilities) to provide service to a customer where competitors have decided they do not want that customer's business.	*Energy*
Provider performed microscopy, PPM	A special subset of moderately complex tests that may be performed by physicians, dentists, nurse practitioners and midwives, and physician assistants as part of a patient examination.	*Quality*
Proving road	a heading driven in advance to prove a coal seam or in search of old workings.	*Mining*
Proximate analysis	determines, on an as-received basis, the moisture content, volatile matter (gases released when coal is heated), fixed carbon (solid fuel left after the volatile matter is driven off), and ash (impurities consisting of silica, iron, alumina, and other incombustible matter). The moisture content affects the ease with which coal can be handled and burned. The amount of volatile matter and fixed carbon provides guidelines for determining the intensity of the heat produced. Ash increases the weight of coal, adds to the cost of handling, and can cause problems such as clinkering and slagging in boilers and furnaces.	*Energy*
Proximity sensor	Usually a displacement sensor for measuring the varying distance between a housing and a rotating shaft.	*Reliability Engineering*
Proximity Sensor	A sensor with the ability to detect the presence of a metal target, within a specified range, and without making physical contact.	*Electrical Engineering*
Proximity Switch	A switch actuated by the presence of an object near its operating head.	*Equipment*
Proxy	A power of attorney given by the shareholder so that his stock may be voted by his nominee(s) at shareholders' meetings.	*Mining*
Prussian blue	Any of several complex cyanogen compounds of ferric and ferrous iron, used as coloring agent in plastics.	*Material Process*
Prying	The amplification of an external force acting on a bolt by a lever action which can occur when that force is an eccentric tensile load.	*Maintenance*
PSA	See Probabalistic Safety Assessment	*Management*
PSD	Power Spectral Density. The power of random vibration intensity in mean-square acceleration per frequency unit, as g^2/Hz or m^2/s^3.	*Reliability Engineering*
Pseudoplastic Fluid	A pseudoplastic fluid is one whose apparent viscosity or consistency decreases instantaneously with increase in rate of shear i.e., an initial relatively high resistance to stirring decreases abruptly as the rate of stirring is increased.	*Engineering Physics*
psi	pounds per square inch (of pressure) rpm - revolutions per minute	*Mechanical, Process, and Operations*
PSI	Process Safety Information.	*Material Process*
psi (pounds per square inch)	a unit of pressure or pressure drop across a flow resistance. One psi is equivalent to the pressure exerted by 2.31 feet of water column.	*Chemical*
PSI (psi)	Pounds Per Square Inch - Force per unit area exerted against a resisting body.	*Mechanical*
PSI Pounds per square inch	the force per unit area exerted against a	*General Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PSIA	Pounds per square inch absolute. Pressure referenced to a vacuum.	*Electrical*
PSID	Pounds per square inch differential. Pressure difference between two points.	*Electronic Process*
PSIG	Pound per square inch gage. Pressure referenced to ambient air pressure.	*Electronic Process*
psig (pounds per square inch (gauge))	0 psig = 14.696 psia (psi absolute) = 1.0 atmosphere.	*Chemical*
PSIP	Periodic Smoke Inspection Program	*Petro-Chemical Abbreviations*
PSIS	Pounds per square inch standard. Pressure referenced to a standard atmosphere.	*Electrical*
PSL	'Product Specification Level.' As specified in API Spec 6A. A tiered progression of testing and inspection requirements for materials and equipment prescribing different levels of service.	*Petroleum Engineering*
PSL-1	'Product Specification Level 1'. The minimum level of testing and inspection required for material and equipment as described in API Spec 6A.	*Petroleum Engineering*
PSL-2	'Product Specification Level 2'. A level of testing and inspection for material and equipment alternate to (higher and more stringent) and in addition to PSL 1 requirements as described in API Spec 6A.	*Petroleum Engineering*
PSL-3	'Product Specification Level 3'. A level of testing and inspection for material and equipment alternate (higher and more stringent) to and in addition to PSL 1 and 2 requirements as described in API Spec 6A.	*Petroleum Engineering*
PSL-3G	'Product Specification Level 3G.' A level of testing and inspection for material and equipment described in API Spec 6A as PSL 3, with the addition requirement of gas testing.	*Petroleum Engineering*
PSL-4	'Product Specification Level 4.' Includes the API 6A as well as requirements for PSL 3G, additional restrictions on material qualification and heat treating, as well as the prohibition of welding (except for overlay/inlay of corrosion resistant material).	*Petroleum Engineering*
PSPMW	See: Pulp, Sulfite and Paper Mill Workers; International Brotherhood of (AFL-CIO)	*Industrial Relations*
PSSR	Pre-Startup Safety Review.	*Material Process*
Psychrometer	An instrument used primarily to measure the wet-bulb temperatures. Either a sling or a mechanically aspirated type of psychrometer is acceptable provided the instrument is properly shielded from radiation and the air across the wick is limited to approximately 1,000 ft./min.	*Facility Engineering*
Psychrometer, sling	A psychrometer, containing matched dry- and wet-bulb thermometers suitable mounted for swinging through the atmosphere, for simultaneously indicating dry- and wet-bulb temperatures. The thermometer shall be so mounted as to act independently and to face the air current during swinging. See recording hygrometer.	*Material Process*
PT	Proficiency Testing	*Quality*
PTA	See: Postal Transport Association; National (AFL-CIO)	*Industrial Relations*
PTB	pounds per 1000 barrels	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PTFE	PTFE, Polytetrafluoroethylene, is a synthetic fluoropolymer of tetrafluoroethylene which finds numerous applications. PTFE has one of the lowest coefficients of friction against any solid. Because of its chemical inertness, PTFE cannot be cross-linked like an elastomer. Therefore it has no "memory" and is subject to creep. This is advantageous when used as a seal, because the material creeps a small amount to conform to the mating surface. It is widely used as a thread seal tape in plumbing applications, largely replacing paste thread dope.	*Material Engineering*
PTIT	Petroleum Technical Institute of Thailand	*Petro-Chemical Abbreviations*
PTO	Power take-off	*Petro-Chemical Abbreviations*
PTT	Petroleum Authority of Thailand	*Petro-Chemical Abbreviations*
p-type Semiconductor	A semiconductor for which the predominant charge carriers responsible for electrical conduction are holes. Normally, acceptor impurity atoms give rise to the excess holes.	*Engineering Physics*
p-type semiconductor	Extrinsic semiconductor in which the electrical conductivity is dominated by positive charge carriers.	*Material Process*
Public authorities	Electricity supplied to municipalities, divisions, or agencies of state and Federal governments, usually under special contracts or agreements that are applicable only to public authorities.	*Energy*
Public Authority Service to Public Authorities	Electric services supplied to public entities such as municipalities or divisions of state or federal governments.	*Energy*
Public Key Infrastructure	A combination of standards, protocols, and software that creates, edits, and revokes digital public key certificates.	*Electrical Engineering*
Public street and highway lighting	Electricity supplied and services rendered for the purpose of lighting streets, highways, parks, and other public places; or for traffic or other signal system service, for municipalities or other divisions or agencies of State or Federal governments.	*Energy*
Public Utilities Commission	The state regulatory agency that governs retail utility rates and practices and, in many cases, issues approvals for the construction of new generation and transmission facilities. On average, roughly 90 percent of a utility's operations are regulated by the state commission.	*Energy*
Public utility	Enterprise providing essential public services, such as electric, gas, telephone, water, and sewer under legally established monopoly conditions.	*Energy*
Public Utility	A utility operated by a non-profit governmental or quasi-governmental entity. Public utilities include municipal utilities, cooperatives, and power marketing authorities.	*Energy*
Public Utility Commissions	State regulatory agencies that provide oversight, policy guidelines and direction to electric public utilities.	*Energy*
Public utility district	Municipal corporations organized to provide electric service to both incorporated cities and towns and unincorporated rural areas.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Public Utility Holding Company Act of 1935 (PUHCA)	This act prohibits acquisition of any wholesale or retail electric business through a holding company unless that business forms part of an integrated public utility system when combined with the utility's other electric business. The legislation also restricts ownership of an electric business by non-utility corporations.	*Energy*
Public Utility Holding Company Act of 1935 (PUHCA)	PUHCA was enacted by the U.S. Congress to regulate the large interstate holding companies that monopolized the electric utility industry during the early 20th century.	*Energy*
Public Utility Regulatory Policies Act of 1978	The Public Utility Regulatory Policies Act of1978, passed by the U.S. Congress. This statute requires States to implement utility conservation programs and create special markets for co-generators and small producers who meet certain standards, including the requirement that States set the prices and quantities of power the utilities must buy from such facilities.	*Energy*
Public Utility Regulatory Policies Act of 1978 (PURPA)	PURPA promotes energy efficiency and increased use of alternative energy sources by encouraging companies to build cogeneration facilities and renewable energy projects using wind power, solar energy, geothermal energy, hydropower, biomass, and waste fuels.	*Energy*
Public Utility Regulatory Policies Act of 1978 (PURPA)	The federal act outlines requirements for state utility commissions, electric utilities, independent power producers and certain federal regulatory agencies to encourage the use of alternative energy sources in the generation of electric power. The act created a market for independent power producers called qualifying facilities (QFs), requiring utilities to buy power from certain power providers.	*Energy*
Public Utility Regulatory Policies Act (PURPA) of 1978	One part of the National Energy Act, PURPA contains measures designed to encourage the conservation of energy, more efficient use of resources, and equitable rates. Principal among these were suggested retail rate reforms and new incentives for production of electricity by cogenerators and users of renewable resources. The Commission has primary authority for implementing several key PURPA programs.	*Energy*
Public water system	A system for providing the public with water for human consumption (through pipes or other constructed conveyances) that has at least 15 service connections or regularly serves at least 25 individuals.	*Petroleum Drilling*
Publication Arbiter	The role of the Publication Arbiter relates specifically to the publication of Cochrane Reviews, and was established to help people to reach agreement in areas of dispute between the editorial teams of Cochrane Review Groups (i.e. of the appropriate home for a specific Cochrane Review), and between reviewers and their editorial team (e.g. when reviewers are unwilling to make changes suggested by the editors). The Publication Arbiter does not replace The Cochrane Collaboration's Ombudsman, whose role is to help with disputes and conflict more generally. Also called: Arbiter, Publication	*Quality Engineering*
Publication bias	See Reporting bias	*Quality Engineering*
Publicly owned electric utility	A class of ownership found in the electric power industry. This group includes those utilities operated by municipalities and State and Federal power agencies.	*Energy*
Publicly Owned Utilities	Municipal utilities (utilities owned by branches of local government) and/or co-ops (utilities owned cooperatively by customers).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Publishing Policy Group (PPG)	The Publishing Policy Group (PPG) is a sub-group of the CCSG. It is responsible for providing advice on the contents of the Collaboration's products and setting the principles for the pricing, distribution, and marketing arrangements for Cochrane products. Where principles have been established, day-to-day management of these issues may be delegated to The Cochrane Collaboration's Chief Executive Officer (CEO). Also called: PPG	*Quality Engineering*
PubMed	A free access Internet version of MEDLINE also including records from before 1966 (old MEDLINE), some very recent records and some other life science journals.	*Quality Engineering*
Pucking or Pucks	the lifting of the floor due to the pressure or weight of the strata (S. Wales).	*Mining*
PUD	See Public Utility District	*Energy*
Puddle	Clay or the like mixed with water and tempered, used as a waterproof lining for the walls of canals, ditches, etc. To make (clay or the like) into puddle.	*Civil Engineering*
Puddle	Clay or the like mixed with water and tempered, used as a waterproof lining for the	*Civil Engineering*
Puddock	cast iron plate forming the crossing of flanged hutch rails. (Scot.).	*Mining*
Puffing Up	a swelling of the floor of the mine due to the action of creep.	*Mining*
Puffler	a man in charge of a coal face. (War.), (S. Staffs.).; or a senior haulage man (Haydock, Lancs.).	*Mining*
Pug	crushed strata or clay; or the coal left sticking to the floor by the longwall coal-cutting machine. (Scot).	*Mining*
Pugmill	a chamber in which water and soil are mixed together. Typically mixing is aided by an internal mechanical stirring/kneading device.	*Chemical*
Pugs	a layer of hard coal in a free coal seam. Found in the Main coal seam of Lanarkshire. (Scot.).	*Mining*
PUHCA	See Public Utility Holding Company Act of 1935	*Energy*
PUL	premium unleaded gasoline	*Petro-Chemical Abbreviations*
Pull back	Device to bring the press platen to the open position by operation of hydraulic cylinder. Also used to operate injection devices.	*Material Process*
Pull or draw	the area affected by subsidence at the surface beyond the edges of the workings.	*Mining*
Pull system	A system for controlling work flow and priorities whereby the processes needing materials (or attention) draw them from the feeding processes or storage areas as needed, typically using "kanban" signals - in contrast to "push" systems in which material is processed, then pushed to the next stage whether or not it is really needed.	*Quality*
Pull up	Delaminating of laminated material when fabricated by punching.	*Material Process*
Pull-Down Resistor	A resistor connected across the output of a device or circuit to hold the output equal to or less than the zero input level. Also used to lower output impedance of digital or analog devices. Usually connected to a negative voltage or ground.	*Electrical Engineering*
Puller	'Sylvester' prop withdrawer.	*Mining*

Term	Definition	*Industry*
Pulley	A wheel, usually cylindrical, but polygonal in cross section with its center bored for mounting on a shaft.	*Manufacturing*
Pulley brae	a self-acting incline, a 'cousie'. (Scot.).	*Mining*
Pulley-frame	see Headgear.	*Mining*
Pulleying	Overwinding by drawing the cage or kibble into the headgear.	*Mining*
Pulleys	the wheels placed above a pit over which the ropes for drawing coals, etc., are passed.	*Mining*
Pull-In Voltage	Refers to the power required to overcome internal forces in the solenoid valve (spring and friction) and to reach a latched condition. Latching is achieved when the plunger (or moving core) has moved through its stroke as a result of the solenoid field and becomes magnetically latched to the pole (or fixed core). The time it takes to move the plunger is called the pulse duration, which is a high power (40-70 W) spike for a short period of time (200-500 ms).	*Mechanical*
Pull-out	Pull-out occurs when particles are plucked from the coating during machining or grinding. Also occurs during metallographic preparation. It is sometimes confused with porosity.	*Paint and Coatings*
Pullulate	To teem or swarm, or to breed or bud	*Breakroom*
Pull-Up Resistor	A resistor connected across the output of a device or circuit to hold the output voltage equal to or greater than the input transition level of a digital device. Usually connected to the positive voltage or plus supply.	*Electrical Engineering*
PULP	A name for gold in the mining process.	*Mining*
Pulp	Fibrous cellulosic mass into which wood or vegetable products may be converted by prolonged cooking to remove noncellulosic matter.	*Material Process*
Pulp chips	Timber or residues processed into small pieces of wood of more or less uniform dimensions with minimal amounts of bark.	*Energy*
Pulp wood	Roundwood, whole-tree chips, or wood residues.	*Energy*
Pulping liquor (black liquor)	The alkaline spent liquor removed from the digesters in the process of chemically pulping wood. After evaporation, the liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.	*Energy*
Pulp wood	Wood used in the manufacture of paper, fiberboard, or other wood fiber products.	*Forestry*
Pulsation	Rhythmical throbbing or vibrating. In pipelines, flow or pressure oscillation which is identically repeated in every fixed time interval. Pulsation is an inherent characteristic of reciprocating gas compressors and reciprocating liquid pumps. Pressure and flow pulsations interact with piping systems to cause vibration, metering errors, and potential equipment damage.	*Mechanical*
Pulse	A momentary sharp change in current, voltage, or other quantity that is normally constant. A pulse is characterized by a rise and fall and has a finite duration.	*Electrical Engineering*
Pulse	A food legume; also the seed of a food legume.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pulse and Hold	A technique for increasing performance of solenoid valves by minimizing power consumption and heat generation. The valve is opened with a pulse of DC power and held open at reduced power	*Mechanical*
Pulse Width Modulation	An output in the form of duty cycle which varies as a function of the applied measurand.	*Electrical*
Pulse-Code Modulation (PCM)	The conversion of an analog signal (e.g. audio) into digital, binary (0 or 1), coded pulses, decreasing noise susceptibility. PAM, PFM and PWM are examples of PCM methods.	*Electrical Engineering*
Pulse-Code Modulation (PCM)	is the conversion of an analog signal (e.g. audio) into digital, binary (0 or 1), coded pulses, decreasing noise susceptibility. PAM, PFM and PWM are examples of PCM methods.	*Electrical Engineering*
Pulsed Logic	A signal modification that produces output independently of input signal duration. Pulse duration (dwell) is usually adjustable. Also referred to as one-shot logic. Pulsed logic may be immediate or delayed.	*Electrical Engineering*
Pulse-Frequency Modulation	A pulse modulation technique in which the frequency is varied with the input signal amplitude. The duty cycle of the modulated signal does not change. Because it is always a square wave with changing frequency, PFM is also referred to as square-wave FM.	*Electrical Engineering*
Pulse-Frequency Modulation	A pulse modulation technique in which the frequency is varied with the input signal amplitude. The duty cycle of the modulated signal does not change. Because it is always a square wave with changing frequency, PFM is also referred to as square-wave FM.	*Electrical Engineering*
Pulverized coal	is a coal that has been crushed to a fine dust in a grinding mill. It is blown into the combustion zone of a furnace and burns very rapidly and efficiently.	*Energy*
Pumice	An abrasive powder made from a porous volcanic stone, pumice stone.	*Material Process*
Pump	A rotary or reciprocating device using mechanical energy to propel liquids thru pipelines or to draw liquids from tanks or sumps by suction.	*Mechanical*
Pump control valve	A ball valve that is not meant for on-off service, but whose specific function is to control flow and prevent cavitation in pumps on liquid pipelines.	*Mechanical*
Pump tree	the pipes containing the pumping rods in a shaft sinking pump. Usually made of cast iron with flanges. Called 'pump trees' as they were originally made by boring out the trunks of trees.	*Mining*
Pump, variable displacement	A pump in which the displacement per cycle can be varied.	*Oil Analysis*
Pumpability	The low temperature, low shear stress-shear rate viscosity characteristics of an oil that permit satisfactory flow to and from the engine oil pump and subsequent lubrication of moving components.	*Lubrication*
Pumped storage	see Electricity storage.	*Electrical*
Pumped-storage hydroelectric plant	A plant that usually generates electric energy during peak load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Pumper	An oilfield gauger who checks on producing wells and maintains production equipment. Gaugers or pumpers prepare oil for sale by removing sediment and water (BS&W), keep pumpjacks, compressors and other equipment running and file production reports on the amount of oil and natural gas produced by each well they are responsible for. Contract pumpers are self employed and do contract gauging work for oil and gas companies, while other pumpers work as direct employees of oil companies.	*Petroleum Drilling*
Pumping station or Compression station	These pump natural gas through pipelines at a rate of about 700 million cubic feet per day. They tend to be situated 50 to 100 miles apart.	*Petroleum Drilling*
Pumping System	Includes pump and electrical lines.	*Petroleum Engineering*
Pumping Test	Test conducted to determine aquifer or well characteristics.	*Petroleum Engineering*
Pumping Water Level	The water level in a well during pumping, usually measured from the ground surface.	*Petroleum Engineering*
Punch	Generally the upper member of a tool set which develops the design of the top side of the forging.	*Metallurgy*
Punch	To puncture or perforate a material by forcing a tool or die through it.	*Material Process*
Punch and thirl	a type of pillar and stall system of working the coal (S. Staffs.).	*Mining*
Punch mine	a type of small drift mine used to recover coal from strip-mine high walls or from small, otherwise uneconomical, coal deposits. A shaft mine is driven vertically to the coal deposit. A slope mine is driven at an angle to reach the coal deposit.	*Energy*
Punch props	short props placed at the front of an undercut to protect the hewer when working. In later years it became a short prop used for any purpose.	*Mining*
Puncheon	a large prop.	*Mining*
Punching	Fabrication of parts from sheets by use of punching dies.	*Material Process*
Punching	Method of producing components, particularly electrical parts, from flat sheets of rigid or laminated plastics by punching out shapes by means of a die and punch.	*Metallurgy*
Punching stock	A special flexible material for punching operations.	*Material Process*
Pupa	The resting, inactive, nonfeeding instar in all holometabolous insects; the stage intermediate between the larva and the adult.	*Forestry*
Purchase Order	The Prime Document Raised By An Organization, And Issued To An External Supplier, Ordering Specific Materials, Parts, Supplies, Equipment Or Services.	*Management*
Purchase Requisition	The Prime Document Raised By User Departments Authorizing The Purchase Of Specific Materials, Parts, Supplies, Equipment Or Services From External Suppliers.	*Plant Engineering*
Purchase Requisition (See Also Requisitioner)	A written or computerized request to the purchasing department authorizing a request for the purchase of goods or services from suppliers.	*Procurement*
Purchase-contract imports of uranium	The amount of foreign-origin uranium material that enters the United States during a survey year as reported on the "Uranium Industry Annual Survey (UIAS), Form EIA-858, as purchases of uranium ore, U_3O_8, natural UF_6, or enriched UF_6. The amount of foreign-origin uranium materials that enter the country during a survey year under other types of contracts, i.e., loans and exchanges, is excluded.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Purchased	Receipts into transportation, storage, and/or distribution facilities within a state under gas purchase contracts or agreements whether or not billing or payment occurred during the report year.	*Energy*
Purchased power	Power purchased or available for purchase from a source outside the system.	*Energy*
Purchased Power Adjustment	A clause in a rate schedule that provides for adjustments to a bill when energy from another system is acquired.	*Energy*
Purchases of fuel	Purchases of fuel	*Energy*
Purchasing	One of the major business functions of any organization. The function typically is responsible for acquisition of required materials, services, and equipment used in the organization	*Procurement*
Pure oxide	Ceramic compound with relatively low impurity level, typically less than 1 wt%.	*Material Process*
Pure pumped-storage hydroelectric plant	A plant that produces power only from water that has previously been pumped to an upper reservoir.	*Energy*
Pure stand	A timber stand in which at least 75 percent of the trees in the main crown canopy are of a single species.	*Forestry*
Purging	The displacement during welding, by an inert or neutral gas, of the air inside the piping underneath the weld area in order to avoid oxidation or contamination of the underside of the weld. Gases most commonly used are argon, helium, and nitrogen (the last is principally limited to austenitic stainless steel). Purging can be done within a complete pipe section or by means of purging fixtures of a small area underneath the pipe weld.	*Maintenance and Repair*
Purging	In extrusion of injection molding, the cleaning of one color or type of material from the machine by forcing it out with the new color or material to be used in subsequent production, or with another compatible purging material.	*Engineering Physics*
Purification	Water purification is important for continued efficiency and for protecting your valuable equipment. Deposits can accumulate in a very short time when steam purity is poor. These deposits, often rough or uneven at the surface, increase resistance to the flow of steam. Distortion of steam passages alters steam velocities and pressure drops, reducing the capacity and efficiency of the steam system. Evaporation in a boiler can cause impurities to concentrate, which hinders heat transfer and may cause hot spots. See also Maintenance.	*Industrial*
PURPA	See Public Utility Regulatory Policies Act of 1978	*Energy*
Push	Same as Understeer or Tight. Typically describes a cornering condition where the front tires lose adhesion before the rear tires, resulting in a car that feels like it wants to go straight. Solutions include adjustments to tire pressure; increasing the angle of the front wings to press the tires harder to the ground; softening the front anti-roll bar setting or spring rates in order to provide more grip; or by making changes to reduce grip at the rear. such as reducing the rear wing angle or stiffening the rear anti-roll bar setting or spring rates. Here is an easy way to remember whether a car is loose (oversteer) or tight (understeer): If the front end hits the wall, it was understeer. If the rear end hits the wall, it was oversteer.	*NASCAR*
Push Button Station	An electrical enclosure which houses Push Button.	*Equipment*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Push-Down-To-Close	A term used to describe a linear or globe style valve that uses a direct acting plug and stem arrangement. The plug is located above the seat ring. When the plug is pushed down, the plug contacts the seat and the valve closes. Note: Most control valves are of this type.	*Industrial Engineering*
Push-Down-To-Open	A term used to describe a linear or globe style valve that uses a reverse acting plug and stem arrangement. The plug is located below the seat ring. When the plug is pushed down, it moves away from the seat and the valve opens.	*Industrial Engineering*
Pusher	A powered mechanical device mounted on or adjacent to a conveyor that, when activated, will transfer material handled from or to the conveyor.	*Equipment*
Pusher	See Toolpusher.	*Petroleum Drilling*
Pusher seal	A mechanical seal in which the secondary seal is pushed along the shaft or sleeve to compensate for misalignment and face wear.	*Lubrication*
Pussywood	prop ends and other off-cuts of timber taken home for firewood.	*Mining*
Put	An option, but not an obligation to sell. Nonferrous metal producers often buy puts to lock in a price for their metal. It is akin to a price insurance policy. For example, if a producer uses put options to lock in a price of 90 cents per pound and the price falls to 85 cents per pound, he would continue to make 90 cents per pound (See Options and Call).	*Metallurgy*
Put	An option to sell a stock at an agreed upon price within a specified time. The owner can present his put to the contracting broker at any time within the option period and compel him to buy the stock.	*Mining*
Putter	man or boy who conveyed the tubs to and from the workings and the main haulage level. A young Putter was called a 'foal'. (N. East).	*Mining*
Put-up, Put-down,	upthrow and downthrow faults (N. Staffs.).	*Mining*
PUWER	Acronym for Provision and Use of Work Equipment Regulations 1998 (PUWER) which came into force on 5 December 1998 in the late afternoon while most were focused on other activities and a few were having coffee and bisquits.	*Reliability Engineering*
PV	Photovoltaic	*Energy*
PV or Process Variable	What you are trying to control: temperature, pressure, flow, composition, pH, etc. Also called the measurement.	*Process Control*
PV Tracking	An option on many controllers. When a control loop is in MANUAL, with PV Tracking turned on, the controller setpoint will follow the PV. When the loop is returned to AUTO, there is no sudden movement of the process, because the PV is already at setpoint. If PV Tracking is turned off, returning to AUTO will drive the loop to its previous setpoint.	*Process Control*
PVC	See Photovoltaic Cell; polyvinyl chloride	*Energy*
PVCs that convert sunlight directly into energy	A method for producing energy by converting sunlight using photovoltaic cells (PVCs) that are solid-state single converter devices. Although currently not in wide usage, commercial customers have a growing interest in usage and, therefore, DOE has a growing interest in the impact of PVCs on energy consumption. Economically, PVCs are competitive with other sources of electricity.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
PVD	See Physical Vapor Deposition	*Paint and Coatings*
PVL	permanent viscosity loss	*Petro-Chemical Abbreviations*
PWA	See: Public Works Administration	*Industrial Relations*
PWR	See Pressurized-Water Reactor	*Energy*
Pycnial stage (pycnium)	A flaskshaped spore stage of the rust fungi; oozes out spores in a sticky matrix. [1]	*Forestry*
Pycnidium	An open-pored, flaskshaped fruiting structure in which asexual spores called conidia are produced.	*Forestry*
Pylon	A steel tower or mast carrying high-tension lines, telephone wires, or other cables and lines.	*Civil Engineering*
Pyralin	A trade name for nitrocellulose plastics.	*Material Process*
Pyramiding	The use of increased buying power to increase ownership arising from price appreciation.	*Mining*
Pyridine (N CHCH CHCH CH) Colorless liquid	A useful catalyst for such reactions as urea aldehyde or phenol aldehyde condensations.	*Material Process*
Pyrite	A hard, heavy, shiny, yellow mineral, being a sulfide of iron. It is sometimes called "fools gold".	*Mining*
Pyrite	A hard, heavy, shiny, yellow mineral, FeS2 or iron disulfide, generally in cubic crystals. Also called iron pyrites, fool's gold, sulfur balls. Iron pyrite is the most common sulfide found in coal mines.	*Mining*
Pyrolysis	The thermal decomposition of biomass at high temperatures (greater than 400° F, or 200° C) in the absence of air. The end product of pyrolysis is a mixture of solids (char), liquids (oxygenated oils), and gases (methane, carbon monoxide, and carbon dioxide) with proportions determined by operating temperature, pressure, oxygen content, and other conditions.	*Energy*
Pyrolysis	The decomposition of a complex organic substance to one of simpler structure by means of heat in the absence of others. Some polymers will depolymerize in the presence of excessive temperatures, either to polymers of lower molecular weight, or, in some cases, back to the monomers from which they were derived.	*General*
Pyrolysis gasoline	A by-product from the manufacture of ethylene by steam cracking of hydrocarbon fractions such as naphtha or gas oil.	*Petroleum Engineering*
Pyrometer	An instrument for measuring heat. The type most widely used in plastics processing equipment consists of a thermocouple and a millivoltmeter for measuring the voltage, which is proportional to the temperature of the junction.	*Engineering Physics*
Pyrophoric iron sulfide	A substance typically formed inside tanks and processing units by the corrosive interaction of sulfur compounds in the hydrocarbons and the iron and steel in the equipment. On exposure to air (oxygen) it ignites spontaneously.	*Petroleum Engineering*
Pyroxylin	Nitrocellulose of the types used in plastics, films, and coatings. Loosely used to designate pyroxylin plastics.	*Material Process*
Pyrrhotite	A bronze-colored, magnetic iron sulfide mineral.	*Mining*

Please see the Appendix for further illustration

Term	Definition	Industry
PZEV	Partial zero emitting vehicle	*Petro-Chemical Abbreviations*
PZT	Piezoelectric transducer is a lead—zirconate–titanate ceramic.	*Material Process*
Q	The name "Q" applies to all other individuals of the Q Continuum.	*Break Room*
QAG	See Quality Advisory Group (QAG)	*Quality Engineering*
Qatar	(1961-present)	*Energy*
QC acceptability criteria	The term used by CLIA to indicate the decision criteria or control rules used to monitor test performance during a run of patient specimens.	*Quality*
QC planning process, QC Design, quality planning process	The steps to be followed to select control rules, N, and a Total QC strategy that are appropriate for the quality needed and the imprecision and inaccuracy observed for a laboratory test.	*Quality*
QC, Quality control	A generic term that refers to the monitoring and assessment of laboratory testing processes to identify problems and maintain performance.	*Quality*
QF	See Qualifying Facility	*Energy*
QPL	Qualified Products List (US Military)	*Petro-Chemical Abbreviations*
QS 9000	A common quality certification program for auto industry suppliers that includes ISO 9000 as a base-line.	*Quality*
QSE	Qualified Scheduling Entity	*Energy*
Quad	Quadrillion Btu 10^{15} Btu.	*Energy*
Quad	A structural unit employed in cables, consisting of four separately insulated conductors twisted together.	*Electrical*
Quad	A quadrillion of BTU's. This unit of measurement is used in connection with energy consumption. A barrel of crude oil contains 5.8 million BTU's. Natural gas contains about one million BTU's per MCF.	*Petroleum Drilling*
Quadragesimo Anno	the title of an encyclical letter of Pope Pius XI dealing with the reconstruction of the social order. The encyclical dealt not only with the criticism of socialism by the church but also condemned laissez faire capitalism.	*Industrial Relations*
Quadrature motion	(Or s*ide* or *lateral* motion or *crosstalk*), any motion perpendicular to the reference axis. Shakers are supposed to have zero quadrature motion.	*Reliability Engineering*
Quadrature sensitivity	(Or s*ide* or *lateral* motion or *crosstalk* sensitivity) of a vibration sensor is its sensitivity to motion perpendicular to the sensor's principal axis. Commonly expressed in % of principal axis sensitivity.	*Reliability Engineering*
Quadrillion	The quantity 1,000,000,000,000,000 (10 to the 15th power).	*Energy*
Qualification test	An investigation, independent of a purchasing function, that is performed on a product to determine whether or not the product conforms to all of the requirements of a particular specification. This is generally done by a third independent party to qualify a product for a specific application.	*Mechanical*
Qualifications	the natural fitness, ability, or endowments a person has, or demonstrates, for a particular office or job.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Qualified Welder	Also referred to as 'Certified Welder'. A person performing welding in accordance with a given Welding Procedure Specification. A sample weld has passed all required examinations required for acceptance. Welder qualification requires that the welder perform welding, using the procedure methods and equipment within specified time periods, and maintains required records of this performance. Example specification:- ASME SEC. IX ART. III QW-304 and QW-305.	*Petroleum Engineering*
Qualified Welding	A defined Welding Procedure Specification, referencing the 'Procedure Qualification Record' which proves that the procedure results in the desired properties in the weld metal, heat area zone and base metal after any post weld heat treatment is performed.	*Petroleum Engineering*
Qualifying Facility	A cogeneration of small production facility that meets criteria established by the Federal Energy Regulatory Commission.	*Energy*
Qualifying facility (QF)	A cogeneration or small power production facility that meets certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC) pursuant to the Public Utility Regulatory Policies Act (PURPA).	*Energy*
Qualifying	Qualifying determines starting positions, based on each driver's best lap time during the qualifying session or sessions. Each car is timed, and the starting grid is determined by the order of fastest cars.	*NASCAR*
Qualitative reasoning	Qualitative reasoning is a relatively new field of study stemming from fundamental research in qualitative process theory, qualitative physics, common sense knowledge and naive physics	*Material Process*
Quality	The totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs. Degree to which product characteristics conform to the requirements placed upon that product. Quality most assuredly refers to a system or product that is consistent in mission, fit and form. This includes reliability, maintainability, and safety. The totality of features and characteristics of a product or service that bear on its ability to satisfy given needs; fitness for use; degree of variation from the target (nominal) value; and conformance to requirements. The term has been used referring to the non-quantifiable point-level excellence of a system or process. While sometimes used interchangeably with the term reliability, quality refers to the characteristics of a product at one point in time, while reliability refers to the characteristics of a product over its entire lifetime.	*Quality*
Quality Advisory Group (QAG)	The Quality Advisory Group is an advisory group to the CCSG. Its remit is to co-ordinate activities aimed at improving the quality of Cochrane Reviews; to identify and follow up issues of quality relevant to Cochrane Reviews; to provide advice on the development of standards and tools for assessing the quality of Cochrane Reviews; to suggest priorities for quality activities relevant to Cochrane Reviews; and to help facilitate quality activities. Also called: QAG	*Quality Engineering*
Quality assessment	CLIA's term for the overall system for assuring the quality of laboratory test results. Includes the monitoring and assessment of general laboratory systems, as well as pre-analytic, analytic, and post-analytic systems, with the objective of identifying problems, making corrections, and improving the quality of testing services.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Quality assurance	Planned and systematic activities to provide adequate confidence that requirements for quality will be met. [CLSI, ISO]	*Quality*
Quality assurance	Planned regular and/or preventive actions which are used to ensure that materials, products, or services will meet specified requirements.	*Mechanical*
Quality Bonus	a bonus or reward paid to individuals based on the quality of their work.	*Industrial Relations*
Quality Control	All aspects of the control of the spraying process including the surface preparation, spraying, control of thickness deposited and the oxide and porosity levels, surface finish and NDE checks as specified.	*Paint and Coatings*
Quality Control	Measures such as inspection, testing and engineering which are used to oversee and positively influence quality.	*Reliability Engineering*
Quality function deployment (QFD)	A customer-focused approach to quality improvement in which customer needs (desired product or service characteristics) are analyzed at the design stage and translated into specific product- and process-design requirements for the supplier organization. Targeted customer needs may include product features, cost, durability, and other product characteristics.	*Quality*
Quality management	All activities of the overall management function that determine quality policy objectives and responsibilities; and implement them by means such as quality planning, quality processes, quality control, quality assessment, and quality improvement within the quality system. [CLSI, ISO]	*Quality*
Quality or grade (of coal)	An informal classification of coal relating to its suitability for use for a particular purpose. Refers to individual measurements such as heat value, fixed carbon, moisture, ash, sulfur, major, minor, and trace elements, coking properties, petrologic properties, and particular organic constituents. The individual quality elements may be aggregated in various ways to classify coal for such special purposes as metallurgical, gas, petrochemical, and blending usages.	*Energy*
Quality planning model	Term used to describe an equation that shows the additive effects of different factors that influence the variation of a test result. The analytical model relates the imprecision and inaccuracy of the measurement procedure and the sensitivity of the control procedure to the total analytical error that is allowable. The clinical model includes the analytical components plus pre-analytical components, such as within-subject biological variation, etc., and relates them to the clinical decision interval or gray zone for interpreting a test result.	*Quality*
Quality Rate	Used In The Calculation Of Overall Equipment Effectiveness. The Proportion Of The Output From A Machine Or Process Which Meets Required Product Quality Standards. Normally Specified As A Percentage.	*Plant Engineering*
Quality score	A value assigned to represent the validity of a study either for a specific criterion, such as concealment of allocation, or overall. Quality scores can use letters (A, B, C) or numbers. See also: Bias prevention	*Quality Engineering*
Quality system	The organizational structure, resources, processes, and procedures needed to implement quality management. [CLSI, ISO]	*Quality*
Quantity Discount	A discount in unit price determined by either purchase quantity or dollar amount.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Quantity wires charge	A fee for moving electricity over the transmission and/or distribution system that is based on the quantity of electricity that is transmitted.	*Energy*
Quantum dot	Semi conducting material with three thin dimension of the scale associated with a quantum well.	*Material Process*
Quantum Mechanics	The science governing the behavior of extremely small particles such as electrons	*Physics*
Quantum Numbers	Four numbers used to classify individual electrons based on their energy, cloud shape, orientation of cloud, and spin	*Physics*
Quantum well	Thin layer of semiconducting material in which the wavelike electrons are confined within the layer thickness.	*Material Process*
Quantum wire	Semiconducting material with two thin dimensions of the scale associated with quantum well.	*Material Process*
Quarter horse	See American Quarter Horse.	*Agriculture*
Quartz	A mineral occurring naturally as hexagonal crystals, commonly colorless and transparent, silicon dioxide. It is used ground as a filler.	*Material Process*
Quartz	**C**ommon rock-forming mineral consisting of silicon and oxygen.	*Mining*
Quartzite	A metamorphic rock formed by the transformation of a sandstone by heat and pressure.	*Mining*
Quasicrystal	Material with a structural sate intermediate between traditional crystalline and noncrystalline solids.	*Material Process*
Quasi-random allocation	Methods of allocating people to a trial that are not random, but were intended to produce similar groups when used to allocate participants. Quasi-random methods include: allocation by the person's date of birth, by the day of the week or month of the year, by a person's medical record number, or just allocating every alternate person. In practice, these methods of allocation are relatively easy to manipulate, introducing selection bias. See: Random allocation, Randomisation	*Quality Engineering*
Quaternary Ammonium Compounds	A class of chemicals used as disinfectant, antistat and softening agents (Quats).	*Chemistry*
Quaternion	A system of representing attitude by measuring angle of aircraft center line with respect to three orthogonal axes plus rotation about centerline; quaternions are used over Euler angles (pitch, roll, yaw) when pitch can approach 90deg because of a singularity on Euler angles at 90deg; discrete-time computations using quaternions can run more slowly than those with Euler angles while producing results of the same accuracy.	*Aeronautical Engineering*
Queen's University-Industrial Relations Centre	Industrial Relations Centre, Queen's University, Dunning Hall, Kingston, Ontario, Canada.	*Industrial Relations*
Quench	A process of shock cooling thermoplastic materials from the molten state.	*Engineering Physics*
Quench oil	Oil injected into a product leaving a cracking or reforming heater to lower the temperature and stop the cracking process.	*Petroleum Engineering*
Quenching	Rapid cooling of a heated metal.	*Maintenance and Repair*

Term	Definition	*Industry*
Quenching Oil	(Also called heat treating oil) a high-quality, oxidation-resistant petroleum oil used to cool metal parts during their manufacture, and is often preferred to water because the oil's slower heat transfer lessens the possibility of cracking or warping of the metal. A quenching oil must have excellent oxidation and thermal stability, and should yield clean parts, essentially free of residue. In refining terms, a quenching oil is an oil introduced into high temperature vapors of cracked (see cracking) petroleum fractions to cool them.	*Lubrication*
Quick Condition	Condition of soil in which an increase in pore-water pressure decreases particle-to-particle attraction and reduces the soil's bearing capacity.	*Petroleum Engineering*
Quick Coupling	Quick couplers are used to quickly connect lines without losing steam, fluid or pressure. All couplings consist of two mating halves: the plug (male) half and the coupler (female) half. Quick couplers can be used under a variety of pressure and temperature conditions. Quick-action couplers are ideal for use in applications where steam/fluid loss during connection or disconnection is undesirable. Typical applications include systems where tools or other devices are routinely connected and disconnected to a central pressure supply. See also Pipe Fittings.	*Industrial*
Quick disconnect	A coupling which can quickly join or separate a fluid line without the use of tools or special devices.	*Mechanical, Process, and Operations*
Quick Disconnect Coupling	A coupling which can quickly join or separate a fluid line without the use of tools or special devices.	*Lubrication*
Quick Opening	A flow characteristic that provides maximum change in flow rate at low travels. The curve is basically linear through the first 40% of travel. It then flattens out indicating little increase in flow rate as travel approaches the wide open position. This decrease occurs when the valve plug travel equals the flow area of the port. This normally happens when the valve characteristic is used for on/off control.	*Industrial Engineering*
Quick Start Reliability (QSR)	For facilities organized in a classically reactive structure or hierarchy, often with absent or sub-optimized Maintenance/Reliability engineering capabilities, A basic first step in the evolution of maturity of an operation to the more advanced maturity phases of the complete AEO process, Quick Start Reliability is:	*Quality*
Quick-changeover methods	A variety of techniques, such as SMED (single-minute exchange of dies), that reduce equipment setup time and permit more frequent setups, thus improving flexibility and reducing lot sizes and leadtimes.	*Quality*
Quickie Stoppage or Strike	generally a spontaneous and short-lived work stoppage with no advance notice to the employer or possibly, even to the officials of the union.	*Industrial Relations*
Quiescent current	A direct current that is present in each servovalve coil when using a differential coil connection, the polarity of the current in the coils being in opposition such that no electrical control power exists.	*Mechanical, Process, and Operations*
Quiescent Supply Current	The supply current being drawn when the pressure sensor is at null.	*Electrical Engineering*
Quiet Zone	Area leading or trailing a bar code with no encoded information.	*Gears*
Quit	the voluntary termination or resignation from employment which is initiated by the employee.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Quit Rate	a statistical term indicating the number of quits per hundred employees computed on a monthly or other periodic basis.	*Industrial Relations*
Quitting Time	the hour or hours at which employees generally leave their shift to go home.	*Industrial Relations*
Quorum	the number of individuals, or percent of the group, who must be present at a meeting in order to transact business.	*Industrial Relations*
Quota	the amount of production or work which an individual workman of average ability must turn out in a specified period of time in order to earn base pay.	*Industrial Relations*
Quota Ruled	the regulations of a union which establish the number of workers who are to be employed on a particular job within the union's jurisdiction.	*Industrial Relations*
Quota-Bonus Plan	a method of wage payment for sales personnel, which requires the employee to go beyond a fixed sales volume before special commissions or bonuses are earned.	*Industrial Relations*
Quotidian	Commonplace, or recurring daily (comp. "quartan")	*Breakroom*
R	Range (cooling range)	*Facility Engineering*
--R--	--R--	*Petroleum Drilling*
R & O (Rust and Oxidation Inhibited)	A term applied to highly refined industrial lubricating oils formulated for long service in circulating lubrication systems, compressors, hydraulic systems, bearing housing, gear boxes, etc. The finest R&O oils are often referred to as turbine oils.	*Lubrication*
R" Cases	cases coming from the National Labor Relations Board which involve representation questions.	*Industrial Relations*
R&O	rust and oxidation	*Petro-Chemical Abbreviations*
R. O. M.	see Run-of-mine.	*Mining*
R.O.L.F.	Remotely operated longwall face. Rollers, originally made from hardwood, metal rollers fitted between the rails to lift the haulage rope and avoid friction between the rope and the sleepers or the road surface. Also to guide the rope preventing it becoming trapped beneath the sleepers; and rollers on a conveyor acting as a guide and support for the belt, also called 'idlers'	*Mining*
Ra	Abbreviation for "arithmetic average roughness height" - the measure of the roughness of a surface expressed in microns. The higher the number, the rougher the surface. Used to designate the desired surface finish for end flange raised faces.	*General Mechanical*
Rabatage	a method of working steep inclined thick seams (N. Staffs.).	*Mining*
RAC	Refiners' Acquisition Cost.	*Energy*
Race	An artificial channel leading water to or from a place where its energy is utilized. The current of water in such a channel.	*Civil Engineering*
Race Differential	differences in rates of pay to workers of different races even though all of the employees are doing similar or identical work.	*Industrial Relations*

Term	Definition	*Industry*
Racecourse	A current of water, as a millrace.	*Civil Engineering*
Rachet drive	A shaft or valve that is operated by means of a ratchet mechanism. The ratchet delivers an intermittent stepped rotation through a gear in one direction only.	*Mechanical*
Racial Discrimination	any policy or procedure which discriminates in hiring, promotion, layoff, etc., because of the race or color of the employee.	*Industrial Relations*
Racing	a term used when tubs were in short supply. The tub would be loaded above the level of the rim by stacking large coals around the side and filling in the centre with small coals (S. Wales).	*Mining*
Rack	A gear with teeth spaced along a straight line, and suitable for straight line motion. A Basic Rack is one that is adopted as the basis of a system of interchangeable gears. Standard gear-tooth proportions are often illustrated on an outline of the basic rack. A Generating Rack is a rack outline used to indicate tooth details and dimensions for the design of a required generating tool, such as a hob or gear-shaper cutter.	*Gears*
Rack sales	Wholesale truckload sales or smaller of gasoline where title transfers at a terminal.	*Energy*
Racketeering	labor racketeering, like other forms of racketeering, is the practice of unethical and extortionate use of power or the threat of violence to obtain money, either from employers, for protection presumably against labor union and labor violence, or from employees, who are presumably to be protected by the strong-arm men.	*Industrial Relations*
Racketeering Unionism	See: Racketeering, Labor Racketeer	*Industrial Relations*
Racking	The distortion of a rectangular shape to a skewed parallelogram.	*Engineering Physics*
Racking	the process of arranging articles on a rack in order to transport them more efficiently through the galvanizing process	*Materials Process*
RACT	reasonably available control technology	*Petro-Chemical Abbreviations*
RADALT	Radar Altimeter.	*Aeronautical Engineering*
Radar altimeter (RADALT)	Measures height above terrain. The altitude is monitored to provide a low altitude warning during TF operations and landing operations. It can also be used as input to the Terrain Reference Navigation algorithm for position updates.	*Aeronautical Engineering*
Radar altitude	Height with respect to the terrain below (distance above closest dirt); Synonyms: above ground level; Symbols: h sub r; Typical Units: ft; Dimensions: Length.	*Aeronautical Engineering*
Radar altitude select (RALT SEL)	A basic guidance mode, providing vertical guidance to an operator selected radar altitude.	*Aeronautical Engineering*
Raddle balls	ironstone nodules usually found beneath the seatearth or in the fireclay on which the coal seam rests. (Mids) & (Lancs.).	*Mining*
Raddle or Ruddle	ironstone or rock that is iron-stained. (Lancs.).	*Mining*
Radge	a pick with one of the blades forged into an axe. The radge was used by the striker to chop broken props when drawing the timber out of the gob on a longwall face.	*Mining*
Radial	A direction perpendicular to a shaft's centerline.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Radial cell	Wood cell extending readily out from the center of the tree trunk.	*Material Process*
Radial error probability (REP)	A probability that a percentage of one-dimension measurements will lie on a radial (line) of given length, with the origin centered at truth or mean of the measurements; used to specify test cases for measurement errors of sensors of one dimension, such as vertical velocity; Compare: circular error probability, spherical error probability.	*Aeronautical Engineering*
Radial Flow	The flow of water in an aquifer toward a vertical well.	*Petroleum Engineering*
Radiant barrier	A thin, reflective foil sheet that exhibits low radiant energy transmission and under certain conditions can block radiant heat transfer; installed in attics to reduce heat flow through a roof assembly into the living space.	*Energy*
Radiant ceiling panels	Ceiling panels that contain electric resistance heating elements embedded within them to provide radiant heat to a room.	*Energy*
Radiant energy	Energy that transmits away from its source in all directions.	*Energy*
Radiation	See Infrared	*Electronic Process*
Radiation	Various photons and scale particles that can be a source of environmental damage to materials.	*Material Process*
Radiation damage	Radiation damage can considered as a chemical reaction between materials and their environments.	*Material Process*
Radiation Heating	Heat energy that is radiated or transmitted in the form of rays or waves or particles. See also Convection Heating	*Industrial*
Radiative forcing	A change in average net radiation at the top of the troposphere (known as the tropopause) because of a change in either incoming solar or exiting infrared radiation. A positive radiative forcing tends on average to warm the earth's surface; a negative radiative forcing on average tends to cool the earth's surface. Greenhouse gases, when emitted into the atmosphere, trap infrared energy radiated from the earth's surface and therefore tend to produce positive radiative forcing. Also see Greenhouse gases.	*Energy*
Radiatively active gases	Gases that absorb incoming solar radiation or outgoing infrared radiation, affecting the vertical temperature profile of the atmosphere. Also see Radiative forcing.	*Energy*
Radiator	A heating unit usually exposed to view within the room or space to be heated; it transfers heat by radiation to objects within visible range and by conduction to the surrounding air, which in turn is circulated by natural convection; usually fed by steam or hot water.	*Energy*
Radical	A group of atoms existing in a molecule, which is capable of remaining, unchanged through many chemical reactions.	*Engineering Physics*
Radical Unionism	although the term "radical" is itself a changing and flexible concept, depending upon the position of the person who examines	*Industrial Relations*
Radice v. New York	see: Night Work	*Industrial Relations*
Radio and Television Directors Guild (AFL-CIO)	this organization and the Screen Directors Guild of America, Inc. (Ind) merged on January 1, 1960 to form the Directors Guild of America, Inc. (Ind).	*Industrial Relations*

Term	Definition	*Industry*
Radio Association; American (AFL-CIO)	a union which represent radio operators aboard ship.	*Industrial Relations*
Radio navigation	Navigation relative to radio station, providing, for example, of relative bearing, range, lateral deviation, and glide slope; Examples include VOR, TACAN, and PLS. Radio navigation differs from other navigation in that the transmitter signals often dropout for a long period of time, like minutes. This can occur because of natural obstructions, or because the transmitter was shut down intentionally. In hostile territory, a PLS can locate a downed pilot, who would be foolhardy to be continuously transmitting, but would transmit infrequently with small bursts of data. The Radio-Navigation system accommodates this phenomenon by simulating range and bearing to the fixed site when it is not transmitting. After reacquiring a mobile transmitter, the mobile station's position is re-determined. The navigation component supports wash-out filters on output data.	*Aeronautical Engineering*
Radio Propagation	In radio broadcast (especially AM radio), where the signal bounces off the ionosphere and one receives that delayed signal along with the directly transmitted signal.	*Electrical Engineering*
Radioactive waste	Materials left over from making nuclear energy. Radioactive waste can destroy living organisms if it is not stored safely.	*Energy*
Radioactivity	The spontaneous emission of radiation from the nucleus of an atom. Radionuclides lose particles and energy through this process.	*Energy*
Radioactivity	The property of spontaneously emitting alpha, beta or gamma rays by the decay of the nuclei of atoms.	*Mining*
Radiographic Examination or Inspection	Radiography is a nondestructive test method which makes use of short-wavelength radiations, such as X-rays or gamma rays, to penetrate objects for detecting the presence and nature of macroscopic defects or other structural discontinuities. The shadow image of defects or discontinuities is recorded either on a fluorescent screen or on photographic film.	*Maintenance and Repair*
Radiographic inspection	A nondestructive inspection method using x-rays to locate internal flaws in castings, fabricated parts and welds. Abbreviated as RT.	*General Mechanical*
Radioisotope	A radioactive isotope.	*Energy*
Radium Poisoning	an industrial disease which results from the use of radium in materials handled by employees.	*Industrial Relations*
Radius ratio	The radius of a smaller ion divided by the radius of a larger one. This ratio establishes the number of larger ions that can be adjacent to the smaller one.	*Material Process*
Radius Clause	a provision occasionally to be found in training programs where by an individual employee agrees that he will not seek employment, particularly with a competitor or join a competitive organization, for a specified period of time and within a specified geographic area.	*Industrial Relations*
Radius of influence	the maximum distance away from an air injection or extraction source that is significantly affected by a change in pressure and induced movement of air.	*Chemical*
Radon	A naturally occurring radioactive gas found in the United States in nearly all types of soil, rock, and water. It can migrate into most buildings. Studies have linked high concentrations of radon to lung cancer.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Radon survey	A geochemical survey technique which detects traces of radon gas, a product of radioactivity.	*Mining*
RAF	reactivity adjustment factor	*Petro-Chemical Abbreviations*
Raff yard	a walled-in yard on the surface in which the smiths, wrights, carpenters etc. worked, or an enclosed area for storing coal. (N. East).	*Mining*
Raffinate	The product resulting from a solvent extraction process and consisting mainly of those components that are least soluble in the solvents. The product recovered from an extraction process is relatively free of aromatics, naphthenes, and other constituents that adversely affect physical parameters.	*Petroleum Engineering*
Rag	thin-bedded or flaggy sandstone.	*Mining*
Rag pump or Rag wheel pump	a pump used in early coal mining for lifting water by manual labor from shallow depths. It consisted of a pipe with an endless chain with discs of iron and leather attached to it at short distances apart, which when moving upwards lifted the water.	*Mining*
Ragging	a handgot method of hewing coal employed generally in the thicker seams. The faces are set out on 'long awn' and the miner uses a tool, roughly five feet in length, similar to a large crowbar, known as a 'ringer', which he inserts in the cleavage planes (cleat) and levers off the coal.	*Mining*
Ragging off	trimming loose pieces of coal off the face before starting work. –see also Hewer.	*Mining*
Ragging up	putting on top clothes ready for the journey out of the pit at the end of the shift.	*Mining*
Raggling	a channel cut in the side of a roadway and covered with boarding to act as a ventilation tube. (Scot.).	*Mining*
Raiding	a term which describes the efforts of a union to bring into its organization individuals who are already members of another union.	*Industrial Relations*
Rail (method of transportation to consumers)	Shipments of coal moved to consumers by rail (private or public/commercial). Includes coal hauled to or away from a railroad siding by truck.	*Energy*
Railroad Adjustment Board	see: National Railroad Adjustment Board	*Industrial Relations*
Railroad and railway electric service	Electricity supplied to railroads and interurban and street railways, for general railroad use, including the propulsion of cars or locomotives, where such electricity is supplied under separate and distinct rate schedules.	*Energy*
Railroad Brotherhoods	this term encompasses the major labor units in the railroad industry.	*Industrial Relations*
Railroad Labor Board	the Board set up under Title 3 of the Transportation Act of 1920, which was authorized to hear and decide disputes involving grievances, rules, or working conditions.	*Industrial Relations*
Railroad locomotive	Self-propelled vehicle that runs on rails and is used for moving railroad cars.	*Energy*
Railroad Retirement Act	the first such act was established in 1934 and declared unconstitutional by the U.S. Supreme Court in Railroad Retirement Board v. Alton Railroad Company.	*Industrial Relations*
Railroad Signalmen; Brotherhood of (AFL-CIO)	the Brotherhood was organized in 1901 as an independent organization and in 1908 was able to effect a merger with a number of the other existing organizations of railroad signalmen.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Railroad Telegraphers; The Order of (AFL-CIO)	the Brotherhood of Telegraphers of the United States was known originally as District 45 of the Knights of Labor and was organized in 1882.	*Industrial Relations*
Railroad Trainmen; Brotherhood of (AFL-CIO)	the organization was established as the Brotherhood of Railroad Brakemen of the Western Hemisphere in September 1883 at Oneonta, New York.	*Industrial Relations*
Railroad Unemployment Insurance Act	a statute passed in June 1938 which provides for the payment of unemployment and sickness benefits to qualified railroad employees under a uniform nation-wide system.	*Industrial Relations*
Railroad use	Sales to railroads for any use, including that used for heating buildings operated by railroads.	*Energy*
Railroad Yardmasters of America (AFL-CIO)	organized in December 1918 when various groups or yardmasters met in Cincinnati, Ohio.	*Industrial Relations*
Railway and Airline Supervisors Association; the American (AFL-CIO)	formerly known as the American Railway Supervisors Association (AFL-CIO).	*Industrial Relations*
Railway and Steamship Clerks, Freight Handlers, Express and Station Employees; Brotherhood of (AFL-CIO)	the organization was established at Sedalia, Missouri, in 1898 and was known as the Order of Railway Clerks of America.	*Industrial Relations*
Railway Audit and Inspection Co.	one of a group of agencies which at various times during labor organizational drives provided professional espionage services to employers throughout the country.	*Industrial Relations*
Railway Brotherhoods	see: Railroad Brotherhoods	*Industrial Relations*
Railway Carmen of America; Brotherhood (AFL-CIO)	organized in 1891 in Colorado, absorbing the Brotherhood of Railway Car Repairers, the Carmen's Mutual Aid Association, and the Brotherhood of Railway Carmen.	*Industrial Relations*
Railway Conductors and Brakemen; Order of (Ind)	organized in July 1868 at Mendota, Illinois.	*Industrial Relations*
Railway Employees; International Association of (Ind)	the official publication is the Quarterly Bulletin.	*Industrial Relations*
Railway Employees' Department	one of the AFL-CIO trade and industrial departments.	*Industrial Relations*
Railway Labor Act	a federal statute enacted in 1926, based on a proposal by representatives of labor and management, to resolve labor disputes on the railroads by mediation and voluntary arbitration, with special provisions for emergency disputes.	*Industrial Relations*
Railway Labor Executives' Association	an organization, established following the passage of the 1926 Railway Labor Act, whose prime objective was to achieve cooperative action "to develop constant interpretations and utilization of all the privileges of (the Railway Labor) Act".	*Industrial Relations*
Railway Pension Act	see: Railroad Retirement Act	*Industrial Relations*
Railway Retirement Act	see: Railroad Retirement Act	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Railway Supervisors Association; the American (AFL-CIO)	see: Railway and Airline Supervisors Association; the American (AFL-CIO)	*Industrial Relations*
Railway Trainmen and Locomotive Firemen; Association of (Ind)	formerly known as the Association of Colored Railway Trainmen and Locomotive Firemen, Inc. (Ind)	*Industrial Relations*
Rain tires	Treaded tires used on a wet track. Also referred to as "Wets."	*NASCAR*
Raise	A secondary or tertiary inclined opening, vertical or near-vertical opening driven upward form a level to connect with the level above, or to explore the ground for a limited distance above one level.	*Mining*
Raise	A vertical or inclined underground working that has been excavated from the bottom upward.	*Mining*
Raised Face	(RF) that section of the face of a flange (near the I.D.) raised above the face of the flange providing sealing surface for a flat (CNAF or spiral wound) gasket or a ring groove (RTJ) to provide a seal with a Ring Gasket. (API Spec. 6A flanges only use ring gaskets). Only 6BX Open Face Flanges (API 10 10,000 and 15,000 psi) must have a raised face, generally 1/16″ or (1/8″ minimum height), API Spec. 6A permits the omission of raised faces on all other flange connectors. ANSI (ASME) Flanges do specify a raised face in class 150 to 2500	*Petroleum Engineering*
Raised faced (RF)	The raised area of a flange face which is the gasket sealing surface between mating flanges. Defined in ASME B16.5. Class 150 and 300 valves have 0.06" RF and Classes 600 and up have a 0.25" RF.	*Mechanical*
Raised faced (RF)	The raised area of a flange face which is the gasket sealing surface between mating flanges. Defined in ASME B16.5. Class 150 and 300 valves have 0.06" RF and Class 600 and up have a 0.25" RF.	*General Mechanical*
Raising	excavating a steep tunnel, or shaft, upwards, from below ground to the surface, or between two seams underground. -see also Staple shaft.	*Mining*
Rake	The trend of an ore body along the direction of its strike.	*Mining*
Rake	The trend of an orebody along the direction of its strike.	*Mining*
Rakes	another term for a set or journey of tubs. (Scot.).	*Mining*
RALT SEL	Radar altitude select.	*Aeronautical Engineering*
RAM	A single-acting cylinder with a single diameter plunger rather than a piston and rod. The plunger in a ram-type cylinder.	*Mechanical, Process, and Operations*
RAM (Random Access Memory)	Memory which contains no pre-programmed information but is loaded and/or altered by the computer system. It is of a "volatile" nature in that all the contents are lost when electrical power is removed. RAM memories are usually provided with battery backup power systems, making it "non volatile."	*Electrical Engineering*
Ram car or shuttle ram	a rubber-tired haulage vehicle that is unloaded through the use of a movable steel plate located at the back of the haulage bed.	*Energy*
Ram packer	a packing device used at the ripping of a face that employs an hydraulically driven ram to move and compact ripping dirt into a gate-side pack.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ram's head	a hand-held, electric or compressed air drill used for boring shot holes. It took its name from its distinctive shape. Also known in some areas as a 'bull's head' or a 'pig's head'.	*Mining*
Ramble	also called 'following stone'. A thin layer of shale or sandstone found lying immediately above the coal. It would be brought down with the coal when it was fired; or loose stone lying above the coal. (N. East); or any loose rock at or near the surface. (Yorks.), also called Ratchel.	*Mining*
Rambouillet	A breed of sheep that resulted from crossing Spanish Merino sheep with native French sheep, beginning about 1800. Blood lines also trace to German Merino sheep.	*Agriculture*
Ramie	A tough, natural fiber used as a filler material.	*Material Process*
Rammer	see Shotstick.	*Mining*
Ramming	the material used for closing a shot hole behind the charge. Various substances have been used. -see Stemming.	*Mining*
Ramp	An increase or decrease of a variable at a constant rate of change with respect to time.	*Electrical Engineering*
Ramp plate	an inclined plate fixed to the face side of an armored flexible conveyor; or an inclined plate used to assist loading.	*Mining*
Ramp Rate	The rate at which you can increase load on a power plant. The ramp rate for a hydroelectric facility may be dependent on how rapidly water surface elevation on the river changes.	*Energy*
Ramp Up (Supply Side)	Increasing load on a generating unit at a rate called the ramp rate.	*Energy*
Ramp	A secondary or tertiary inclined opening, driven to connect levels, usually driven in a downward direction, and used for haulage.	*Mining*
Ramp-Up (Demand-Side)	Implementing a demand-side management program over time until the program is considered fully installed.	*Energy*
Rams	Various types of rams are used in mining. Rams are used extensively on the machine-operated coalface for moving forward the conveyor system and drawing forward the hydraulic roof supports. Rams are also used for loading and offloading mine cars from the cage. Ram are usually hydraulically operated but pneumatic (compressed air) and steam operated rams have also been used.	*Mining*
Rance	a long narrow pillar or stoop left unworked to support the roof; or a small prop set to support the coal as it is being undercut. (Scot.). -see also Nogs.	*Mining*
Ranch	Narrowly defined as an establishment for raising livestock on range. However, common usage in the American West also applies the term to a large farm devoted mainly to raising a single crop or kind of animal. In this use, it is proper to refer to an apple ranch, a wheat ranch, etc. The term ranch would only be properly applied to large-scale operations.	*Agriculture*
Rancher	A person who owns or operates a ranch.	*Agriculture*
Rand Award	the arbitration award handed down in 1946 by Justice I. C. Rand of the Canadian Supreme Court in a dispute between the Ford Motor Company and its employees.	*Industrial Relations*
Rand Formula	care must be observed in using the phrase "Rand Formula" since it applies to two different and unrelated situations.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rand School of Social Science	social studies school with labor orientation located at 7 East 15th Street, New York.	*Industrial Relations*
Random	Governed by chance. See also: Randomisation	*Quality Engineering*
Random Access Memory (RAM)	Memory that can be both read and changed during computer operation. Unlike other semi-conductor memories, RAM is volatile if power to the RAM is disrupted or lost, all the data stored is lost.	*Electrical*
Random Access Memory (RAM)	Memory that can be both read and changed during computer operation. Unlike other semi-conductor memories, RAM is volatile-if power to the RAM is disrupted or lost, all the data stored is lost.	*Electronic Process*
Random allocation	A method that uses the play of chance to assign participants to comparison groups in a trial, e.g. by using a random numbers table or a computer-generated random sequence. Random allocation implies that each individual or unit being entered into a trial has the same chance of receiving each of the possible interventions. It also implies that the probability that an individual will receive a particular intervention is independent of the probability that any other individual will receive the same intervention. See also: Quasi-random allocation, Randomisation	*Quality Engineering*
Random Copolymer	A polymer in which two different mer units are randomly distributed along the molecular chain.	*Engineering Physics*
Random error	Error due to the play of chance. Confidence intervals and P values allow for the existence of random error, but not systematic errors (bias).	*Quality Engineering*
Random error, RE	An error that can be either positive or negative, the direction and exact magnitude of which cannot be exactly predicted. In contrast, systematic errors are always in one direction.	*Quality*
Random network theory	Statement that a simple oxide glass can be described as the random linkage of building blocks, such as the silica tetrahedron.	*Material Process*
Random permuted blocks	A method of randomisation that ensures that, at any point in a trial, roughly equal numbers of participants have been allocated to all the comparison groups. Permuted blocks should be used in trials using stratified randomization. Also called: Block randomisation	*Quality Engineering*
Random Rates	individualized or personalized rates of pay.	*Industrial Relations*
Random sample	A group of people selected for a study that is representative of the population of interest. This means that everyone in the population has an equal chance of being approached to participate in the survey, and the process is meant to ensure that a sample is as representative of the population as possible. It has less bias than a convenience sample: that is, a group that the researchers have more convenient access to. Randomized trials are rarely carried out on random samples.	*Quality Engineering*
Random solid solution	Solid solution in which the solute atoms are arranged in an irregular fashion.	*Material Process*
Random vibration	(See Probabilistic vibration.) One whose instantaneous magnitudes cannot be predicted. Adjective "Gaussian" applies if they follow the Gaussian distribution. May be broad-band, covering a wide, continuous frequency range, or narrow band, covering a relatively narrow frequency range. No periodic or deterministic components.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Random walk	Atomistic migration in which the direction of each step is randomly selected from among all possible orientations.	*Material Process*
Random-effects model	[In meta-analysis:] A statistical model in which both within-study sampling error (variance) and between-studies variation are included in the assessment of the uncertainty (confidence interval) of the results of a meta-analysis. See also fixed-effect model. When there is heterogeneity among the results of the included studies beyond chance, random-effects models will give wider confidence intervals than fixed-effect models.	*Quality Engineering*
Randomisation	The process of randomly allocating participants into one of the arms of a controlled trial. There are two components to randomisation: the generation of a random sequence, and its implementation, ideally in a way so that those entering participants into a study are not aware of the sequence (concealment of allocation). See also: Quasi-random allocation, Random, Random allocation	*Quality Engineering*
Randomized clinical trial	See Randomized controlled trial	*Quality Engineering*
Randomized controlled trial	An experiment in which two or more interventions, possibly including a control intervention or no intervention, are compared by being randomly allocated to participants. In most trials one intervention is assigned to each individual but sometimes assignment is to defined groups of individuals (for example, in a household) or interventions are assigned within individuals (for example, in different orders or to different parts of the body). See also: Observational study Also called: Randomized clinical trial, RCT	*Quality Engineering*
Randomized controlled trial	Study design where treatments, interventions, or enrollment into different study groups are assigned by random allocation rather than by conscious decisions of clinicians or patients. If the sample size is large enough, this study design avoids problems of bias and confounding variables by assuring that both known and unknown determinants of outcome are evenly distributed between treatment and control groups.	*Analysis*
Range	Standard aviation term Synonyms: distance; Symbols: r; Typical Units: ft,nmi - method of measurement dependent on use; Dimensions: Length.	*Aeronautical Engineering*
Range	The measurand values over which the sensor is intended to measure, specified by the upper and lower limits.	*Electrical Engineering*
Range top	The range burners or stove top and the oven are considered two separate appliances. Counted also with range tops are stand-alone "cook tops."	*Energy*
Range, Elevated-Zero	A range where the zero value of the measured variable, measured signal, etc., is greater than the lower range-value. Note: The zero may be between the lower and upper range values, at the upper range value, or above the upper range value. Note 2: Terms suppression, suppressed range or suppressed span is frequently used to express the condition in which the zero of the measured variable is greater than the lower range value. The term range, elevated zero is preferred.	*Process Control*
Range, Suppressed-Zero	A range where the zero value of the measured variable is less than the lower range value. Zero does not appear on the scale.	*Process Control*
Rangeability	The ratio of the maximum flowrate to the minimum flowrate of a meter.	*Electrical*
Range-Limit, Lower	The lowest quantity that a device can be adjusted to measure.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Range-Limit, Upper	The highest quantity that a device can be adjusted to measure.	*Process Control*
Ranging	Act of determining a range.	*Aeronautical Engineering*
Ranging drum shearer	a shearer with a drum (or drums) fitted on an arm (ranging arm) that can be moved up and down to cut a thick seam.	*Mining*
Raning	searching for coal by means of shallow pits along the line of the outcrop. (Scot.).	*Mining*
Rank	the degree of coalification or maturity of the coal; or a standard distance of 60 to 80 yards (54m to 73m) called the first 'rank', upon which a standard price was paid for 'putting' or 'drawing a 'score' of coals.	*Mining*
Rank and File	the term in the vernacular means "the working people." Actually the term applies to individual union members who have no specials status either as officers or shoop stewards in the plant.	*Industrial Relations*
Rankine (°R)	An absolute temperature scale based upon the Fahrenheit scale with 180° between the ice point and boiling point of water. 459.67°R = 0°F.	*General*
Rankine cycle	The thermodynamic cycle that is an ideal standard for comparing performance of heat-engines, steam power plants, steam turbines, and heat pump systems that use a condensable vapor as the working fluid. Efficiency is measured as work done divided by sensible heat supplied.	*Energy*
Rankine cycle engine	The Rankine cycle system uses a liquid that evaporates when heated and expands to produce work, such as turning a turbine, which when connected to a generator, produces electricity. The exhaust vapor expelled from the turbine condenses and the liquid is pumped back to the boiler to repeat the cycle. The working fluid most commonly used is water, though other liquids can also be used. Rankine cycle design is used by most commercial electric power plants. The traditional steam locomotive is also a common form of the Rankine cycle engine. The Rankine engine itself can be either a piston engine or a turbine.	*Energy*
Ranking Plan	a system of job evaluation which some claim to be the easiest and simplest way to classify jobs within a plant.	*Industrial Relations*
Ranks of coal	The classification of coal by degree of hardness, moisture and heat content. "Anthracite" is hard coal, almost pure carbon, used mainly for heating homes. "Bituminous" is soft coal. It is the most common coal found in the United States and is used to generate electricity and to make coke for the steel industry. "Subbituminous" is a coal with a heating value between bituminous and lignite. It has low fixed carbon and high percentages of volatile matter and moisture. "Lignite" is the softest coal and has the highest moisture content. It is used for generating electricity and for conversion into synthetic gas. In terms of Btu or "heating" content, anthracite has the highest value, followed by bituminous, subbituminous and lignite.	*Mining*
Rap	a sudden breaking, or settling down, of the roof under weight (S. Wales); or a bell signal to a machinery operator, (winding engineman, haulage driver etc.).	*Mining*
Rapid prototyping	A variety of techniques for quick conversion of CAD-generated product designs into useful, accurate physical models, typically using computer-controlled systems. In the stereolithography approach, controls based on CAD designs guide laser beams that create precise plastic models by polymerizing and fusing liquid resins into a laminated composite of very thin slices.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rapid solidification	Processing technique for cooling a melt below its melting point at a high quench rate (e.g. 106 °C/s) resulting in the possibility of forming an amorphous structure or metastable crystalline phases.	*Material Process*
Rapidly solidified alloy	Metal alloy formed by a rapid solidification process.	*Material Process*
Rapper wire	a mechanical bell signaling system incorporating a lever at one end and a hammer at the other connected by wire.	*Mining*
Rapping	tapping the roof to see if it is safe.	*Mining*
RAR	See Reasonable Assured Resources.	*Energy*
Rare earth elements	Relatively scarce minerals such as niobium and yttrium.	*Mining*
Rashing	coal that is breaking away from the coalface. (Mids.); or loose dirt or shaley beds of rock (S. Wales).	*Mining*
Rasping	A type of feeding by insects which rub or grate the leaf surfaces with their mouthparts to obtain particles for consumption.	*Forestry*
Rat	a derogatory and derisive slang expression frequently applied to individuals who were members of the union but who become strikebreakers and turn on their working "brothers".	*Industrial Relations*
Rat Hole - Rathole	This term can refer to a couple of things. It can mean a storage place for the Kelly which has been made in the rig floor using heavy piece of steel pipe or casing. It can also mean an extra length of hole drilled at the end of the well to allow logging tools to be able to fully analyze all of the wellbore and for other reasons related to well completion.	*Petroleum Drilling*
Ratch	a section of the coalface that a man would work in a shift (S. Derbys.), (Leics.)—see Stint; or a device used by a miner to lock up his tools. (War.).	*Mining*
Ratchel	cross-bedded, weathered sandstone.- see also Ramble.	*Mining*
Ratcher	a coal getter or collier (Leics.), (S. Derbys.).	*Mining*
Ratches	lifts (slices) taken off a coal pillar in pillar and stall working (Lancs.).	*Mining*
Rate	the sides of a gate road falling off and blocking the road (S. Staffs.).	*Mining*
Rate Action	The derivative function of a temperature controller.	*Electrical*
Rate base	The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash, working capital, materials and supplies, deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.	*Energy*
Rate Base	Value of property upon which a utility is permitted to earn a specific rate of return.	*Energy*
Rate base (electric)	The value of property, upon which, a utility is permitted to earn a specified rate of return as established by a regulatory authority. See FERC definition.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rate case	A proceeding, usually before a regulatory commission, involving the rates to be charged for a public utility service.	*Energy*
Rate Class	A group of customers identified as a class and subject to a rate different from the rates of other groups.	*Energy*
Rate Cutting	generally applies to the arbitrary reduction by an employer of an incentive rate where there has been no change in the job content.	*Industrial Relations*
Rate features	Special rate schedules or tariffs offered to customers by electric and/or natural gas utilities.	*Energy*
Rate for the Job	generally the same as the standard or basic rate which has been established in a particular plant for a particular occupation.	*Industrial Relations*
Rate gyro	A kind of gyroscope that measures rotational velocity (degrees or radians per second) around a fixed axis.	*Reliability Engineering*
Rate limiter	A filter that passes the input as the output, except that rate of change of the output is limited to a maximum absolute value; Compare: limiter.	*Aeronautical Engineering*
Rate limiting step	Slowest step in a process involving sequential steps. The overall process rate is, thereby, established by that one mechanism.	*Material Process*
Rate of return	The ratio of net operating income earned by a utility is calculated as a percentage of its rate base.	*Energy*
Rate of return on rate base	The ratio of net operating income earned by a utility, calculated as a percentage of its rate base.	*Energy*
Rate of shear	The difference between the velocities along the parallel faces of a fluid element divided by the distance between the faces.	*Oil Analysis*
Rate of Wages	the compensation or amounts of money paid to an individual per hour, per week, per month or, if on a piece or incentive rate, per unit of output.	*Industrial Relations*
Rate Range	the spread between the predetermined minimum and maximum rate for individuals performing a specific job.	*Industrial Relations*
Rate schedule (electric)	The rates, charges, and provisions under which service is supplied to the designated class of customers. See FERC definition.	*Energy*
Rate Setting	the process or procedure used by management or jointly by management and labor to set the rates for jobs in a particular plant or company.	*Industrial Relations*
Rate Structure	The design and organization of billing charges by customer class to distribute the revenue requirement among customer classes and rating period.	*Energy*
Rate Time	The time interval over which the system temperature is sampled for the derivative function.	*Electrical*
Rate time	the time interval over which the system temperature is sampled for the derivative function.	*Electronic Process*
Rate-Basing	The practice by utilities of allotting funds invested in utility Research Development Demonstration and Commercialization and other programs from ratepayers, as opposed to allocating these costs to shareholders.	*Energy*
Rated Capacity	The load which a new wire rope or wire rope sling may handle under given operating conditions and at an assumed DESIGN FACTOR.	*Wire Rope & Cable*

Term	Definition	*Industry*
Rated current	The specified servovalve input current of either polarity to produce rated flow. Rated current must be specified for a particular coil connection differential, series, or parallel, and does not include null bias current.	*Mechanical, Process, and Operations*
Rated Fatigue Pressure	The pressure that a pressure containing component is represented to sustain 10 million times without failure.	*Mechanical, Process, and Operations*
Rated Flow	The maximum flow that the power supply system is capable of maintaining at a specific operating pressure.	*Lubrication*
Rated horsepower	Nameplate horsepower of fan drivers. Unit: hp.	*Facility Engineering*
Rated Pressure	The operating pressure which is recommended for a component or a system by the manufacturer.	*Mechanical, Process, and Operations*
Rated Static Pressure	The pressure that a component can withstand without failure. Static Pressure - The pressure in a fluid at rest. (A form of "potential energy".) Suction Pressure - The absolute pressure of the fluid at the inlet side of the pump.	*Mechanical, Process, and Operations*
Ratee	the individual whose work or abilities are being rated.	*Industrial Relations*
Ratemaking Authority	The utility commission's authority as designated by a State or Federal legislature to fix, modify, and/or approve rates.	*Energy*
Rate-of-Return Rates	Rates set to the average cost of electricity as an incentive for regulated utilities to operate more efficiently at lower rates where costs are minimized.	*Energy*
Ratepayer	This is a retail consumer of the electricity distributed by an electric utility. This includes residential, commercial and industrial users of electricity.	*Energy*
Rater	the individual who actually determines the rate.	*Industrial Relations*
Rates	The authorized charges per unit or level of consumption for a specified time period for any of the classes of utility services provided to a customer.	*Energy*
Rathole	Rathole	*Petroleum Drilling*
Rating	A manufacturer's guaranteed performance of a machine, transmission line, or other electrical apparatus, based on design features and test data. The rating will specify such limits as load, voltage, temperature, and frequency. The rating is generally printed on a nameplate attached to equipment and is commonly referred to as the nameplate rating or nameplate capacity.	*Energy*
Ratio estimate	The ratio of two population aggregates (totals). For example, "average miles traveled per vehicle" is the ratio of total miles driven by all vehicles, over the total number of vehicles, within any subgroup. There are two types of ratio estimates those computed using aggregates for vehicles and those computed using aggregates for households.	*Energy*
Ratio of Gearing	Ratio of the numbers of teeth on mating gear. Ordinarily the ratio is found by dividing the number of teeth on the larger gear by the number of teeth on the smaller gear or pinion. For example, if the ratio is 2 or "2 to 1," this usually means that the smaller gear or pinion makes two revolutions to one revolution of the larger mating gear.	*Mechanical Engineering*
Ratiometric (Ratiometricity Error)	At a given supply voltage, sensor output is a proportion of that supply voltage. Ratiometricity error is the change in this proportion resulting from any change to the supply voltage. Usually expressed as a percent of full scale output.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ratiometric Measurement	A measurement technique where an external signal is used to provide the voltage reference for the dual slope A/D converter. The external signal can be derived from the voltage excitation applied to a bridge circuit or pick-off supply, thereby eliminating errors due to power supply fluctuations.	*Electrical*
Ratiometric Measurement	A measurement technique where an external signal is used to provide the voltage reference for the dual-slope A/D converter. The external signal can be derived from the voltage excitation applied to a bridge circuit or pick-off supply, thereby eliminating errors due to power supply fluctuations.	*Electronic Process*
Rational	Wise, judicious, not absurd or foolish (consistent with logic)	*Management Discussion*
Ratoon crop	A crop cultivated from the shoots of a perennial plant.	*Energy*
Rattle	A sound exemplified by shaking a steel can full of steel nuts and bolts.	*Reliability Engineering*
Rattle Chains	flat chains used for winding, about 3 to 4 inches wide with consecutive long and short links – no doubt making a rattling noise as they were used (S. Staffs.).	*Mining*
Rattle-jack or rattler	carbonaceous shale, also hoo cannel (Mids.)—see also Geyes.	*Mining*
Rattler	inferior gas coal, or sandy shale. (Scot.).	*Mining*
Rattlers	cannel coal. (Yorks.).	*Mining*
RAV	Replacement Asset Value.	*Maintenance*
Ravel	Of a road surface, to lose aggregate.	*Civil Engineering*
Ravens	an inferior, sometimes pyritous, coal at the top of the Top Beeston Seam, (Yorks.).	*Mining*
Raw	Data taken directly from the sensor; Compare: derived, estimated, filtered, measured, selected, smoothed.	*Aeronautical Engineering*
Raw Coal	Coal that has received no preparation other than possibly screening.	*Energy*
Raw Materials	Any materials that go into the final product.	*Procurement*
Raw Water	Raw water comprises the input source of water for your steam system. Raw water, whether from surface, ground, municipal, ocean or other, requires treatment before the it can be utilized. Water treatment systems can include various methods to remove color, suspended and dissolved solids, and other contaminants harmful to steam equipment. See also Water Treatment.	*Industrial*
Raw-Materials Turn Rate	A measure of asset management that typically is calculated by dividing the value of total annual shipments at plant cost (for the most recent full year) by the average raw-material value at plant cost. Plant cost includes material, labor, and plant overhead.	*Maintenance*
Rayleigh frequency distribution	A mathematical representation of the frequency or ratio that specific wind speeds occur within a specified time interval.	*Energy*
Rayon	A generic term for filaments made from various solutions of modified cellulose by pressing or drawing the cellulose solution through an orifice and solidifying it in the form of a filament. Rayon is marketed in two forms: continuous filament yarn and staple fibers of spinnable length.	*Material Process*
RBC	Rural Business-Cooperative, an organization within the USDA.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	Industry
RBD	see Block diagram	*Reliability Engineering*
RBM	See Risk-based Maintenance.	*Maintenance*
RBOB	Reformulated Gasoline Blendstock for Oxygenate Blending.	*Energy*
RBOT	rotating bomb oxidation test	*Petro-Chemical Abbreviations*
Rc	Recirculation percent	*Facility Engineering*
RCAD	abbreviation for relative change in azimuthal deviation; see table. (degrees)	*Petroleum Drilling*
RCHD	abbreviation for relative change in horizontal deviation; see table. (feet or meters)	*Petroleum Drilling*
RCIA	See: Retail Clerks International Association (AFL-CIO)	*Industrial Relations*
RCID	abbreviation for relative change in inclinational deviation; see table. (degrees)	*Petroleum Drilling*
RCM	See Reliability-Centered Maintenance.	*Maintenance*
RCRA Section 6002	Section 6002 of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, directs EPA to designate items that are or can be produced with recovered materials and to recommend practices for buying these items. Among other things, RCRA Section 6002 also provides criteria for EPA to consider when selecting items for designation, and requires procuring agencies to establish affirmative procurement programs for designated items.	*Environmental Engineering*
RCVD	abbreviation for relative change in vertical deviation; see table. (feet or meters)	*Petroleum Drilling*
RDF	See Refuse-Derived Fuel.	*Energy*
RDWW	See: Roofers, Damp and Waterproof Workers Association; United Slate, Tile and Composition (AFL-CIO)	*Industrial Relations*
RE	A term that describes a change in random error from the stable imprecision of the method (smeas). A value of 2.0 indicates a doubling of the original method standard deviation, whereas a value of 1.0 represents the original stable standard deviation. Used in our quality planning models or error budget equations to indicate the increase in random error that can be detected by a control procedure. REcrit is a special case that represents the increase in random error that needs to be detected to maintain a defined quality requirement.	*Quality*
REA	See Rural Electrification Administration.	*Energy*
REA	Rural Electrification Administration, a former USDA agency that administered loan programs for electrification and telephone service in rural areas. It was created in 1935 by executive order as an independent federal bureau and incorporated in USDA in 1939. The administration was abolished in 1994. It's functions are now performed by the Rural Utilities Service in USDA.	*Agriculture*
Reach	A level portion of a canal, between locks.	*Civil Engineering*
Reactance	A phenomenon associated with AC power characterized by the existence of a time difference between voltage and current variations.	*Energy*
Reaction	A reaction is a force exerted by a support on an object: sometimes called support reaction. Using this definition, a reaction is an external force.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reactive Maintenance	Maintenance Strategy to equipment malfunctions or break downs after they occur. Maintenance is mainly performed during irregular non-planned stops. It may be undertaken where equipment is knowingly assigned a Run-To-Failure (RTF) strategy, or No Scheduled Maintenance strategy. See Run To Failure, Breakdown Maintenance, and No Scheduled Maintenance.	*Maintenance*
Reactive power	The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive power must be supplied to most types of magnetic equipment, such as motors and transformers. Reactive power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is a derived value equal to the vector difference between the apparent power and the real power. It is usually expressed as kilovolt-amperes reactive (KVAR) or megavolt-ampere reactive (MVAR). See Apparent Power, Power, Real Power.	*Energy*
Reactive power	It is a concept that describes the loss of power in a system resulting from the production of electric and magnetic fields in it. Reactive loads in a power system drop voltage and draw current, which creates the impression that they are using up power, when they are not. This "imaginary power" or "phantom power" is called reactive power, and is measured in Volt-Amps-Reactive (VAR). Reactive power is significant because it must be provided and maintained to ensure continuous, steady voltage on transmission networks. Reactive power is produced for maintenance of the system, and not for end-use consumption. If elements of the power grid cannot get the reactive power they need from nearby sources, they will pull it across transmission lines and destabilize the grid. In this way, poor management of reactive power can cause major blackouts.	*Electrical*
REACTOR	The vessel in which chemical reactions take place during a chemical conversion type of process.	*Petroleum Engineering*
Read Only Memory (ROM)	Memory that contains fixed data. The computer can read the data, but cannot change it in any way.	*Electrical*
Read Only Memory (ROM)	Memory that contains fixed data. The computer can read the data, but cannot change it in any way.	*Electronic Process*
Reader	A bar code scanner and decoder.	*Gears*
Ready Line	See Go Line.	*Maintenance*
Reagent	a substance or solution used in a chemical reaction, especially those used in laboratory work to detect, measure, or produce other substances.	*Chemical*
Real dollars	These are dollars that have been adjusted for inflation.	*Energy*
Real Power	The component of electric power that performs work, typically measured in kilowatts (kW) or megawatts (MW)--sometimes referred to as Active Power. The terms "real" or "active" are often used to modify the base term "power" to differentiate it from Reactive Power and Apparent Power. See Apparent Power, Power, Reactive Power.	*Energy*
Real price	A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Real time	Time in a computational process which runs at the same rate as a physical process; for example, algorithms designed to run a fixed period t (filter time constants at set for t) and actually execute with frequency 1/t execute in real time; Avionics systems must run in real time.	*Aeronautical Engineering*
Real-time closed loop control	resembles **iterative closed loop control** but continuously modifies drive signals throughout the test.	*Reliability Engineering*
Real-time engineering simulation (rtes)	A simulator designed to test avionics algorithms with a pilot in the loop, consisting of a simulated cockpit, an aircraft model, sensor models, and algorithms to be tested; rtes is often used during development to check algorithms, such as the navigation, radio navigation, guidance and flight director, prior to full-scale software development; rtes gives systems engineers early insight in human factors problems, pilot complaints, algorithm bugs, instability in the algorithms, expected performance (accuracy), and pilot-machine interaction; Synonyms: piloted simulation; Compare: built-in simulation.	*Aeronautical Engineering*
Real-time feedback	Instantaneous (or nearly instantaneous) communication of electronically captured data (typically quality data) to process operators or equipment to enable rapid or automated adjustments that keep production processes operating within quality parameters.	*Quality*
Real-time Pricing	The instantaneous pricing of electricity based on the cost of the electricity available for use at the time the electricity is demanded by the customer.	*Energy*
Ream	Layers of nonhomogeneous material parallel to the surface in a transparent or translucent elastic.	*Material Process*
Reaming shell	A component of a string of rods used in diamond drilling, it is set with diamonds and placed between the bit and the core barrel to maintain the gauge (or diameter) of the hole.	*Mining*
Reaming shell	A component of a string of rods used in diamond drilling; it is set with diamonds, and placed between the bit and the core barrel to maintain the gauge of the hole.	*Mining*
Rearer coal or Rearers	steeply inclined strata, where the coal is said to 'rear up'.	*Mining*
Reason	A rational motive for a belief or action (sound judgment)	*Management Discussion*
Reasonable Price	A price that does not exceed that which would be incurred by a prudent person in the conduct of a competitive business. Reasonable price can be established by market test, price or cost analysis, or the experience and judgment of the Director of Business Services. Such judgment considers total value to the University. There is value to the University in purchases which meet the University's needs, such as those involving quality, quantity, delivery and service; and those which further the University's outreach goals. A reasonable price need not be the lowest price available, but is one which offers the highest total value to the University. For transactions above $50,000, reasonable price is established through competition sufficient to ensure an adequate market test, or set by applicable law or regulation, or supported by an appropriate price or cost analysis.	*Procurement*
Reasonableness	A test to determine if data is reasonable, for example, radar altitude must be positive, and two devices should return similar data within known limits of each other.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reasonably assured resources (RAR)	Uranium that occurs in known mineral deposits of such size, grade, and configuration that it could be recovered within the given production cost ranges, with currently proven mining and processing technology. Estimates of tonnage and grade are based on specific sample data and measurements of the deposits and on knowledge of deposit characteristics. *Note*: **RAR** corresponds to DOE's uranium reserves category.	*Energy*
Reasoning	forming conclusions, judgments or inferences	*Management Discussion*
Reasoning by Analogy	Drawing conclusion from similar situations	*Management Discussion*
Rebar	a steel rod with ridges for use in reinforced concrete.	*Petroleum Drilling*
Rebate program	A utility company-sponsored conservation program whereby the utility company returns a portion of the purchase price cost when a more energy-efficient refrigerator, water heater, air conditioner, or other appliance is purchased.	*Energy*
Reboiler	An auxiliary unit of a fractionating tower designed to supply additional heat to the lower portion of the tower.	*Petroleum Engineering*
Rebound	In shock absorbers, a rebound adjustment is a change to the dampening of the shock on the expansion stroke. Without rebound dampening, the car would tend to bounce as it passes over bumps on the track. Rebound adjustments can also affect how the weight of the car shifts around during braking, acceleration and cornering.	*NASCAR*
Reburn	An advanced co-firing technique using natural gas to reduce pollution from electric power plants.	*Energy*
Rebuttal	Overcoming your opponents arguments, continuing to build and reexplain your case	*Management Discussion*
REC	Renewable Energy Credit	*Energy*
Recalcitrant	unreactive, nondegradable; refractory.	*Chemical*
Recall	[In trial searching:] See also: Sensitivity	*Quality Engineering*
Recall bias	Systematic error due to the differences in accuracy or completeness of recall to memory of past events or experiences.	*Analysis*
Receipts	**Receipts:**	*Energy*
Receivables from municipality	All charges by the utility department against the municipality or its other departments that are subject to current settlement.	*Energy*
Received	Gas (and other fuels) physically transferred into the responding company's transportation, storage, and/or distribution facilities.	*Energy*
Receivers	see Spears.	*Mining*
Receiving	The function of receiving and processing incoming materials.	*Procurement*
Receiving Party	Entity receiving the capacity and/or energy transmitted by the transmission provider to the point(s) of delivery.	*Energy*
Recharge	Water added to an aquifer. For example, rainwater seeping through the ground. Recharge may occur artificially through injection wells or by spreading water over groundwater reservoirs. Commonly expressed as a rate or volume (i.e. inches per year).	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Recharge Area	An area where permeable soil or rock allows water to seep into the ground to replenish an aquifer. Also referred to as a recharge zone or watershed.	*Petroleum Engineering*
Recharge Basin	A basin or pit excavated for the purpose of allowing water to soak into the ground quicker than naturally-occurring recharge rates.	*Petroleum Engineering*
Recharge Boundary	An aquifer system boundary that adds water to the aquifer. Streams and lakes are typical recharge boundaries.	*Petroleum Engineering*
Recharge Rate	The quantity of water per unit of time that replenishes or refills an aquifer. Recharge rates can be influenced by factors such as soil, plant cover, water content of surface materials, and rainfall intensity.	*Petroleum Engineering*
Reciprocating (Piston) Pump	A pump in which a motor sitting above the well moves a piston up and down inside a pipe in the well casing. Working the same way as a hand pump, on the upstroke, water is pulled into the pipe. A check valve at the foot of the pipe prevents water from flowing out on the downstroke.	*Petroleum Engineering*
Reciprocating Screw	Extruder system in which the rotating screw is pushed backwards by the molten polymer collecting in front of the screw. When sufficient material has been collected, the screw moves forward and forces the material through the head and die at a high speed.	*Engineering Physics*
Reciprocation	Back-and-forth straight line motion or oscillation. REDUCED PRESSURE RANGE - The adjustment range of the regulator.	*Mechanical, Process, and Operations*
Recirculation	This term describes a condition in which a portion of the discharge air enters the tower along with the fresh air. The amount of recirculation is determined by tower design, tower placement, and atmospheric conditions. The effect is generally evaluated on the basis of the increase in the entering wet-bulb temperature compared to the ambient.	*Facility Engineering*
Reck	rubbish and debris used for packing behind roof supports. (Lancs.).	*Mining*
Reclamation	Process of restoring surface environment to acceptable pre-existing conditions. Includes surface contouring, equipment removal, well plugging, revegetation, etc.	*Energy*
Reclamation expenses	In the context of the coal operation statement of income, refers to all payments made by the company attributable to reclamation, including taxes.	*Energy*
Recloser	A circuit breaker designed to interrupt short-circuit current and reconnect the circuit after interruption.	*Electrical*
Recomplete	An operation involving any of the following:	*Petroleum Drilling*
Recomplete	An operation involving any of the following: (1) Deepening from one zone to another zone. (2) Completing well in an additional zone. (3) Plugging back from one zone to another zone. (4) Sidetracking to purposely change the location of the bottom of the well, but not including sidetracking for the sole purpose of bypassing obstructions in the borehole. (5) Conversion of a service well to an oil or gas well in a different zone. (6) Conversion of an oil or gas well to a service well in a different zone.	*Petroleum Drilling*
Reconnaissance	A preliminary survey of ground.	*Mining*
Record	A collection of unrelated information that is treated as a single unit.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Record date	The date by which a shareholder must be registered on the books of a company in order to receive a declared dividend, or to vote on company affairs.	*Mining*
Recording hygrometer or psychrometer	Any approved type of hygrometer or psychrometer equipped with automatic clocking and recording device capable of making a continuous time relative humidity autograph, or time-wet- and dry-bulb temperature autograph.	*Material Process*
Recording Number	A four digit alpha-numeric that represents the location, account, fund, sub of a department's account(s).	*Procurement*
Recover Rate	Rate at which groundwater refills the casing after the level is drawn down. Term used to specify the production rate of a well.	*Petroleum Engineering*
Recoverability	In reference to accessible coal resources, the condition of being physically, technologically, and economically minable. Recovery rates and recovery factors may be determined or estimated for coal resources without certain knowledge of their economic minability; therefore, the availability of recovery rates or factors does not predict recoverability.	*Energy*
Recoverable coal	Coal that is, or can be, extracted from a coal bed during mining.	*Energy*
Recoverable proved reserves	The proved reserves of natural gas as of December 31 of any given year are the estimated quantities of natural gas which geological and engineering data demonstrates with reasonable certainty to be recoverable in the future from known natural oil and gas reservoirs under existing economic and operating conditions.	*Energy*
Recoverable reserves	That proportion of the oil and/gas in a reservoir that can be removed using currently available techniques.	*Petroleum Drilling*
Recoverable Resources of Coal	The sum of measured resources plus indicated resources.	*Energy*
Recovered Energy	Reused heat or energy that otherwise would be lost. For example, a combined cycle power plant recaptures some of its own waste heat and reuses it to make extra electric power.	*Energy*
Recovered Materials	Waste materials and byproducts that have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process.	*Environmental Engineering*
Recovery	The amount of feed flow that is converted into filtrate flow by a membrane filtration system.	*Filtration*
Recovery	Initial state of annealing in which atomic mobility is sufficient to allow some softening of the material without a significant microstructure change.	*Material Process*
Recovery	The proportion or percentage of coal or ore mined from the original seam or deposit.	*Mining*
Recovery experiment	A method validation experiment performed to estimate proportional systematic error. A test sample is prepared by adding a standard solution of the analyte of interest to an aliquot of a patient specimen. A baseline sample is prepared by adding an equal amount of diluent or solvent to the same patient specimen. The two samples are analyzed and recovery estimated from the difference observed between the two samples divided by the amount added.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Recovery Factor	That proportion of the oil and/gas in a reservoir that can be removed using currently available techniques.	*Petroleum Drilling*
Recovery factor (coal)	The percentage of total tons of coal estimated to be recoverable from a given area in relation to the total tonnage estimated to be in the demonstrated reserve base. The estimated recovery factors for the demonstrated reserve base generally are 50 percent for underground mining methods and 80 percent for surface mining methods. More precise recovery factors can be computed by determining the total coal in place and the total recoverable in any specific locale.	*Energy*
Recovery percentage (coal)	The percentage of coal that can be recovered from the coal deposits at existing mines.	*Energy*
Recovery Time	The length of time which it takes a transducer to return to normal after applying a proof pressure.	*Electrical*
Recrystallization	Nucleation and growth of a new stress-free microstructure from a cold worked microstructure.	*Material Process*
Recrystallization	the formation of a new set of strain-free grains within a previously cold-worked material; normally an annealing heat treatment is necessary.	*Metallurgy*
Recrystallization temperature	The temperature at which atomic mobility is sufficient to affect mechanical properties as a result of recrystallization. The temperature is approximately one third to one half times the absolute melting point.	*Material Process*
RECS	See Residential Energy Consumption Survey.	*Energy*
Rectifier	A device for converting alternating current to direct current.	*Energy*
Rectifier	An electrical device used to convert alternating current (AC) into direct current (DC). (See also Inverter.)	*Electrical*
Rectifier	See Diode.	*Material Process*
Recycle gas	High hydrogen-content gas returned to a unit for reprocessing.	*Petroleum Engineering*
Recycled feeds	Feeds that are continuously fed back for additional processing.	*Energy*
Recycling	The process of converting materials that are no longer useful as designed or intended into a new product.	*Energy*
Red and yellow flag	This striped flag is displayed by corner workers to signify debris (oil, sand, water or some other substance) on the track.	*NASCAR*
Red Angus	See Angus.	*Agriculture*
Red ash	the result of colliery spoil catching fire through spontaneous combustion.	*Mining*
Red dog	A nonvolatile combustion product of the oxidation of coal or coal refuse. Most commonly applied to material resulting from in situ, uncontrolled burning of coal or coal refuse piles. It is similar to coal ash.	*Mining*
Red flag	When displayed at the start/finish line, a red flag signifies an immediate halt of the session due to a dangerous condition such as a flooded track or a car blocking the track. Corner workers around the track will display black flags when this happens, and all cars are required to stop racing and slowly return to the pits. The lap in progress is discarded, and the field reverts to the order of	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	the previous lap when racing resumes. If the race has run more that 50 percent of the laps, the chief steward has the option to declare a complete race if track conditions are not expected to improve. If a race has run less than 50 percent, it will be concluded on another date.	
Red horse	decomposed ferruginous coal measures sandstone, or masses of red clay in the Magnesium Limestone, (Yorks.).	*Mining*
Red oxide	Red iron oxide, used as filler. See also Rouge.	*Material Process*
Redd	rubble and debris usually from a roof fall. Also called 'redding', or waste and stone left over after the coal has been cleaned; or to rip or take down the roof of a roadway; or to mine pillars of coal. (Scot.).	*Mining*
Redding	clearing up, shifting and tidying up. (N. East).	*Mining*
Reddsmen	the men employed to keep the roadway open and clear of redd. (Scot.).	*Mining*
Redesign	A Term Which, In Reliability Centered Maintenance, Means Any One-Off Intervention To Enhance The Capability Of A Piece Of Equipment, A Job Procedure, A Management System Or People's Skills	*Management*
Redistribution basin	An elevated basin installed between the hot and cold water basins in a crossflow tower to maintain correct water distribution throughout the entire height of the fill.	*Facility Engineering*
Redox	short for oxidation-reduction.	*Chemical*
Redox (oxidation-reduction) reaction	A chemical reaction involving transfer or electrons from one element to another.	*Petroleum Drilling*
Redox potential	A measurement of the state of oxidation of a system.	*Energy*
Redrill footage	Occasionally, a hole is lost or junked and a second hole may be drilled from the surface in close proximity to the first. Footage drilled for the second hole is defined as "redrill footage." Under these circumstances, the first hole is reported as a dry hole (explanatory or developmental) and the total footage is reported as dry hole footage. The second hole is reported as an oil well, gas well, or dry hole according to the result. The redrill footage is included in the appropriate classification of total footage, but is not reported as a separate classification.	*Petroleum Drilling*
Reduce	to remove oxygen from (a compound)	*Materials Process*
Reduced crude	A residual product remaining after the removal by distillation of an appreciable quantity of the more volatile components of crude oil.	*Petroleum Engineering*
Reduced port	A valve port opening that is smaller than the line size or the valve end connection size.	*General Mechanical*
Reduced port	A valve port opening that is smaller than the line size or the valve end connection size.	*Mechanical*
Reduced Shank Bolt	A bolt whose shank diameter is smaller than the nominal diameter of the bolt (normally the shank diameter of such a bolt is approximately equal to the effective diameter of the thread).	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reduced Trim	Is an undersized orifice. A reduced or restricted capacity trim is used for several reasons. (1) It adapts a valve large enough to handle increased future flow requirement with trim capacity properly sized for present needs. (2) A valve with adequate structural strength can be selected and still retain reasonable travel vs. capacity relationships. (3) A valve with a large body using restricted trim can be used to reduce inlet and outlet fluid velocities. (4) It can eliminate the need for pipe reducers. (5) Errors in over sizing can be corrected by use of restricted capacity trim.	*Industrial Engineering*
Reduced use-off hours	A conservation feature consisting of manually or automatically reducing the amount of heating or cooling produced during the hours a building is not in full use.	*Energy*
Reducer	A connector having a smaller line size at one end than the other.	*General*
Reducers	Concentric and eccentric reducers. See also Pipe Fittings.	*Industrial*
Reducing Agent	A substance that cases reduction, thereby itself becoming oxidized.	*Paint and Coatings*
Reducing	Separating from foreign substances; the reduction of ores consists in extracting from them the metals they contain.	*Mining*
Reduction	A reaction in which electrons are added to the reactant. More specifically, the addition of hydrogen or the abstraction of oxygen.	*Paint and Coatings*
Redundancy	The capacity to switch from primary equipment to standby equipment automatically without affecting the process under control.	*Control Engineering*
Reed	joints or the cleavage plane in the strata and coal. (Scot.).	*Mining*
Reed Technology	Technology where the reed contacts are designed to be actuated by a magnet. When a magnetic field is brought close to the reed contacts, the contacts are drawn together to make the circuit.	*Electrical Engineering*
Reek	smoke, as in the smoke produced from a blast using powder.	*Mining*
Reel	a windlass or turn beam fixed at the top of a gug to draw up the coal, or a roller, drum or pulley at the top of an incline around which the haulage rope or chain passes. (Som.).	*Mining*
Reengineering	A one time fundamental rethinking and business process redesign to achieve dramatic improvements in performance and/or maintainability.	*Maintenance*
Reenter	To enter a previously abandoned well.	*Petroleum Drilling*
Reeve	To pass a rope through a hole or around a system of sheaves.	*Wire Rope & Cable*
Referee	Referees provide feedback to reviewers on the content and design of their Protocols and reviews. They are provided with checklists to guide and assist them in this. See also: Review	*Quality Engineering*
Referee process	System by which a review goes out to editors and external parties with content, methodological, or user expertise. These people are sometimes called external peer reviewers or referees. See also: Editorial process, Review	*Quality Engineering*
Reference	What must be achieved in order to match a plan; Synonyms: desired.	*Aeronautical Engineering*
Reference	What must be achieved in order to match a plan; Synonyms - desired.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reference acceleration (REFACC)	A guidance control law parameter, generated by the longitudinal guidance modes; Typical Units - ft/s-squared, g; Dimensions - Length/Time-squared.	*Aeronautical Engineering*
Reference acceleration gain (KLA)	A guidance control law parameter, generated by the longitudinal guidance modes; Typical Units: s; Dimensions: Time.	*Aeronautical Engineering*
Reference acceleration gain (KLA)	A guidance control law parameter, generated by the longitudinal guidance modes; Typical Units - s; Dimensions - Time.	*Aeronautical Engineering*
Reference Change Value (RCV)	An uncertainty term that expresses the difference that must be observed before a change of patient values should be considered clinically important. Defined by Fraser as a function of the analytical variation and the within-subject biologic variation.	*Quality*
Reference interval	A particular statistical range, rather than the entire range of observed reference values. Commonly used to characterize the range of test results expected for a defined group of people.	*Quality*
Reference interval experiment	A method evaluation experiment in which specimens are collected from selected individuals in defined states of health in order to characterize the expected range of test values for that population.	*Quality*
Reference Junction	The cold junction in a thermocouple circuit which is held at a stable, known temperature. The standard reference temperature is 0°C (32°F). However, other temperatures can be used.	*Electrical*
Reference Junction	The cold junction in a thermocouple circuit which is held at a stable known temperature. The standard reference temperature is 0°C (32°F). However, other temperatures can be used.	*Electronic Process*
Reference Manager	A software package designed to manage bibliographic references. Sometimes confusingly referred to as RefMan (see RevMan). Examples of other similar packages are Papyrus and ProCite.	*Quality Engineering*
Reference Mark	Any diagnostic point or mark which can be used to relate a position during rotation of a part to its location when stopped.	*Electronic Process*
Reference material, RM	"A material or substance, one or more of whose property values are sufficiently homogeneous and well established to be used for the calibration of an apparatus, the assessment of a measurement method, or for assigning values to materials." [CLSI] See also certified reference material.	*Quality*
Reference method	"A thoroughly investigated method, in which exact and clear descriptions of the necessary conditions and procedures are given for the accuracy determined of one or more property values, and in which documented accuracy and precision of the method are commensurate with the method's use for assessing the accuracy of other methods for measuring the same property values, or for assigning reference method values to reference materials." [CLSI]	*Quality*
Reference month	The calendar month and year to which the reported cost, price, and volume information relates.	*Energy*
Reference Performance	Performance attained under reference operating conditions. Note: Performance includes such things as accuracy, dead band, repeatability, hysteresis, linearity, etc.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	Industry
Reference Plane	Any plane perpendicular to the shaft axis to which an amount of unbalance is referred.	*Electronic Process*
Reference population	The population that the results of a study can be generalized to. See also: External validity	*Quality Engineering*
Reference values	All of the values observed for a particular determination when sampling a population of individuals in defined states of health.	*Quality*
Reference year	The calendar year to which the reported sales volume information relates.	*Energy*
Referral filter bias	The sequence of referrals that may lead patients from primary to tertiary centers raises the proportion of more severe or unusual cases, thus increasing the likelihood of adverse or unfavorable outcomes.	*Analysis*
Refined coal	A coal product that is created when impurities and/or moisture are removed to improve heat content and reduce emissions. Includes any coal that meets the IRS definition of refined coal (Notice 2010-54 or any superseding IRS notices). Does not include coal processed by coal preparation plants.	*Energy*
Refined petroleum products	Refined petroleum products include but are not limited to gasolines, kerosene, distillates (including No. 2 fuel oil), liquefied petroleum gas, asphalt, lubricating oils, diesel fuels, and residual fuels.	*Energy*
Refiner	A firm or the part of a firm that refines products or blends and substantially changes products, or refines liquid hydrocarbons from oil and gas field gases, or recovers liquefied petroleum gases incident to petroleum refining and sells those products to resellers, retailers, reseller/retailers or ultimate consumers. "Refiner" includes any owner of products that contracts to have those products refined and then sells the refined products to resellers, retailers, or ultimate consumers.	*Energy*
Refiner acquisition cost of crude oil	The cost of crude oil, including transportation and other fees paid by the refiner. The composite cost is the weighted average of domestic and imported crude oil costs. Note: The refiner acquisition cost does not include the cost of crude oil purchased for the Strategic Petroleum Reserve (SPR).	*Energy*
Refinery	An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.	*Energy*
Refinery and blender net inputs	Raw materials, unfinished oils, and blending components processed at refineries, or blended at refineries or petroleum storage terminals to produce finished petroleum products. Included are gross inputs of crude oil, natural gas plant liquids, other hydrocarbon raw materials, hydrogen, oxygenates (excluding fuel ethanol), and renewable fuels (including fuel ethanol). Also included are net inputs of unfinished oils, motor gasoline blending components, and aviation gasoline blending components. Net inputs are calculated as gross inputs minus gross production. Negative net inputs indicate gross inputs are less than gross production. Examples of negative net inputs include reformulated gasoline blendstock for oxygenate blending (RBOB) produced at refineries for shipment to blending terminals, and unfinished oils produced and added to inventory in advance of scheduled maintenance of a refinery crude oil distillation unit.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Refinery and blender net production	Liquefied refinery gases, and finished petroleum products produced at a refinery or petroleum storage terminal blending facility. Net production equals gross production minus gross inputs. Negative net production indicates gross production is less than gross inputs for a finished petroleum product. Examples of negative net production include reclassification of one finished product to another finished product, or reclassification of a finished product to unfinished oils or blending components.	*Energy*
Refinery capacity utilization	Ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units.	*Energy*
Refinery fuel	Crude oil and petroleum products consumed at the refinery for all purposes.	*Energy*
Refinery gas	Still gas consumed as refinery fuel.	*Energy*
Refinery input, crude oil	Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).	*Energy*
Refinery input, total	The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.	*Energy*
Refinery losses and gains	Processing gain and loss that takes place during the refining process itself. Excludes losses that do not take place during the refining process, e.g., spills, fire losses, and contamination during blending, transportation, or storage.	*Energy*
Refinery olefins	Subset of olefinic hydrocarbons (olefins) produced at crude oil refineries, including ethylene, propylene, butylene, and isobutylene.	*Energy*
Refinery output	The total amount of petroleum products produced at a refinery. Includes petroleum consumed by the refinery.	*Energy*
Refinery production	Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount that is reprocessed (input) or reclassified to become another product during the same month. Refinery production of unfinished oils and motor and aviation gasoline blending components appear on a net basis under refinery input.	*Energy*
Refinery yield	Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished aviation gasoline.	*Energy*
Refinery	The facility where the characteristics of petroleum or petroleum products are changed.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Refinery-grade butane	A refinery-produced hydrocarbon product that is composed predominantly of normal butane and/or isobutane, and may also contain propane and/or natural gasoline. This product may also contain significant volumes of olefinic hydrocarbons.	*Energy*
Refining	Series of processes to convert crude oil and its fractions into finished petroleum products, including thermal cracking, catalytic cracking, polymerization, alkylation, reforming, hydrocracking, hydroforming, hydrogenation, hydrogen treating, Hydrofining®, solvent extraction, dewaxing, de-oiling, acid treating, clay filtration and deasphalting.	*Lubrication*
Refining	A series of processes for converting crude oil and its fractions to finished petroleum products. Following distillation, a petroleum fraction may undergo one or more additional steps to purify or modify it. These refining steps include; thermal cracking, catalytic cracking, polymerization, alkylation, reforming, hydrocracking, hydroforming, hydrogenation, hydrogen treating, hydrofining, solvent extraction, dewaxing, deoiling, acid treating, clay filtration, and deasphalting. Refined lubricating oils may be blended with other lube stocks, and additives may be incorporated, to impart special properties.	*Lubrication*
Refinishing	To apply a new coat of wax or floor finish to a floor.	*Chemistry*
Reflectance	Fraction of light reflected at an interface.	*Material Process*
Reflection	Deflection of a light beam at the interface between two media.	*Engineering Physics*
Reflection rules	Summary of which crystal planes in a given structure cause x-ray diffraction.	*Material Process*
Reflective film	Transparent covering for glass that helps keep out heat from the sun.	*Energy*
Reflective Scan	A scanning technique in which the light source is aimed at a reflective surface to illuminate the photosensor. Retroreflective, specular, diffuse scan and convergent beam are all reflective scan techniques.	*Electrical Engineering*
Reflectivity	The ratio of the energy carried by a wave after reflection from a surface to its energy before reflection.	*Energy*
Reflectivity	Amount of light reflected back by the surface upon which the bar code is printed.	*Gears*
Reflex	An angle that measures between 180° and 360°.	*Math*
Reflux	The portion of the distillate returned to the fractionating column to assist in attaining better separation into desired fractions.	*Petroleum Engineering*
Reforestation	Replanting of forests on lands that have recently been harvested or otherwise cleared of trees.	*Energy*
Reformate	An upgraded naphtha resulting from catalytic or thermal reforming.	*Petroleum Engineering*
Reforming	The thermal or catalytic conversion of petroleum naphtha into more volatile products of higher octane number. It represents the total effect of numerous simultaneous reactions such as cracking, polymerization, dehydrogenation, and isomerization.	*Petroleum Engineering*
Reformulated blendstock for oxygenate blending (RBOB)	Motor gasoline blending components intended for blending with oxygenates to produce finished reformulated gasoline.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reformulated gasoline	Finished gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. It includes gasoline produced to meet or exceed emissions performance and benzene content standards of federal-program reformulated gasoline even though the gasoline may not meet all of the composition requirements (e.g. oxygen content) of federal-program reformulated gasoline. Note: This category includes Oxygenated Fuels Program Reformulated Gasoline (OPRG). Reformulated gasoline excludes Reformulated Blendstock for Oxygenate Blending (RBOB) and Gasoline Treated as Blendstock (GTAB).	*Energy*
Refraction	Bending of a light beam upon passing from one medium into another.	*Engineering Physics*
Refractive Index	The ratio of the velocity of light in a vacuum to the velocity of light in some medium.	*Engineering Physics*
Refractive index Fundamental optical property. The ratio of the velocity of light in a vacuum to its velocity in the substance. It is also the ratio of the sine of the angle of incidence to the sine of the angle of refraction	Refractive index Fundamental optical property. The ratio of the velocity of light in a vacuum to its velocity in the substance. It is also the ratio of the sine of the angle of incidence to the sine of the angle of refraction.	*Material Process*
Refractory	a metal or ceramic that may be exposed to extremely high temperatures without deteriorating rapidly or without melting.	*General Engineering*
Refractory	High temperature resistant material, such as many of the common ceramic oxides.	*Material Process*
Refractory index	a measure of the ability of a substance to be biodegraded by bacterial activity. The lower the refractory index, the greater the biodegradability.	*Chemical*
Refractory metal	Metals and alloys, such as molybdenum, that are resistant to high temperatures.	*Material Process*
Refractory Metal Thermocouple	A class of thermocouples with melting points above 3600°F. The most common are made from tungsten and tungsten/rhenium alloys, Types G and C. They can be used for measuring high temperatures up to 2200°C (4000°F) in non-oxidizing, inert, or vacuum environments.	*Electrical*
Refractory Metal Thermocouple	A class of thermocouples with melting points above 3600°F. The most common are made from tungsten and tungsten/rhenium alloys Types G and C. They can be used for measuring high temperatures up to 4000°F (2200°C) in non-oxidizing, inert, or vacuum environments.	*Electronic Process*
Refractory ore	Ore that resists the action of chemical reagents in the normal treatment processes and which may require pressure leaching or other means to effect the full recovery of the valuable minerals.	*Mining*
Refrigeration Compressor	A special type of compressor typically used for refrigeration, heat pumping and air conditioning. They are made to turn low-pressure gases into high-pressure and high-temperature gases. The three main types of refrigeration compressors are screw compressors, scroll compressors and piston compressors.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Refrigeration unit	Lowers the temperature through a mechanical process. In a typical refrigeration unit, electricity powers a motor that runs a pump to compress the refrigerant to maintain proper pressure. (A "refrigerant" is a substance that changes between liquid and gaseous states under desirable temperature and pressure conditions.) Heat from the compressed liquid is removed and discharged from the unit and the refrigerant then evaporates when pressure is reduced. The refrigerant picks up heat as it evaporates and it returns to the compressor to repeat the cycle. A few refrigeration units use gas (either natural gas or LPG) in an absorption process that does not use a compressor. The gas is burned to heat a chemical solution in which the refrigerant has been absorbed. Heating drives off the refrigerant which is later condensed. The condensed refrigerant evaporates by a release of pressure, and it picks up heat as it evaporates. The evaporated refrigerant is then absorbed back into the chemical solution, the heat is removed from the solution and discharged as waste heat, and the process repeats itself. By definition, refrigerators, freezers, and air-conditioning equipment all contain refrigeration units.	*Energy*
Refrigerator Oil	The lubricant added to the working fluid in an expansion-type cooling unit which serves to lubricate the pump mechanism.	*Lubrication*
Refuge holes	see Manholes.	*Mining*
Refunding	Retirement of one security issue with proceeds received from selling another. Refunding provides for retiring maturing debt by taking advantage of favorable money market conditions.	*Energy*
Refuse bank	A repository for waste material generated by the coal cleaning process.	*Energy*
Refuse mine	A surface mine where coal is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.	*Energy*
Refuse recovery	The recapture of coal from a refuse mine or the coal recaptured by that process. The resulting product has been cleaned to reduce the concentration of noncombustible materials.	*Energy*
Refuse-derived fuel (RDF)	A fuel produced by shredding municipal solid waste (MSW). Noncombustible materials such as glass and metals are generally removed prior to making RDF. The residual material is sold as-is or compressed into pellets, bricks, or logs. RDF processing facilities are typically located near a source of MSW, while the RDF combustion facility can be located elsewhere.	*Energy*
Regeneration	In a catalytic process the reactivation of the catalyst, sometimes done by burning off the coke deposits under carefully controlled conditions of temperature and oxygen content of the regeneration gas stream.	*Petroleum Engineering*
Regeneration cut	A cutting strategy in which old trees are removed in order to reestablish a new stand of seedlings.	*Forestry*
Regenerative braking	A braking method that is used to recoup some of the energy lost as vehicles slow down or brake against an incline (downhill). It exploits the ability of electric motors to work as generators during breaking. This enables the mechanical energy from the load to be converted into electric energy and returned to the electricity supply systems for use either by other vehicles, or by the braking vehicle at a later time if onboard energy storage systems such as batteries or super-capacitors are available. The method can be used to improve the energy efficiency of cranes and elevator systems, trains and hybrid cars.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Regenerative circuit	A circuit in which pressure fluid discharged from a component is re-turned to the system to reduce flow input requirements. Often used to speed up the action of a cylinder by directing discharged oil from the rod end to the piston end.	*Mechanical, Process, and Operations*
Regenerative energy	Energy that is not obtained from fossil energy carriers but from renewable resources such as wood or from water power or solar radiation.	*Thermal Management*
Regional metamorphism	Metamorphism caused by both the heat of igneous processes and tectonic pressure.	*Mining*
Regional Power Exchange	An entity established to coordinate short-term operations to maintain system stability and achieve least-cost dispatch. The dispatch provides back-up supplies, short-term excess sales, reactive power support, and spinning reserve. The pool may own, manager and/or operate the transmission lines or be an independent entity that manages the transactions between entities.	*Energy*
Regional processor	A company that processes and packages fresh produce at a regional location, usually for markets beyond the local area.	*Agriculture*
Regional Reliability Councils	Regional organizations charged with maintaining system reliability even during abnormal bulk power conditions such as outages and unexpectedly high loads.	*Energy*
Regional reserves, regional reserve estimates (coal)	Same as reserves; alternative wording is used by EIA to distinguish regional reserves, which are derived by factoring (downward) from a demonstrated reserve base for one or more study areas or regions, from reserves at active mines, which are aggregated (upward) from reserve estimates reported by individual mines on Form EIA-7A.	*Energy*
Regional Transmission Group	An organization approved by a Commission to coordinate transmission planning (and expansion), operation, and use on a regional basis.	*Energy*
Re-girder	to re-open a roadway that has closed due to roof weight and reset new supports or girders. –see also Resetting.	*Mining*
Register	A storage device with a specific capacity, such as a bit, byte or word.	*General Engineering*
Register of controlled trials	See Specialized register	*Quality Engineering*
Registered lands	A permit-only hunting program in which land is registered with and patrolled by the Wildlife Resources Commission.	*Forestry*
Regression analysis	A statistical modeling technique used to estimate or predict the influence of one or more independent variables on a dependent variable, e.g. the effect of age, sex, and educational level on the prevalence of a disease. Logistic regression and meta-regression are types of regression analysis.	*Quality Engineering*
Regression equation	The equation for the line obtained in linear regression calculations (Y = a + bX). This equation is used to calculate the amount of systematic error from the comparison of methods experiment. For a concentration where medical interpretation of the test value is critical (called a medical decision level, Xc), the corresponding value by the test method can be calculated from the regression equation (Yc = a + bXc). The amount of systematic error, SE, is the difference between Yc and Xc.	*Quality*
Regression statistics	Used here to refer to the terms that are commonly calculated, i.e., the slope, y-intercept, and standard deviation about the regression line.	*Quality*

Term	Definition	*Industry*
Regrind	Waste material such as sprues, runners, excess parison material and reject parts from injection molding, blow molding and extrusion operations, which has been reclaimed by shredding or granulating. Regrind is usually mixed with virgin compound at a predetermined percentage for reprocessing.	*Engineering Physics*
Regular gasoline	Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note Octane requirements may vary by altitude.	*Energy*
Regular port valve	A term usually applied to plug valves. The "regular" port of such a valve is customarily about 40% of the line pipe area. Hence, it corresponds to a venture or reduced bore valve of like nominal pipe size. Venturi ball valves are often a logical alternative to plug valves with advantages in price, torque, and low maintenance.	*Mechanical*
Regulated entity	For the purpose of EIA's data collection efforts, entities that either provide electricity within a designated franchised service area and/or file forms listed in the Code of Federal Regulations, Title 18, part 141 are considered regulated entities. This includes investor-owned electric utilities that are subject to rate regulation, municipal utilities, federal and state power authorities, and rural electric cooperatives. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Power Act (PURPA) are not considered regulated entities.	*Energy*
Regulated streamflow	The rate of flow past a given point during a specified period that is controlled by reservoir water release operation.	*Energy*
Regulation	The governmental function of controlling or directing economic entities through the process of rulemaking and adjudication.	*Energy*
Regulation %	The ratio of voltage extremes due to loading or line fluctuations. The process of holding constant a quantity such as voltage by means of a system that automatically corrects errors. For example, as more current is drawn from a battery or power supply, the output voltage tends to decrease (load regulation). With a power supply derived from AC, the DC output voltage can vary with the variation in AC voltage (line regulation).	*Electrical Engineering*
Regulation	An activity of government to control or direct economic entities by rulemaking and adjudication.	*Energy*
Regulation, procedures, and practices	A utility commission carries out its regulatory functions through rulemaking and adjudication. Under rulemaking, the utility commission may propose a general rule of regulation change. By law, it must issue a notice of the proposed rule and a request for comments is also made; the Federal Energy Regulatory Commission publishes this in the Federal Register. The final decision must be published. A utility commission may also work on a case-by-case basis from submissions from regulated companies or others. Objections to a proposal may come from the commission or intervenors, in which case the proposal must be presented to a hearing presided over by an administrative law judge. The judge's decision may be adopted, modified, or reversed by the utility commissioners, in which case those involved can petition for a rehearing and may appeal a decision through the courts system to the U.S. Supreme Court.	*Energy*
Regulator	A throttling valve which exercises automatic control over some variable (usually pressure). Not an on-off valve.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Regulator	Device (wall, door) used to control the volume of air in an air split.	*Mining*
Regulator, Air line pressure	A regulator which transforms a fluctuating air pressure supply to provide a constant lower pressure output.	*Mechanical, Process, and Operations*
Regulatory Compact	Under this compact, utilities are granted service territories in which they have the exclusive right to serve retail customers. In exchange for this right, utilities have an obligation to serve all consumers in that territory on demand.	*Energy*
Reheat Blow Molding	In reheat blow molding, parisons are stretched axially by an external gripper or an internal stretch rod, and then stretched radially by blow air to form the finished product. This process orients the molecules biaxially resulting in the improved barrier properties.	*Engineering Physics*
Reheating coils	A part of some air-conditioning systems. Electric coils in air ducts used primarily to raise the temperature of circulated air after it was over-cooled to remove moisture. Some buildings have reheating coils as their sole heating source.	*Energy*
Reid Vapor Pressure (RVP)	An indirect measure of the rate at which petroleum liquids evaporate. It is the absolute vapor pressure of a crude oil, or of single or mixed liquid petroleum products, as measured by the Reid Method (ASTM Method D 323).	*Energy*
Reimbushment	Reversing one's course along previous tracks (e.g. in snow)	*Breakroom*
Reinforced Plastic	Molded, formed, filament wound, or shaped plastic parts consisting of resins to which reinforcing fibers, mats, fabrics, etc., have been added before the forming operation. Strength properties are improved.	*Engineering Physics*
Reinforcement	In branch connections, reinforcement is material around a branch opening that serves to strengthen it. The material is either integral in the branch components or added in the form of weld metal, a pad, a saddle, or a sleeve. In welding, reinforcement is weld metal in excess of the specified weld size.	*Maintenance and Repair*
Reinforcement Weld	Weld metal on the face of a groove weld in excess of the metal necessary for the specified weld size.5	*Maintenance and Repair*
Reinforcing steel	steel embedded in concrete to increase the concrete's load strength	*Materials Process*
Reinjected	The forcing of gas under pressure into an oil reservoir in an attempt to increase recovery.	*Energy*
Reinserted fuel	Irradiated fuel that is discharged in one cycle and inserted in the same reactor during a subsequent refueling. In a few cases, fuel discharged from one reactor has been used to fuel a different reactor.	*Energy*
Reinsertion	The process of returning nuclear fuel that has been irradiated and then removed from a reactor back into a reactor for further irradiation. Reinserted assemblies are assemblies that have been irradiated in a cycle, were not in the core in the prior cycle (cycle N), and which are in the core in the current cycle (cycle N+1).	*Energy*
Reject	To disallow a position update, usually by an operator; Compare: accept.	*Aeronautical Engineering*
Relative	Applies to measurements, in a non-standard, moving reference, as opposed to fixed reference; Compare: absolute.	*Aeronautical Engineering*
Relative	Applies to measurements, in a non-standard, moving reference, as opposed to fixed reference; Compare - absolute.	*Aeronautical Engineering*

Term	Definition	Industry
Relative bearing	Angle from aircraft center line to bearing of the destination; Symbols: B sub R; Typical Units: rad, deg.	*Aeronautical Engineering*
Relative change in azimuthal deviation	quantifies how azimuthal deviation is changing. Same as RCAD. (degrees/100 feet, or degrees/30.48 meters)	*Petroleum Drilling*
Relative change in horizontal deviation	quantifies how horizontal deviation is changing, and leads msHD considerably. Same as RCHD. (feet/1000 feet, or meters/304.8 meters)	*Petroleum Drilling*
Relative change in inclinational deviation	quantifies how inclinational deviation is changing. Same as RCID. (degrees/100 feet, or degrees/30.48 meters)	*Petroleum Drilling*
Relative change in vertical deviation	quantifies how vertical deviation is changing, and leads msVD considerably. Same as RCVD. (feet/1000 feet, or meters/304.8 meters)	*Petroleum Drilling*
Relative Humidity	The ratio of the mole fraction of water vapor present in the air to the mole fraction of water vapor present in saturated air at the same temperature and barometric pressure.	*Facility Engineering*
Relative humidity	Ratio of actual density or pressure, of existing moisture vapor, to maximum possible density, or pressure, at the same temperature, expressed as a percentage.	*Material Process*
Relative Losses	The production deferred or lost due to the specified element or system, as a percentage of the total deferment or losses.	*Maintenance*
Relative Magnetic Permeability	The ratio of the magnetic permeability of some medium to that of a vacuum.	*Engineering Physics*
Relative permeability	The magnetic permeability of a solid divided by the permeability of a vacuum.	*Material Process*
Relative risk	See Risk ratio	*Quality Engineering*
Relative risk (RR, or risk ratio)	The ratio of the probability of developing, in a specified period of time, an outcome among those receiving the treatment of interest or exposed to a risk factor, compared with the probability of developing the outcome if the risk factor or intervention is not present (i.e., the ratio of risk in the treated group to the risk in the control group: RR = EER/CER)	*Analysis*
Relative risk reduction	The proportional reduction in risk in one treatment group compared to another. It is one minus the risk ratio. If the risk ratio is 0.25, then the relative risk reduction is 1-0.25 = 0.75, or 75%.	*Quality Engineering*
Relative risk reduction (RRR)	The extent to which a treatment reduces a risk, in comparison with patients not receiving the treatment of interest (i.e., the percent reduction in events in treated compared to controls: RRR = [(CER-EER)/CER]).	*Analysis*
Relaxation	The loss of clamping force in a bolt that occurs typically without any nut rotation occurring. Commonly occurs as a result of embedment but can also be due to gasket creep, metal creep (at elevated temperatures), differential thermal expansion and stress relaxation.	*Maintenance*
Relaxation time	The time necessary for the stress on a polymer to fall to 0.37(=1/e) of the initial applied stress.	*Material Process*
Relay (Mechanical)	An electromechanical device that completes or interrupts a circuit by physically moving electrical contacts into contact with each other.	*Electrical*
Relay (Solid State)	A solid state switching device which completes or interrupts a circuit electrically with no moving parts.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Relays	1. A switch that can be operated remotely. 2. Control and protection relays are switches used to signal and control the operation of electrical equipment and systems. They include electronic and electromechanical relays and components; high-voltage protection, substation control and communications; automated substation components; and distribution relays.	*Electrical*
Release Force	The level to which force on the plunger must be reduced to allow the contacts to snap from the operated contact position to the normal contact position.	*Electrical Engineering*
Release mark	A surface irregularity in a molded piece, usually occurring at the corners which are the final point of release for the mold. See also Air locks.	*Material Process*
Release Travel	An operating characteristic of a switch, release travel is the distance through which the plunger moves when traveled from the release point to the free position. As a characteristic of the actuation applied to the switch, release travel is the distance the plunger is released past the release point.	*Electrical Engineering*
Relevant Range	The range of activity within which assumptions about variable and fixed cost behavior are valid.	*Procurement*
Reliability	Electric system reliability has two components - adequacy and security. Adequacy is the ability of the electric system to supply the aggregate electric demand and energy requirements of the customers at all times, taking into account scheduled and unscheduled outages of system facilities. Security is the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system facilities.	*Energy*
Reliability (electric system)	A measure of the ability of the system to continue operation while some lines or generators are out of service. Reliability deals with the performance of the system under stress.	*Energy*
Reliability analysis	A method of analysing a system design evaluating reliability related issues with the aim of improving the field reliability of the system. (See Life Data Analysis)	*Reliability Engineering*
Reliability Block Diagram	A pictorial representation of the logical interdependencies (parallel or series paths) required for the system under analysis to function correctly.	*Maintenance*
Reliability Calculations	These are calculations performed in order to quantify the reliability of a system prior to its design, development and production.	*Reliability Engineering*
Reliability Centered Maintenance	A Structured Process, Originally Developed In The Airline Industry, But Now Commonly Used In All Industries To Determine The Equipment Maintenance Strategies Required For Any Physical Asset To Ensure That It Continues To Fulfill Its Intended Functions In Its Present Operating Context. A Number Of Books Have Been Written On The Subject, But None Better Than Moubray's Book, Rcm Ii.	*Plant Engineering*
Reliability coordinator (electric)	The entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operators vision. See NERC definition.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reliability Councils	Regional reliability councils were organized after the 1965 northeast blackout to coordinate reliability practices and avoid or minimize future outages. They are voluntary organizations of transmission-owning utilities and in some cases power cooperatives, power marketers, and non-utility generators. Membership rules vary from region to region. They are coordinated through the North American Electric Reliability Council.	*Energy*
Reliability Engineering	See Maintenance Engineering.	*Maintenance*
Reliability Engineering	Deals with the longevity and dependability of parts, products and systems. More specifically it is about controlling risk. It incorporates a wide variety of analytical techniques designed to help engineers understand the failure modes and patterns of parts, products and systems.	*Reliability Engineering*
Reliability Enhancement Test (RET)	A term sometimes used to describe a range of design validation and accelerated life testing processes.	*Reliability Engineering*
Reliability growth	The analysis of the change in reliability over time, usually applied to products under development. Reliability growth analysis provides the means by which the reliability, mean life or failure rate is tracked over time, allowing the user to predict future reliability values based on the current rate of growth of the reliability measurement of interest.	*Reliability Engineering*
Reliability importance	See Importance measure	*Reliability Engineering*
Reliability life data analysis	See Life data analysis	*Reliability Engineering*
Reliability test design	The process of designing plans for reliability testing.	*Reliability Engineering*
Reliability testing	Testing units to failure in order to obtain raw failure time data for life data analysis.	*Reliability Engineering*
Reliability-Centered Maintenance (RCM)	A structured process, originally developed in the airline industry, to determine the equipment maintenance strategies required for any physical asset to ensure that it continues to fulfill its intended functions in its present operating context. The assets are decomposed, extensively analyzed and described, failure modes and effects analyses (FMEA) are made for the most critical components, and the maintenance organization and processes are carefully (re) defined.	*Reliability Engineering*
Relief Annealing	See "ANNEALING"	*Metallurgy*
Relief lines	Parallel scratches or projecting ridges distributed over a considerable area of sheet, and usually produced during a slicing operation. See Sheeter lines.	*Material Process*
Relief valve	A quick acting, spring loaded valve that opens (relieves) when the pressure exceeds the spring setting. Often installed on the body cavity of ball and gate valves to relieve thermal overpressure in liquid services. See "B.R.V." and Section 2.	*Mechanical*
Relieve	Process of reducing dimensions so that one part will fit another.	*Metallurgy*
Relocation of tailings	Relocation of tailings is sometimes necessary if the pile poses a threat to inhabitants or the environment, for example, through being situated too close to populated areas, on top of aquifers or other sources of water, or in unstable areas such as flood plains or faults near earthquake zones.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Remaining (resources/ reserves) (coal)	The amount of coal in the ground after some mining, excluding coal in the ground spoiled or left in place for which later recovery is not feasible.	*Energy*
Remaining Useful Life	An opinion (based on data, observations, history, records, exposure, etc.) of the number of years before a fluid, system or component will require replacement or reconditioning.	*Lubrication*
Remanent induction	The induction (of a feromagnetic material) remaining after the applied magnetic field is removed.	*Material Process*
Remanent polarization	The polarization (of a feromagnetic material) remaining after the applied magnetic field is removed.	*Material Process*
Remediation	Containment, treatment, or removal of contaminated groundwater. May include treatment, containment, or removal of contaminated soil above the water table.	*Petroleum Engineering*
Remote	Not hard-wired; communicating via switched lines, such as telephone lines. Usually refers to peripheral devices that are located at a site away from the CPU.	*Electrical*
Remote	A hydraulic function such as a cylinder which is separate from its supply source. Usually connected to the source by flexible hoses.	*Mechanical, Process, and Operations*
Remote control	The operation of a valve or other flow control device from a point at a distance from the device being controlled. Can be accomplished by electrical, pneumatic or hydraulic means.	*Mechanical*
Remote Maintenance	Maintenance carried out without physical access of the personnel to the asset.	*Maintenance*
Remote terminal (RT)	Term defining role of a device on a MIL-STD-1553 bus as being a slave; Compare: bus controller.	*Aeronautical Engineering*
Remote Terminal Unit	Signal Data Converter.	*Aeronautical Engineering*
Remote Terminal Unit (RTU)	Remote terminal units collect data from points around a power transmission and distribution network and transmit the information to a central location. They are typically used to control and monitor power networks, and are components of supervisory control and data acquisition (SCADA) systems.	*Electrical*
Remote-mount	An installation in which a positioner is not mounted directly on the actuator, but in a location some distance away. This can be done for convenience or to protect the electronics of the device from harsh conditions, such vibration or radiation.	*Mechanical*
Renard series	See Preferred Numbers.	*Mechanical, Process, and Operations*
Rendering plant	a place where lard, tallow, and oil are extracted from animal parts	*Agriculture*
Rendezvous	To meet with another aircraft in the air, for refueling or other mission objectives.	*Aeronautical Engineering*
Rendezvous approach	To approach a planned rendezvous point.	*Aeronautical Engineering*
Renewable diesel fuel (other)	Diesel fuel and diesel fuel blending components produced from renewable sources that are coprocessed with petroleum feedstocks and meet requirements of advanced biofuels. **Note:** This category "other" pertains to the petroleum supply data system.	*Energy*
Renewable Energy	Electricity generated from sources such as solar, wind, and geothermal power rather than from fossil fuels.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Renewable Energy	Energy that is capable of being renewed by the natural ecological cycle.	*Energy*
Renewable energy resources	Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.	*Energy*
Renewable fuels (other)	Fuels and fuel blending components, except biomass-based diesel fuel, renewable diesel fuel, and fuel ethanol, produced from renewable biomass. **Note:** This category "other" pertains to the petroleum supply data system.	*Energy*
Renk	see Rank.	*Mining*
Rennet	The milk coagulating enzyme of the stomach.	*Material Process*
Rennet casein	Casein coagulated from skim milk with rennet, used in the manufacture of casein plastics.	*Material Process*
Rent	cleavage in the coal that has a smooth parting, usually with sooty coal in it. (Scot.).	*Mining*
REP	Retail Electric Provider	*Energy*
Repair	The process of physically restoring a nonconformance to a condition such that an item complies with the applicable requirements, including the code requirements.	*Maintenance and Repair*
Repair	performing finishing work after galvanizing in order to meet standards or specifications, or coating areas of steel that have been exposed due to post-galvanizing fabrication, installation, or extremely rough handling	*Materials Process*
Repair distribution	A mathematical model that describes the probability of repairs occurring over time.	*Reliability Engineering*
Repairable system	A system that can be restored to operating condition after a failure by the repair or replacement of one or more components.	*Reliability Engineering*
Repeatability	The ability of a transducer to reproduce output readings when the same measurand value is applied to it consecutively, under the same conditions, and in the same direction. Repeatability is expressed as the maximum difference between output readings.	*Electrical*
Repeatability (of results of measurements)	Closeness of agreement between the results of successive measurements of the same measurand carried out under the same conditions of measurement. NOTE: Formerly, the term within-run prediction was used. [CLSI EP15-A2]	*Quality*
Repeatability conditions	Conditions where independent test results are obtained with the same method on identical test material in the same laboratory by the same operator using the same equipment within a short interval of time. [CLSI EP15-A2]	*Quality*
Repetitive shock machine	A platform to which products (to be tested or screened) are attached. Often this platform forms the bottom surface of a thermal test chamber. Pneumatic vibrators are attached to the bottom of the platform, causing it to vibrate, usually simultaneously in several axes.	*Reliability Engineering*
Replacement Asset Value (RAV)	Replacement asset value is the market cost for asset replacement.	*Maintenance*
Replacement Asset Value (RAV)	Also referred to as estimated replacement value (ERV). This is the dollar value that would be required to replace the production capability of the present assets in the plant.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Replacement energy source for primary heating	For the CBECS (an EIA consumption survey), the heating energy source to which the building could switch within one week without major modifications to the main heating equipment, without substantially reducing the area heated, and without substantially reducing the temperature maintained in the heated area.	*Energy*
Replacement Maintenance (RM)	Replacement/Rehabilitation/Remodel Maintenance. All activity designed to bring an asset back into good shape, upgrade an asset to current technology, or make an asset more productive.	*Maintenance*
Replacement ore	Ore formed by a process during which certain minerals have passed into solution and have been carried away, while valuable minerals from the solution have been deposited in the place of those removed.	*Mining*
Replacement vehicle	A vehicle which is acquired in order to take the place of a vehicle which is being retired from service. These acquisitions do not increase the size of the company fleet.	*Energy*
Replacements	The substitution of a unit for another unit generally of a like or improved character.	*Energy*
Replenish	To add fluid to maintain a full hydraulic system.	*Mechanical, Process, and Operations*
Replicate/reproduce	Do the same thing to other people in order to achieve the same outcomes that occurred in a study. Also, repeating the circumstances of a study to test whether the results and outcomes are similar in another sample or population. See also: Reproducible	*Quality Engineering*
Replication	Testing that reproduces a specified desired motion history (time domain) or waveform.	*Reliability Engineering*
Replication experiment	A method validation experiment that estimates the random analytical error. It is performed by making measurements on a series of aliquots of a test solution within a specified time period, usually within the time of an analytical run (within-run imprecision), within a day (within-day imprecision), and over a period of at least 20 days (day-to-day or total imprecision).	*Quality*
Report State	The State, including adjacent offshore continental shelf areas in the Federal domain, in which a company operated natural gas gathering, transportation, storage, and/or distribution facilities or a synthetic natural gas plant covered by the individual report.	*Energy*
Report week	A calendar week beginning at 12:01a.m. on Sunday and ending at midnight on Saturday.	*Energy*
Report year (calendar)	The 12-month period, January 1 through December 31	*Energy*
Report year (fiscal)	A 12-month period for which an organization plans the use of its funds. The fiscal year is designated by the calendar year in which it ends.	*Energy*
Reportable range	The range of concentration of the substance in the specimen for which method performance is reliable and test results can be reported.	*Quality*
Reported	Data from a device.	*Aeronautical Engineering*
Reporting	The average number of Btu per cubic foot of gas at 60 degrees Fahrenheit and 14.73 psia delivered directly to consumers. Where billing is on a thermal basis, the heat content values used for billing purposes are to be used to determine the annual average heat content.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reporting bias	A bias caused by only a subset of all the relevant data being available. The publication of research can depend on the nature and direction of the study results. Studies in which an intervention is not found to be effective are sometimes not published. Because of this, systematic reviews that fail to include unpublished studies may overestimate the true effect of an intervention. In addition, a published report might present a biased set of results (e.g. only outcomes or sub-groups where a statistically significant difference was found. Also called: Publication bias	*Quality Engineering*
Repowered Plant	This is an existing power facility that has been substantially rebuilt to extend its useful life.	*Energy*
Repowering	Refurbishment of a plant by replacement of the combustion technology with a new combustion technology, usually resulting in better performance and greater capacity.	*Energy*
Repressuring	The injection of gas into oil or gas formations to effect greater ultimate recovery.	*Energy*
Reprocessing	Synonymous with chemical separations.	*Energy*
Reproducibility	The closeness of agreement among repeated measurements of the output for the same value of input, made under the same operating conditions over a period of time, approaching from both directions. Note 1: It is usually measured as a non-reproducibility and expressed as reproducibility in percent of span for a specified time period. Normally, this implies a long period of time, but under certain conditions, the period may be a short time during which drift may not be included. Note 2: Reproducibility includes hysteresis, drift and repeatability.	*Process Control*
Reproducibility (Repeatability, Reliability)	The results of a test or measure are identical or closely similar each time it is conducted.	*Analysis*
Reproducible	Able to be done the same way elsewhere. See also: Replicate/reproduce	*Quality Engineering*
Reproduction	The process by which young trees grow to become the older trees of the future forest that occurs through natural sprouting or seeding, or by the planting of seedlings.	*Forestry*
Repulsive force	Force due to the like charge repulsion of both (negative) electron orbitals and (positive) nuclei of adjacent atoms.	*Material Process*
Request For Information (RFI)	Is usually submitted for planning purposes, including development of a bid solicitation. Vendors are advised that an award will not be forthcoming.	*Procurement*
Request For Proposal (RFP)	Is a request for a bid submittal which requires each seller to submit their plan for meeting the bid requirements. The award decision is based on evaluation of proposals in determining which proposal has the lowest overall cost and takes into consideration a quality assessment in addition to price.	*Procurement*
Request For Quotation (RFQ)	Is a request for bid submittal awarded on the basis of lowest price meeting a minimum specification.	*Procurement*
Requirements power	The firm service needs required by designated load plus losses from the points of supply.	*Energy*
Requisitioner	One who initiates a purchase requisition.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rerefining	A process of reclaiming used lubricant oils and restoring them to a condition similar to that of virgin stocks by filtration, clay adsorption or more elaborate methods.	*Lubrication*
Reregulation	The design and implementation of regulatory practices to be applied to the remaining regulated entities after restructuring of the vertically-integrated electric utility. The remaining Regulated entities would be those that continue to exhibit characteristics of a natural monopoly, where imperfections in the market prevent the realization of more competitive results, and where, in light of other policy considerations, competitive results are unsatisfactory in one or more respects. Reregulation could employ the same or different regulatory practices as those used before restructuring.	*Energy*
Resale (wholesale) sales	Resale or wholesale sales are electricity sold (except under exchange agreements) to other electric utilities or to public authorities for resale distribution. (This includes sales to requirements and nonrequirements consumers.)	*Energy*
Research and development (RD)	Basic and applied research in the sciences and engineering and the design and development of prototypes and processes, excluding quality control, routine product testing, market research, sales promotion, sales service, research in the social sciences or psychology, and other non-technological activities or technical services.	*Energy*
Reseller	A firm (other than a refiner) that is engaged in a trade or business that buys refined petroleum products and then sells them to a purchaser who is not the ultimate consumer of those refined products.	*Energy*
Resellers	Companies that purchase utility service from a wholesaler and resell it to consumers.	*Energy*
Resembling asphalt	resembling asphalt.	*Material Process*
Reserve	That portion of the demonstrated reserve base that is estimated to be recoverable at the time of determination. The reserve is derived by applying a recovery factor to that component of the identified coal resource designated as the demonstrated reserve base.	*Energy*
Reserve	That portion of the identified coal resource that can be economically mined at the time of determination. The reserve is derived by applying a recovery factor to that component of the identified coal resource designated as the reserve base.	*Mining*
Reserve additions	The estimated original, recoverable, salable, and new proved reserves credited to new fields, new reservoirs, new gas purchase contracts, amendments to old gas purchase contracts, or purchase of gas reserves in-place that occurred during the year and had not been previously reported. Reserve additions refer to domestic in-the-ground natural gas reserve additions and do not refer to interstate pipeline purchase agreements; contracts with foreign suppliers; coal gas, SNG, or LNG purchase arrangements.	*Energy*
Reserve Capacity	Capacity in excess of that required to carry peak load.	*Energy*
Reserve cost categories of $15, $30, $50, and$100 per pound U_3O_8	Classification of uranium reserves estimated by using break-even cut-off grades that are calculated based on forward-operating costs of less than $15, $30, $50, and $100 per pound U_3O_8.	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
Reserve Generating Capacity	The amount of power that can be produced at a given point in time by generating units that are kept available in case of special need. This capacity may be used when unusually high power demand occurs, or when other generating units are off-line for maintenance, repair or refueling.	*Energy*
Reserve Margin	The percentage of installed capacity exceeding the expected peak demand during a specified period.	*Energy*
Reserve margin (operating)	The amount of unused available capability of an electric power system (at peak load for a utility system) as a percentage of total capability.	*Energy*
Reserve revisions	Changes to prior year-end proved reserves estimates, either positive or negative, resulting from new information other than an increase in proved acreage (extension). Revisions include increases of proved reserves associated with the installation of improved recovery techniques or equipment. They also include correction of prior year arithmetical or clerical errors and adjustments to prior year-end production volumes to the extent that these alter reserves estimates.	*Energy*
Reserve Strength	The strength of a rope exclusive of the outer wires.	*Wire Rope & Cable*
Reserved Word	A word that has a defined function in the language, and cannot be used as a variable name.	*General*
Reserved Word	A word that has a defined function in the language, and cannot be used as a variable name.	*Electronic Process*
Reserves changes	Positive and negative revisions, extensions, new reservoir discoveries in old fields, and new field discoveries that occurred during the report year.	*Energy*
Reserves, coal	Quantities of unextracted coal that comprise the demonstrated base for future production, including both proved and probable reserves. Also see Proved energy reserves; Probable energy reserves; Energy reserves; Proved (measured) reserves, coal; and Probable (indicated) reserves, coal.	*Energy*
Reserves, net	Includes all proved reserves associated with the company's net working interests.	*Energy*
Reservoir	A porous and permeable underground formation containing an individual and separate natural accumulation of producible hydrocarbons (crude oil and/or natural gas) which is confined by impermeable rock or water barriers and is characterized by a single natural pressure system.	*Energy*
Reservoir	A container for storage of liquid in a fluid power system.	*Lubrication*
Reservoir	A porous and permeable sedimentary rock containing commercial quantities of oil and gas. Three types of reservoirs are encountered including structural traps, stratigraphic traps and combination traps.	*Petroleum Drilling*
Reservoir	The underground formation where oil and gas has accumulated. It consists of a porous rock to hold the oil or gas, and a cap rock that prevents its escape.	*Petroleum Drilling*
Reservoir (sump) filter	A filter installed in a reservoir in series with a suction or return line.	*Oil Analysis*
Reservoir capacity	The present total developed capacity (base and working) of the storage reservoir, excluding contemplated future development.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reservoir Filter	A filter installed in a reservoir in series with a suction or return line. Also known as sump filter.	*Lubrication*
Reservoir repressuring	The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.	*Energy*
Reset	Same as the integral or "I" part of PID controllers.	*Process Control*
Reset Rate	The inverse of integral time; usually expressed as "repeats per minute."	*Electrical Engineering*
Reset Windup	With a simple PID controller, integral action will continue to change the controller output value (in voltage, air signal or digital computer value) after the actual output reaches a physical limit. This is called reset (integral) windup. For example, if the controller is connected to a valve which is 100% open, the valve cannot open farther. However, the controller's calculation of its output can go past 100%, asking for more and more output even though the hardware cannot go past 100%. Most controllers use an "anti-reset windup" feature that disables integral action using one of a variety of methods when the controller hits a limit.	*Process Control*
Resetting	the re-setting or renewing of roof supports which may have moved due to the action of roof weight.	*Mining*
Residence Time	The period of time groundwater remains in an aquifer.	*Petroleum Engineering*
Residential building	A structure used primarily as a dwelling for one or more households.	*Energy*
Residential consumers	Consumers using gas for heating, air conditioning, cooking, water heating, and other residential uses in single and multi-family dwellings and apartments and mobile homes.	*Energy*
Residential energy consumption survey (RECS)	A national multistage probability sample survey conducted by the Energy End Use Division of the Energy Information Administration. The RECS provides baseline information on how households in the United States use energy. The Residential Transportation Energy Consumption Survey (RTECS) sample is a subset of the RECS. Household demographic characteristics reported in the RTECS publication are collected during the RECS personal interview.	*Energy*
Residential heating oil price	The price charged for home delivery of No. 2 heating oil, exclusive of any discounts such as those for prompt cash payment. Prices do not include taxes paid by the consumer.	*Energy*
Residential propane price	The "bulk keep full" price for home delivery of consumer-grade propane intended for use in space heating, cooking, or hot water heaters in residences.	*Energy*
Residential sector	An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. Note: Various EIA programs differ in sectoral coverage.	*Energy*
Residential type central air conditioner	There are four basic parts to a residential central air-conditioning system (1) a condensing unit, (2) a cooling coil, (3) ductwork, and (4) a control mechanism such as a thermostat. There are two basic configurations of residential central systems (1) a "split system" where the condensing unit is located outside and the other components are inside, and (2) a packaged-terminal air-encased in one unit and is usually found in a "utility closet."	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Residential vehicles	Motorized vehicles used by U.S. households for personal transportation. Excluded are motorcycles, mopeds, large trucks, and buses. Included are automobiles, station wagons, passenger vans, cargo vans, motor homes, pickup trucks, and jeeps or similar vehicles. In order to be included (in the EIA survey), vehicles must be (1) owned by members of the household, or (2) company cars not owned by household members but regularly available to household members for their personal use and ordinarily kept at home, or (3) rented or leased for 1 month or more.	*Energy*
Residential well	A pumping well that serves one home or is maintained by a private owner.	*Petroleum Drilling*
Residential/commercial (consumer category)	Housing units, wholesale or retail businesses (except coal wholesale dealers); health institutions (hospitals, social and educational institutions (schools and universities); and Federal, state, and local governments (military installations, prisons, office buildings, etc.). Excludes shipments to Federal power projects, such as TVA, and rural electrification cooperatives, power districts, and state power projects.	*Energy*
Residual	"The difference between a given data point and its predicted value." [CLSI]	*Quality*
Residual (Final) Unbalance	Residual unbalance is that unbalance of any kind that remains after balancing.	*Electronic Process*
Residual chlorine	(See chlorine, free) the amount of available chlorine present in water at any specified period, subsequent to the addition of chlorine.	*Chemical Engineering*
Residual dirt capacity	The dirt capacity remaining in a service loaded filter element after use, but before cleaning, measured under the same conditions as the dirt capacity of a new filter element.	*Mechanical, Process, and Operations*
Residual fuel oil	A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.	*Energy*
Residual Monomer	The unpolymerized monomer that remains incorporated in a polymer after the polymerization reaction is completed.	*Engineering Physics*
Residual Saturation	Saturation below which fluid drainage will not occur.	*Petroleum Engineering*
Residual stand	Trees left in a stand to grow until the next harvest.	*Forestry*
Residual stress	The stress remaining within a structural material after all applied loads are removed.	*Material Process*
Residue	contaminants (oil, grease, dirt, rust, mill scale) that unless removed, will prevent complete galvanizing of the steel surface	*Materials Process*
Residue gas	Natural gas from which natural gas processing plant liquid products and, in some cases, nonhydrocarbon components have been extracted.	*Energy*
Residuum	Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1,000 degrees Fahrenheit.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Resilient seat	A valve seat containing a soft seal such as an o-ring or plastic to assure tight shut-off.	*General Mechanical*
Resilient seat	A valve seat containing a soft seal, such as an o-ring, to assure tight shut-off.	*Mechanical*
Resilient Tile	Tile that will withstand shock without permanent damage; includes rubber, cork, asphalt, linoleum, vinyl, vinyl asbestos. This tile will give under impact and certain loads, and then return to its original form after the load is removed.	*Chemistry*
Resin	A solid or semisolid amorphous organic compound or mixture of such compounds, with no definite melting point and no tendency to crystallize. Resins may be of vegetable or animal origin (e.g. shellac) or may be synthetic. Natural resins are distinguished from gums in that the resins are insoluble in water, but certain synthetic water soluble materials are referred to as resins or resin stages.	*Material Process*
Resin	An organic substance of natural or synthetic origin characterized by being polymeric in nature. Most resins, though not all, are of high molecular weight and consist of long chain or network molecular structure. Usually resins are more soluble in their lower molecular weight forms.	*Engineering Physics*
Resin bolting	A method of permanent roof support in which steel rods are grouted with resin.	*Mining*
Resin flake	Cured thermosetting resin flakes remolded in a plastic.	*Material Process*
Resinate	A metallic soap in which the organic acid constituent is obtained from rosin.	*Material Process*
Resinoid	Generic term for thermosetting resins. The name is also applied to cured synthetic resins.	*Material Process*
Resinosis	Resin flow through bark or from wounds or cankers on conifers.	*Forestry*
Resinox	A trade name for phenol-formaldehyde and molding plastic.	*Material Process*
Resistance	The resistance to the flow of electric current measured in ohms (.). For a conductor, resistance is a function of diameter, resistivity (an intrinsic property of the material) and length.	*Electrical*
Resistance	Property of a conductor that opposed the current flow produced by a given difference of potential. The ohm is the practical unit of resistance.	*Electrical Engineering*
Resistance Weld	Method of manufacturing pipe by bending a plate into circular form and passing electric current through the material to obtain a welding temperature.	*Maintenance and Repair*
Resistance Ratio Characteristic	For thermistors, the ratio of the resistance of the thermistor at 25°C to the resistance at 125°C.	*Electrical*
Resistance Temperature Characteristic	A relationship between a thermistor's resistance and the temperature.	*Electrical*
Resistance Temperature Characteristic	A relationship between a thermistor's resistance and the temperature.	*Electronic Process*
Resistance Welding	by the heat obtained from resistance to	*Maintenance and Repair*
Resisting body	resisting body.	*General Mechanical*
Resisting force	See internal force.	*Engineering Physics*
Resistivity	The reciprocal of electrical conductivity, and a measure of a material's resistance to the passage of electric current.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Resistivity survey	A geophysical technique used to measure the resistance of a rock formation to an electric current.	*Mining*
Resistor	A resistor is any electrical component that resists the flow of electrical current. Resistors can be used to control current and therefore protect a circuit from overload. Resistors are also an important component in instrumentation and are used together with capacitors in power filters to eliminate unwanted harmonics.	*Electrical*
Resite A	C-stage phenol-aldehyde resin.	*Material Process*
Resitol A	B-stage phenol-aldehyde resin.	*Material Process*
Resolution	The smallest detectable increment of measurement. Resolution is usually limited by the number of bits used to quantize the input signal. For example, a 12-bit A/D can resolve to one part in 4096 (2 to the 12 power equals 4096).	*Electrical*
Resolution	The magnitude of output step changes as the pressure is continuously varied over the range. This term applies primarily to potentiometric sensors. Resolution is best specified as average and maximum resolution. Usually expressed in percent of full scale output.	*Electrical Engineering*
Resolved shear	Stress operating on a slip system.	*Material Process*
Resonance	Forced vibration of a true SDoF system causes resonance when the forcing frequency equals the natural frequency, when any forcing frequency change decreases system response. (See also critical frequency) Therefore resonance represents maximum sprung mass response, if forcing frequency is varied while input force is held constant. More complex systems have many resonances.	*Reliability Engineering*
Resonant Frequency	The measurand frequency at which a transducer responds with maximum amplitude.	*Electrical*
Resorcinol (C6H4(OH)2)	Colorless rhombic tablets from water or benzene. Reacts with many substances to form synthetic resins. Also, used in the manufacture of dyes.	*Material Process*
Resource	The calculated amount of material in a mineral deposit, based on limited drill information.	*Mining*
Resources	Concentrations of coal in such forms that economic extraction is currently or may become feasible. Coal resources broken down by identified and undiscovered resources. Identified coal resources are classified as demonstrated and inferred. Demonstrated resources are further broken down as measured and indicated. Undiscovered resources are broken down as hypothetical and speculative.	*Mining*
Resources (Coal)	Naturally occurring concentrations or deposits of coal in the Earth's crust, in such forms and amounts that economic extraction is currently or potentially feasible.	*Energy*
Respirable dust	very fine coal and stone particles, which breathed in can damage the lungs.	*Mining*
Respirable dust	Dust particles 5 microns or less in size.	*Mining*
Respirable dust sample	A sample collected with an approved coal mine dust sampler unit attached to a miner, or so positioned as to measure the concentration of respirable dust to which the miner is exposed, and operated continuously over an entire work shift of such miner.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Respondent	A company or individual who completes and returns a report or survey form.	*Energy*
Response	The vibratory motion or force that results from some mechanical input.	*Reliability Engineering*
Response signal	The signal from a "response sensor" measuring the mechanical response of a mechanical system to an input vibration or shock.	*Reliability Engineering*
Response Time	The length of time required for the output of a transducer to rise to a specified percentage of its final value as a result of a step change of input.	*Electrical*
Response Time	The time it takes for a device to respond to an input signal. The sum of the sensor, amplifier, and output response is the total response time.	*Electrical Engineering*
Response Time (time constant)	The time required by a sensor to reach 63.2% of a step change in temperature under a specified set of conditions. Five time constants are required for the sensor to stabilize at 100% of the step change value.	*Electrical*
Response Time (time constant)	The time required by a sensor to reach 63.2% of a step change in temperature under a specified set of conditions. Five time constants are required for the sensor to stabilize at 600 of the step change value.	*Electronic Process*
Response, Dynamic	The behavior of the output of a device as a function of the input, both with respect to time.	*Process Control*
Response, Ramp	The total (transient plus steady-state) time response resulting from a sudden increase in the rate of change in the input from zero to some finite value.	*Process Control*
Response, Step	The time response of an instrument when subjected to an instantaneous change in input from one steady-state value to another.	*Process Control*
Responsible Bidder	A business entity (company) which has the capability in all respects to fully perform the contract requirements and whose integrity and reliability will assure good faith performance. Factors considered in evaluating responsibility may include: financial resources, past performance, delivery capability, experience, organization, personnel, technical skills, operations controls, equipment, and facilities. A business entity (company) determined by the Director of Business Services/designee to be in substantial conformance with the specifications, delivery requirements and conditions prescribed in the request for quotation, free of material mistake or errors.	*Procurement*
Restoration	Any Activity Which Returns The Capability Of An Asset That Has Not Failed To A Level Of Performance Equal To, Or Greater Than, That Specified By Its Functions, But Not Greater Than Its Original Maximum Capability. Not To Be Confused With A Modification Or A Repair.	*Plant Engineering*
Restoration time	The time when the major portion of the interrupted load has been restored and the emergency is considered to be ended. However, some of the loads interrupted may not have been restored due to local problems.	*Energy*
Restraint	A structural attachment, device, or mechanism that limits movement of the pipe in one or more directions.	*Maintenance and Repair*
Restricted Gate	A very small orifice between runner and cavity in an injection or transfer mold. When the piece is ejected this gate breaks cleanly, simplifying separation of runner from piece.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Restricted-universe census	This is the complete enumeration of data from a specifically defined subset of entities including, for example, those that exceed a given level of sales or generator nameplate capacity.	*Energy*
Restriction	A reduced cross-sectional area in a line or passage which normally causes a pressure drop. (Examples: pinched lines or clogged passages, or an orifice designed into a system.)	*Mechanical, Process, and Operations*
Restrictor	A device which reduces the cross sectional flow area.	*Mechanical, Process, and Operations*
Restrictor Ring	A ring-shaped part protruding from the torpedo surface which provides increase of pressure in the mold to improve, e.g. welding of two streams.	*Engineering Physics*
Restrictor, orifice	A restrictor, the length of which is relatively small with respect to its cross-sectional area. The orifice may be fixed or variable.	*Mechanical, Process, and Operations*
Restructuring	The process of replacing a monopoly system of electric utilities with competing sellers, allowing individual retail customers to choose their electricity supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of the vertically-integrated electric utility.	*Energy*
Restructuring	The reconfiguration of the vertically-integrated electric utility. Restructuring usually refers to separation of the various utility functions into individually-operated and -owned entities.	*Energy*
Rests	an old name for the keps. (N. East).	*Mining*
Resuing	A method of stopping in narrow-vein deposits whereby the wallrock on one side of the vein is blasted first and then the ore.	*Mining*
Resultant	The resultant of a system of forces is a single force or moment whose magnitude, direction, and location make it statically equivalent to the system of forces.	*Engineering Physics*
Retail	Sales of electric energy to the ultimate customer.	*Energy*
Retail Company	A company that is authorized to sell electricity directly to industrial, commercial and residential end-users.	*Energy*
Retail Competition	A system under which more than one electric provider can offer to sell to retail customers, and retail customers are allowed to choose more than one provider from whom to purchase their electricity.	*Energy*
Retail Customers	Customers, including residences and businesses, who themselves use the electricity they purchase; also referred to as end-use customers.	*Energy*
Retail Electric Provider (REP)	An entity that sells electric energy to retail customers in Texas. A retail electric provider may not own or operate generation assets.	*Energy*
Retail Market	A market in which electricity and other energy services are sold directly to the end-use customer.	*Energy*
Retail motor gasoline prices	Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index.	*Energy*
Retail sales (electric)	Sales made directly to the customer that consumes the energy product.	*Energy*
Retail Transaction	The sale of electric power from a generating company or wholesale entity to the customer.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Retail Wheeling	This refers to the ability of end-use customers of any size to purchase electric capacity, energy or both from anyone other than the local electric utility by moving or wheeling such power over the local utility's transmission and/or distribution lines.	*Energy*
Retailer	A firm (other than a refiner, reseller, or reseller/retailer) that carries on the trade or business of purchasing refined petroleum products and reselling them to ultimate consumers without substantially changing their form.	*Energy*
Retained earnings	The balance, either debit or credit, of appropriated or unappropriated retained earnings of the utility department arising from earnings.	*Energy*
Retainer plate	Plate on which demountable pieces such as mold cavities, ejector pins, guide pins and bushings are mounted during molding. Usually drilled for steam and water.	*Material Process*
Retainer Plate	In injection molding, a plate which reinforces the cavity block against the injection pressure, and also serves as an anchor for the cavities, ejector pins, guide pins, and bushings. The retainer plate is usually cored for circulating water or steam for cooling and heating.	*Engineering Physics*
Retaining Pin	A pin on which an insert is placed and located prior to molding.	*Engineering Physics*
Retardation	preferential retention of contaminant movement in the subsurface resulting from adsorptive processes or solubility differences.	*Chemical*
Retarder	A substance added to a reacting	*Material Process*
Reticulation	Literally: An arrangement resembling a net or network. Reticulation in a steam system refers to the consistent and continued distribution and conservation of the hot water and steam, which cycles continuously. This begins with the formation of steam from the water heater, and follows with the successful recovery of condensate created by the heat exchange process.	*Industrial*
Retire from service	A vehicle is retired from service if that vehicle is placed out of service and there are no future plans to return that vehicle to service.	*Energy*
Retired hydropower plant sites	The site of a plant that formerly produced electrical or mechanical power but is now out of service. Includes plants that have been abandoned, damaged by flood or fire, inundated by new reservoirs, or dismantled.	*Energy*
Retort	A vessel in which substances are distilled or decomposed by heat.	*Mining*
Retreat	to work the coal away from the furthest inbye point, back in the direction of the shafts. Also called to 'work home'; or a system of mining in which the roads are driven to pre-determined boundaries and panels or pillars are extracted in the contrary direction.	*Mining*
Retreat face	see Face.	*Mining*
Retreat mining	A system of robbing pillars in which the robbing line, or line through the faces of the pillars being extracted, retreats from the boundary toward the shaft or mine mouth.	*Mining*
Retroreflective Scan	The reflective scan technique that uses a special reflector (retroreflector) to return light along the same path it was sent.	*Electrical Engineering*
Retrospective study	Study design in which cases where individuals who had an outcome event in question are collected and analyzed after the outcomes have occurred (see also Case-control study).	*Analysis*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Return	The air or ventilation that has passed through all the working faces of a split.	*Mining*
Return airway or Return	a road in a mine along which used air is conducted away from the workings to the upcast shaft.	*Mining*
Return current path	the path through which the current in an electric cell returns to the source	*Materials Process*
Return flow temperature	The return flow temperature is the temperature of the heating water when it returns to the boiler.	*Thermal Management*
Return gate	see Tail gate.	*Mining*
Return Idler	A roller which supports the return run of the belt.	*Manufacturing*
Return idler	The idler or roller underneath the cover or cover plates on which the conveyor belt rides after the load which it was carrying has been dumped at the head section and starts the return trip toward the foot section.	*Mining*
Return Line	A location in a line conducting fluid from working device to reservoir.	*Lubrication*
Return Line Filtration	Filters located upstream of the reservoir but after fluid has passed through the system's output components (cylinders, motors, etc.).	*Lubrication*
Return On Assets (ROA)	See Return On Net Assets (RONA).	*Maintenance*
Return On Capital Employed (ROCE)	The capital employed in the business is the sum of the business assets and the operating capital required to support the enterprise. Return on Capital Employed (ROCE) is the ratio between after tax operating profit (Business Operating Income, BOI) and capital employed.	*Maintenance*
Return on common equity	The net income less preferred stock dividends, divided by the average common stock equity.	*Energy*
Return on common stock equity	An equity's earnings available for common stockholders calculated as a percentage of its common equity capital.	*Energy*
Return On Equity (ROE)	Profit divided by corporate equity.	*Maintenance*
Return on invested capital (ROIC)	A measure of how effectively a company uses the money (borrowed or owned) invested in its operations. ROIC = net operating profit after taxes (NOPAT) divided by capital invested (total assets less excess cash minus non-interest-bearing liabilities). Total assets = fixed assets + current assets + intangible assets + investments. For plants that are cost centers, net operating profits after taxes = annual value of shipments - direct costs, indirect costs, depreciation and taxes.	*Quality*
Return On Investment (ROI)	The profit gained from an investment divided by the monetary value of the investment.	*Maintenance*
Return on Investment (ROI)	A measure of the financial gain (or loss) of a project in relation to its cost. It is calculating by taking: Financial Gain or Loss – Project Cost/Project Cost) X 100.	*Reliability Engineering*
Return On Net Asset (RONA)	The ratio between after tax operating profit, and the net assets value of the enterprise. Net assets comprise the land, building, and equipment owned by the company.	*Maintenance*
Return on Net Assets	RONA simply calculates how well a company converts assets to sales, and therefore income. (The simple calculation is sales minus expenses divided by net assets.)	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rev limiter	Modern engines are controlled by electronic "mapping" software that controls things such as fuel consumption and ignition timing. Rev limiting is used for two purposes: to keep the engine from exceeding its maximum rotational speed and exploding into bits of very expensive shrapnel, and to adhere to speed limit rules in the pit lane. Maximum rev limits are set by the engine manufacturer, while the pit lane rev limiter is controlled by a pushbutton on the steering wheel.	*NASCAR*
Revealed (Overt) Failure	A component or system failure that is automatically brought to light on occurrence.	*Reliability Engineering*
Revenue - (electricity)	The total amount of money received by an entity from sales of its products and/or services; gains from the sales or exchanges of assets, interest, and dividends earned on investments; and other increases in the owner's equity, except those arising from capital adjustments.	*Energy*
Revenue requirement	The total revenue that the utility is authorized an opportunity to recover, which includes operating expenses and a reasonable return on rate base.	*Energy*
Reverberatory furnace	A long, flat furnace used to slag gangue minerals and produce a matte.	*Mining*
Reverse Acting	This term has several deferent meanings depending upon the device it is describing. A reverse-acting actuator is one in which the actuator stem retracts with an increase in diaphragm pressure. A reverse-acting valve is one with a push-down-to-open plug and seat orientation. A reverse-acting positioner or a reverse-acting controller outputs a decrease in signal in response to an increase in set point.	*Industrial Engineering*
Reverse Bend	Reeving a wire rope over sheaves and drums so that it bends in opposing directions.	*Wire Rope & Cable*
Reverse bias	Orientation of electrical potential to provide a minimal flow of charge carriers in a rectifier.	*Material Process*
Reverse fault	an overlap fault that hades, or is inclined, away from the downthrown side.	*Mining*
Reverse Flow	Flow of fluid in the opposite direction from that normally considered the standard direction. Some rotary valve are considered to be bi-directional although working pressure drop capabilities may be lower and leakage rates may be higher in reverse flow.	*Industrial Engineering*
Reverse Osmosis	Forcing a liquid through a nonporous membrane, removing particles, along with dissolved molecules and ions. The finest form of membrane separation and is used to desalinate water for drinking, and in the preparation of ultrapure water for various industries.	*Contamination Control*
Reverse piezoelectric effect	Production of a thickness change in a material as a result of an applied voltage.	*Material Process*
Reverse Polarity	The arrangement of direct-current arc welding leads with the work as the negative pole and the electrode as the positive pole of the welding arc; a synonym for direct-current electrode positive.8	*Maintenance and Repair*
Reverse Polarity Protection	The circuitry, usually a diode which prevents current from flowing into the control in case of accidental mis-wiring of the plus (+) or minus (–) terminals, preventing damage to the unit.	*Electrical Engineering*
Reversible	A conveyor which is designed to move product in either direction.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reversible turbine	A hydraulic turbine, normally installed in a pumped-storage plant, which can be used alternatively as a pump or as an engine, turbine, water wheel, or other apparatus that drives an electrical generator.	*Energy*
Reversing Mill	Any rolling mill in which the direction of rotation of the rolls can be reversed at will. Heavy primary mills for bloom and slab rolling are the most common, but others, including some cold-rolling mills, are also made to reverse.	*Metallurgy*
Reversing valve	A four-way directional valve used to reverse a double-acting cylinder or reversible motor.	*Mechanical, Process, and Operations*
Review	1. A systematic review. 2. A review article in the medical literature which summarizes a number of different studies and may draw conclusions about a particular intervention. Review articles are often not systematic. Review articles are also sometimes called overviews. 3. To referee a paper. See also: External peer reviewer (of a Cochrane Review), Referee, Referee process	*Quality Engineering*
Review Group Co-ordinator (RGC)	Former title of the Managing Editor (previously known as Administrator)	*Quality Engineering*
Review Manager	See RevMan (Review Manager)	*Quality Engineering*
Review Protocol	See Protocol	*Quality Engineering*
Reviewer/Author	Somebody responsible for preparing and, in the case of Cochrane Reviews, keeping up-to-date a systematic review. The term 'reviewer' is also sometimes used to refer to an external peer reviewer, or referee. Between 2004 and 2006, a phased approach will be used to move from using the word 'reviewer' (of a Cochrane Review) to 'author'. Also called: Author/Reviewer	*Quality Engineering*
Revisions and additions (gross change in reserves)	**T**he difference (plus or minus) between the year-end reserves plus production for a given year and the year-end reserves for the previous year.	*Energy*
RevMan (Review Manager)	Software developed for The Cochrane Collaboration to assist reviewers in preparing Cochrane Reviews. Reviewers enter their Protocols and reviews into RevMan, from which they are exported and sent to a Managing Editor to be considered for inclusion in the Cochrane Database of Systematic Reviews. Also called: Review Manager	*Quality Engineering*
RevMan Advisory Group (RAG)	A sub-group of the Information Management System Group (IMSG), which advises on development of RevMan. Also called: RAG	*Quality Engineering*
Revolution	An angle that measures 360°. One complete turn or rotation.	*Math*
Rework	All work that has to be redone. Rework indicates a problem in materials, skills, or scope of the original job.	*Maintenance*
Reyn	The standard unit of absolute viscosity in the English system. It is expressed in pound-seconds per square inch.	*Mechanical, Process, and Operations*
Reynold's number	A numerical ratio of the dynamic forces of mass flow to the shear stress due to viscosity. Flow usually changes from laminar to turbulent between Reynold's numbers 2,000 and 4,000.	*Mechanical, Process, and Operations*
Reynold's Number	A numerical ratio of the dynamic forces of mass flow to the shear stress due to viscosity. Flow usually changes from laminar to turbulent between Reynold's Number 2,000 and 4,000.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Reynold's Number	A number which characterizes flow. If the Reynold's number is low (under approximately 1800) then the flow is said to be laminar. This may be thought of as the fluid flowing in layers. If the Reynold's number is high (over approximately 2300) then the flow is said to be turbulent. Turbulent flow is considered to be well mixed.	*Chemical*
Reynolds Number	The ratio of inertial and viscous forces in a fluid defined by the formula Re = rVD/μ, where: r = Density of fluid, μ = Viscosity in centipoise (CP), V = Velocity, and D = Inside diameter of pipe.	*General*
Reynolds Number	The ratio of inertial and viscous forces in a fluid defined by the formula Re = rVD/μ, where - r = Density of fluid, μ = Viscosity in centipoise (CP), V = Velocity, and D = Inside diameter of pipe.	*Electronic Process*
RF (RAISED FACE)	The raised area of a flange face which affords a seal with a mating flange face by means of a flat gasket of the same diameter as the raised face.	*Mechanical*
RFA	Renewable Fuels Association	*Petro-Chemical Abbreviations*
RFG	See Reformulated Gasoline.	*Energy*
RFI	Radio frequency interference.	*Electrical*
RFI Shielding	Thermal spray coatings of electrically conductive metals such as zinc, aluminum and copper are used on non-conducting composite casing materials to shield sensitive electronic devices from radio frequency electromagnetic interference.	*Paint and Coatings*
RFWN	See: 'WNRF'	*Petroleum Engineering*
RH	Relative humidity	*General*
Rheology	The deformation and/or flow characteristics of grease in terms of stress, strain, temperature and time (commonly measured by Penetration and Apparent Viscosity).	*Oil Analysis*
Rheology	The study of the behavior of materials as they are deformed.	*Engineering Physics*
Rheostat	A variable resistor.	*Electrical*
Rhizome	Horizontal, underground stem.	*Agriculture*
Rhizomorph	A thread- or cordlike fungal structure made up of hyphae.	*Forestry*
Rhodium plating	The electro-deposition of rhodium for oxidation resistance combined with surface hardness.	*Paint and Coatings*
Rhones	rectangular wooden ducts for conveying ventilation air into the workings not usually ventilated by the main current; or wooden channels for conveying water. (Scot.).	*Mining*
RHS	Rural Housing Service, an agency of the USDA.	*Agriculture*
Rhuma	another term for Parrot; or locally coaly blaes in districts of Fife. (Scot.).	*Mining*
Rhunes	bituminous shale. (Scot.).	*Mining*
Rhyolite	A fine-grained, extrusive igneous rock which has the same chemical composition as granite.	*Mining*
RIA	See: Research Institute of America	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rib	The side of a pillar or the wall of an entry. The solid coal on the side of any underground passage. Same as rib pillar.	*Mining*
Rib	Configuration designed into a plastic part to provide lateral, horizontal, or other structural support.	*Engineering Physics*
Rib and pillar	a pillar and stall system worked in the Staffordshire Thick Coal (S. Staffs.).	*Mining*
Rib samples	Ore taken from rib pillars in a mine to determine metal content.	*Mining*
Rib side	the sides of a heading or roadway driven in the solid coal; or the edge of solid coal at each end of a longwall face.	*Mining*
Ribbing	enlarging a heading or drift. (Lancs.).	*Mining*
Ribbon Blenders	Mixing devices comprising helical ribbon-shaped blades rotating close to the edge of a U-shaped vessel. They are used for relatively high-viscosity fluids and dry blends such as PVC caldendering and extrusion compounds.	*Metallurgy*
Ribbon silicon	Crystalline silicon that is used in photovoltaic cells. Ribbon silicon is fabricated by a variety of solidification (crystallization) methods that withdraw thin silicon sheets from pools of relatively pure molten silicon.	*Energy*
Ribonucleic acid	Is involved in transfer of a growing protein chain in or on the ribosome.	*Agriculture*
Ribside gate	a roadway or gate in longwall working which has solid coal on one side and the waste pack on the other.	*Mining*
Ribside pack	a pack formed by working the coal along the rib side of a roadway and utilizing the space for packing the waste.	*Mining*
Rice	small pieces of timber interlaced above and behind the main timbers supporting a roadway. They were used when the ground is soft or shaley and has a tendency to run. (Som.), (Bris.). -see also Lacing, Lagging and Lofting.	*Mining*
Ricinoleic acid (CH3 (CH2)5CHOHCH2 CH CH(CH2)7COOH)	Colorless liquid or crystalline mass. Acid obtained by the hydrolysis of castor oil (glyceryl ester). Used as plasticizer or softening agent, especially for phenol aldehyde plastics.	*Material Process*
Ricket or Ricketing	a narrow brattice, or a channel cut along the floor to drain off water. (Mids.).	*Mining*
Rickety	a hand-driven ratchet-drilling machine used for boring shot holes. Also known as a 'worm and stand'.	*Mining*
Rickle	part coal and part shale. (Oldham, Great Mine Seam, Lancs.).	*Mining*
Rid	see Drive.	*Mining*
Ridding	the clearing and removing of loose material after a heavy roof-fall. (N. East).	*Mining*
Ridding or pucking	digging up the floor of a roadway after it has been lifted by the action of creep (S. Wales).	*Mining*
Ride height	Height of the chassis above the ground. Because of the relationship between the height of the ground-effect tunnels and their performance, maintaining optimum ride height is an important facet of car setup and design. However, it is hard to manage since the faster a car goes, the more the aerodynamic effects press it to the ground. Many very complex methods are used to maintain a consistent ride height.	*NASCAR*
Ride or Riding	ascend or descend the shaft in the cage; or travel on a manriding belt conveyor; or travel to and from the work place on manriding cars.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rider	a fault, sometimes called a 'hitch', where the edge of a fracture in the coal slipped against another. They were often separated by mineral matter such as soft clayey shale called the rider, also called the 'gowk' of the trouble; or a man in charge of an underground train. (Mids.); or anyone in transit in the cage. (Mids.); or a guide-frame or rope guides to steady the bowk or hoppit in a sinking-shaft; or a lad who rode out on the tubs on the haulage road (S. Wales); or a thin coal seam over-lying a thicker one.	*Mining*
Rider	A thin seam of coal overlying a thicker one.	*Mining*
Ridge Lines	Points of higher ground that separate two adjacent streams or watersheds. Also known as divides.	*Petroleum Engineering*
Ridging	In gear teeth, a form of plastic flow characterized by a rippled appearance on the surface.	*Lubrication*
Riff	the roof immediately above the coal seam. (Scot.).	*Mining*
Riflemen	small cogs, generally 18 inches to 2ft 6in square but sometimes larger, made of pieces of stone (ironstone) or oil shale, topped with pieces of timber to ease the pressure (N. Staffs.).	*Mining*
Rifler	a mixture of hard and soft coal of good quality overlying the 'main hards' in the Top Hard Seam. (Notts.). Also used as an alternate name for the Top Hard.	*Mining*
Rifling	working the upper section of a coal seam over the waste or gob of the lower section, which has already been worked out (N. Staffs.).	*Mining*
Rig	The structures and equipment used in drilling an oil and gas well including the derrick, engine, engine house and other equipment.	*Petroleum Drilling*
Rig floor	The area immediately around the rotary table and extending to each corner of the derrick. Floorhands and Motorhands work on the rig floor (Derrickhands work on the Monkeyboard, which is above the rig floor).	*Petroleum Drilling*
Right Angle	An angle that measures 90°.	*Math*
Right of way	Land covered by a public road.	*Civil Engineering*
Right of way	Land covered by a public road.	*Civil Engineering*
Righthand Thread	A screw thread that is screwed in by rotating clockwise. The majority of screw threads are right handed.	*Maintenance*
Right-of-way	The land and legal right to use and service the land along which a transmission line is located. Transmission line right-of-way is usually acquired in widths that vary with the kilovolt (kV) size of the line.	*Energy*
Right-of-way (electric)	A corridor of land on which electric lines may be located. The Transmission Owner may own the land in fee, own an easement, or have certain franchise, prescription, or license rights to construct and maintain lines. See NERC definition.	*Energy*
Rights	In finance, a certified right to purchase treasury shares in stated quantities, prices and time limits; usually negotiable at a price which is related to the prices of the issue represented; also referred to as warrants. Rights and warrants can be bought and sold prior to their expiry date because not all shareholders wish to exercise their rights.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rigid	An idealized concept meaning something which does not deform under loading. In fact, all objects deform under loading, but in modeling it can be useful to idealize very stiff objects as rigid.	*Engineering Physics*
Rigid	Mechanical behavior associated with a polymer below its glass transition temperature.	*Material Process*
Rigid conductors	wood or iron rails fitted in the shaft to buntons or cross pieces fixed across the shaft to act as guides to the cage. Also called 'Guides'.	*Mining*
Rigid Rotor	A rotor is considered rigid when it can be corrected in any two (arbitrarily selected) planes [see "Correction (Balancing) Plane"] and after that correction, its unbalance does not significantly exceed the balancing tolerances (relative to the shaft axis) at any speed up to maximum operating speed and when running under conditions which approximate closely to those of the final supporting system.	*General*
Rill	An irrigation term for a small stream of water turned onto the surface of a field. (The term also has a non-agricultural use.)	*Agriculture*
RILU	See: Red International of Labor Unions	*Industrial Relations*
Rim pull	The force required at the edge of the handwheel to generate the required torque at the center of the handwheel.	*General Mechanical*
Rim pull	The force required at the edge of the handwheel to generate the required torque at the center of the handwheel.	*Mechanical*
Ring Beam	Footing that carries the loads from the shell of a Natural Draft Tower.	*Facility Engineering*
Ring Gate	An annular opening for entrance of material into the cavity of an injection or transfer mold.	*Engineering Physics*
Ring Lubrication	A system of lubrication in which the lubricant is supplied to the bearing by an oil ring.	*Lubrication*
Ring or Ring crib	a crib laid in a pit shaft to collect water. -see also Garland; or a circular piece of wrought-iron, about 8ins. deep, which was placed on top of a skip of coal to increase the load (S. Staffs.); or a wooden crib built around the wall of a shaft to which the cage guides were fixed.	*Mining*
Ring Sticking	Freezing of a piston ring in its groove in a piston engine or reciprocating compressor due to heavy deposits in the piston ring zone.	*Lubrication*
Ring Type Joint (RTJ)	A type of flange seal that is produced by compressing a solid metal ring into a machined groove in a matching flange face.	*Industrial Engineering*
Ring type joint (RTJ)	A flange connection using a specially shaped soft metal ring as a gasket. Generally used on high pressure valves. May be the body and bonnet connection and/or the end flange connection.	*Mechanical*
Ring, "O"	A ring which has a round cross-section usually used for sealing. RING, SCRAPER - A ring which removes material by a scraping action.	*Mechanical, Process, and Operations*
Ring, Wiper	A ring which removes material by a wiping action.	*Mechanical, Process, and Operations*
Ringer	a long iron or steel crowbar used for breaking down loose stone; or a tool, roughly five feet in length, similar to a large crowbar, used to lever off coal from the coalface using the cleat or the ripping canch after shot firing. (Mids.); or a hammer for driving wedges. (Derbys.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ringer and Chain	a large iron bar with a chain attached used for withdrawing props. Also known as a 'dog and chain'. (Mids.).	*Mining*
Ringes	a large iron barrel attached to the winding rope for lifting water out of the sump. (N. East). -see also Cowl.	*Mining*
Ringgeared mill drives (RMD)	a system used to drive (rotate) a mill. The RMD itself is comprised of motor(s) (synchronous or asynchronous), a frequency converter, transformers and control equipment. As opposed to gearless mill drives, the motor in RMD is mechanically connected to the mill via a coupling, pinion(s) and ringgear.	*Electrical*
Ringing	Continued oscillation after an external force or excitation is removed, as after a guitar string is plucked.	*Reliability Engineering*
Ring-laser gyro (RLG)	A gyroscope based on a laser beam instead of a rotating mass, providing to same data as a gyroscope.	*Aeronautical Engineering*
Ringmotor	also called wrap-around motor, a ringmotor is a very large synchronous motor. The poles of the motor are directly flanged on the driven equipment. (See also Machine).	*Electrical*
Rings	Circular metallic elements that ride in the grooves of a piston and provide compression sealing during combustion. Also used to spread oil for lubrication.	*Lubrication*
Ring shake	Peripheral cracks in woody tissues of stems. The pattern of damage is concentric with the annual rings.	*Forestry*
Ring spot	A circular area of chlorosis with a green center.[1]	*Forestry*
Rinse Agent	A wetting agent used in the last rinse during dishwashing to improve the draining of the water from dishes and utensils.	*Chemistry*
Rinse Aids	Surfactants that aid in the rinsing property of water by lowering its surface tension.	*Chemistry*
Rinsing	removing any active solution from the surface of steel by immersion in water Rust -* corrosion product consisting of hydrated iron oxides; this term is applicable only to ferrous (iron-containing) alloys	*Materials Process*
RIO Bus	Remote Input/Output bus. This is a communication bus used to connect a field control unit with remote I/O points or nodes.	*Control Engineering*
Rip	to blast or bring down the roof of a roadway to gain headroom and improve the ventilation; or the strata forming the upper part of the face of a roadway from where the coal has been removed below.	*Mining*
Rip rap	Cobblestone or coarsely broken rock used for protection against erosion of embankment or gully.	*Energy*
Riparian	Relating to or living or located on the bank of a natural watercourse (as a river) or sometimes of a lake or a tidewater.	*Petroleum Engineering*
Riparian forest or riparian buffers	Vegetative areas along a body of water containing a complex assemblage of vegetation, typical of a riparian system.	*Forestry*
Ripe or Rype	to search, usually for contraband. A process carried out at all safety lamp mines at the beginning of each shift as the men queue up to descend the shaft.	*Mining*
Ripper	A coal extraction machine that works by tearing the coal from the face.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rippers	men employed to rip. They remove the rock left from above the coal seam and set arches (rings) as the face advances.	*Mining*
Ripping	a section of roof or roadway that has to be removed by blasting or machine; or to blast or bring down the roof of a roadway.	*Mining*
Ripping lip	see Canch and Kench.	*Mining*
Ripple	A periodic variation of the pressure above and below the operating pressure. It is defined as a percentage of the operating pressure in terms of the maximum peak-to-peak value obtained at the point of rating.	*Mechanical, Process, and Operations*
Ripple	The alternating component of voltage from a rectifier or generator. A slight fluctuation in the intensity of a steady current.	*Electrical Engineering*
Rise	Workings going 'to the rise' are going up the inclination or slope, or dip, of the seam.	*Mining*
Rise rate	The ratio of pressure rise to time.	*Mechanical, Process, and Operations*
Rise road	a road driven to the rise, uphill, up dip. (Scot.).	*Mining*
Rise split	the ventilation air that is directed to the 'rise side' of a mine when split ventilation is used.	*Mining*
Rise Time	The time required for a sensor or system to respond to an instantaneous step function, measured from the 10% to 90% points on the response waveforms.	*General*
Rise workings	workings on the rise side of the mine, above the level of the seam at the base of the shaft.	*Mining*
Riser	Piping which connects the circulating water supply line from the level of the base of the tower to the supply header of the tower inlet connection.	*Facility Engineering*
Riser (drilling)	A pipe between a seabed BOP and a floating drilling rig.	*Petroleum Drilling*
Riser (production)	The section of pipework that joins a seabed wellhead to the Christmas tree.	*Petroleum Drilling*
Rising branch	a stone-drift being driven towards the rise side. (South West).	*Mining*
Rising main	the main column of pipes in a shaft.	*Mining*
Rising stem	A valve stem which rises as the valve is opened.	*Mechanical*
Rising stem ball valve	A single seated ball valve that is designed to seal by using the valves stem to mechanically wedge the valves ball into a stationary seat effecting a bubble tight seal. The valves stem operates through a guide sleeve assembly that guides the stem through a quarter turn of rotation as the stem is raised or lowered by a handwheel (or actuator). The mechanical action of the stem moves the ball away from the seat prior to the 90° rotation of the ball. This design provides lower operating torques and longer seat life while assuring bubble tight shut off.	*Mechanical*
Risk	The Potential For The Realization Of The Unwanted, Negative Consequences Of An Event. The Product Of Conditional Probability Of An Event, And The Event Outcomes.	*Management*
Risk	Risk is an uncertain, possible event, and as regard safety, often involves damage.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Risk Analysis	The analysis of risk includes two phases, risk assessment and risk management. The risk assessment phase deals with the identification of initiating events towards the construction of the risk curves. The so-called quantitative Probability Risk Assessment (PRA) methodology is often used. PRA can include well-known techniques like preliminary risk analysis, failure modes and effects analysis, criticality analysis, hazards and operability study, event tree analysis, and fault tree analysis. The risk management phase deals with making trade-offs between alternatives influencing the risk scenarios and curves. Each alternative for actively or passively controlling the risk creates a specific risk curve. The curves are evaluated and decisions are made accordingly taking the cost of alternatives as trade-off. A risk-free alternative is often used as a reference point in evaluating alternatives.	*Reliability Engineering*
Risk characterization	Risk characterization estimates the incidence of expected adverse health effects in exposed populations.	*Material Process*
Risk difference	The difference in size of risk between two groups. For example, if one group has a 15% risk of contracting a particular disease, and the other has a 10% risk of getting the disease, the risk difference is five percentage points. Also called: Absolute risk difference, Absolute risk reduction	*Quality Engineering*
Risk factor	An aspect of a person's condition, lifestyle or environment that affects the probability of occurrence of a disease. For example, cigarette smoking is a risk factor for lung cancer.	*Quality Engineering*
Risk factor	Characteristics or factors associated with an increased probability of developing a condition or disease in the first place. Compare with prognostic factors. Neither risk or prognostic factors necessarily imply a cause and effect relationship.	*Analysis*
Risk ratio	The ratio of risks in two groups. In intervention studies, it is the ratio of the risk in the intervention group to the risk in the control group. A risk ratio of one indicates no difference between comparison groups. For undesirable outcomes, a risk ratio that is less than one indicates that the intervention was effective in reducing the risk of that outcome. Also called: Relative risk, RR	*Quality Engineering*
Risk-Based Inspection (RBI)	Risk Based Inspection (RBI), as the name suggests, employs similar RBM risk assessment techniques, but differs significantly from RBM in terms of its basis and scope. Risk Based Inspection is concerned primarily with pressure and containment systems including (but not restricted to): Vessels and boilers Pressurized and refrigerated storage tanks Compressors and pumps Associated pipe work and valves. Protective devices associated with such systems are also usually included. Risk Based Inspection has an integrity focus. It therefore concerns itself primarily with mitigation of safety and environmental risks.	*Reliability Engineering*
Risk-Based Maintenance (RBM)	A maintenance improvement program whereby the maintenance processes and procedures are planned based on (failure) risks, effects, and calculated cost. This is a financially based analysis technique which focuses on establishing the relative worth of maintenance. It was originally developed as a means of reviewing existing maintenance programs, and in this mode it works well as a continuous improvement tool. RBM defines opportunities for incremental improvement through the elimination of tasks of low value and the introduction of tasks which address high commercial risk areas. As such, RBM is also valuable in transferring knowledge from existing installations to provide a baseline for new builds.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rits	vertical cuttings in the shaft for receiving boxes to convey the water from the rings. (N. East).	*Mining*
River (method of transportation to consumers - coal)	Shipments of coal moved to consumers via river by barge. Shipments to Great Lakes coal loading docks or Tidewater pier or coastal points are not included.	*Energy*
Riverbed Claims	Minerals found in river beds accessed by turning the river from its natural course.	*Mining*
RLCA	See: Letter Carriers' Association; National Rural (Ind)	*Industrial Relations*
RMAN	Recovered Materials Advisory Notices (RMANs) provide purchasing guidance and recommend recovered and postconsumer material content levels for designated items. RMAN recommendations are guidance and therefore are not codified in the Code of Federal Regulations.	*Environmental Engineering*
RME	rapeseed methyl ester	*Petro-Chemical Abbreviations*
RMS or Root-Mean-Square value	The square root of the time-averaged squares of a series of measurements. Refer to a textbook on electrical engineering. In the exclusive case of a sine wave, s, the RMS value, is 0.707 the peak value.	*Reliability Engineering*
RMS Responding	A measurement equal to the rms value of the input signal for all waveforms within the specified frequency range and crest factor limit.	*Reliability Engineering*
RNA - Ribonucleic acid	RNA - Ribonucleic acid.	*Agriculture*
Roache or Roche	a hard or coarse sandstone, usually many feet thick (N. Staffs.).	*Mining*
Road	an underground passage, a roadway, tunnel or gate in a mine, e.g., 'raveling road', 'dummy road' etc. driven and maintained to provide access to the coal and for haulage, ventilation and travelling; or a working place. (Scot.); or the iron rails, e.g. the tub road.	*Mining*
Road box	A concrete or metal box with a removable cover, enclosing and providing access to valves installed in buried lines alongside roads or streets. The valves are operated by removing the box cover and inserting a long handled "tee" wrench which engages a 2" square nut attached to the valve stem or to the pinion shaft of geared valves.	*Mechanical*
Road cod	Man responsible for main roadways and the track, and to get materials in and out efficiently (N. Staffs.). Also called a 'roadman'.	*Mining*
Road headers	machines that drive underground roadways or headings, usually comprising a fixed or telescopic boom carrying a rotating cutting head that excavates the full cross-section of the roadway.	*Mining*
Road oil	Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.	*Energy*
Road roller	Any machine for rolling road materials flat.	*Civil Engineering*
Roadhead	in longwall working the end of the roadway at the coalface. -see also Gate-end.	*Mining*
Roadman	see Road cod.	*Mining*
Roadside pack	pack built of stone flanking a roadway.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Roan	A dark-colored horse with white sprinkles.	*Agriculture*
Rob	to strip coal from a pillar, 'robbing'. –see also Broken working.	*Mining*
Rob	To extract pillars of coal previously left for support.	*Mining*
Robbed out area	Describes that part of a mine from which the pillars have been removed.	*Mining*
Robbed out	worked out, of old abandoned working.	*Mining*
Robble	a fault, or where the coal seam varies considerably in thickness or quality in a short distance.	*Mining*
Robbley	faulted ground, full of slips (N. Staffs.).	*Mining*
Robinson–Patman Act	A federal law that requires a supplier engaged in interstate commerce to sell the same item to all customers at the same price (assuming like terms). Exceptions are permitted. A lower price is permitted: (1) for a larger purchase quantity, providing the seller can justify the lower price through lower costs; (2) to move obsolete or distressed merchandise; or (3) to meet the lower price of local competition in a certain geographic region. It is illegal for a buyer to knowingly induce or accept a discriminatory price.	*Procurement*
Robo test	An oil oxidation bench test for assessing the low temperature viscosity of the oil after it has been "aged".	*Mechanical, Process, and Operations*
Robot, industrial	An industrial robot is defined by ISO 8373 as an automatically controlled, reprogrammable, multipurpose, manipulator, programmable in three or more axes, which may be either fixed in place or mobile for use in industrial automation applications. Typical robot applications include welding, painting, assembly, pick and place, packaging and palletizing, product inspection, and testing, all accomplished with high endurance, speed, and precision. ABB developed the first commercially available electric robot almost 40 years ago.	*Electrical*
Roburite	an early flameless explosive used without water cartridges for shot firing in dry and dusty conditions comprising 86% ammonium nitrate and 14% chlorinated dinitrobenzol. A 'third class' explosive which could only be exploded by a special detonator obviating the risks from explosion by heat or sparks or by any ordinary shock. Invented by Carl Roth of Berlin and was found to be about three times as powerful as gunpowder. It was a potentially poisonous substance which required careful handling and effective stemming to ensure full burning.	*Mining*
Robust	A loop that is robust is relatively insensitive to process changes. A less robust loop is more sensitive to process changes. See a presentation on Loop Stability, The Other Half of the PID Tuning Story	*Process Control*
Rock	Any natural combination of minerals; part of the earth's crust.	*Mining*
Rock and rig	sandstone full of little shreds and patches of coal (S. Staffs.).	*Mining*
Rock bind	strong sandy shale.	*Mining*
Rock burst	The sudden failure of walls or pillars in a mine caused by the weight of pressure of the surrounding rocks, and accompanied by a violent release of energy.	*Mining*
Rock drivage	a roadway or heading driven in non-coal strata.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rock factor	The number of cubic meters of a particular rock type required to make up one ton of the material. One ton of a highly siliceous ore may occupy 0.40 cubic meters, while a ton of dense sulfide ore may occupy only 0.25 cubic meters.	*Mining*
Rock head/heading	a tunnel driven entirely in rock.	*Mining*
Rock mechanics	The study of the mechanical properties of rocks, which includes stress conditions around mine openings and the ability of rocks and underground structures to withstand these stresses.	*Mining*
Rockbolting	The act of consolidating roof strata by means of anchoring and tensioning steel bolts in holes especially drilled for the purpose.	*Mining*
Rockbolting	The act of supporting openings in rock with steel bolts anchored in holes drilled especially for this purpose.	*Mining*
Rockburst	A violent release of energy resulting in the sudden failure of walls or pillars in a mine, caused by the weight or pressure of the surrounding rocks.	*Mining*
Rocker Box or Cradle	Like a sluice box, the rocker box has riffles in it to trap the gold. It was designed to be used in areas with less water than a sluice box. The process involves pouring water out of a small cup and then rocking the small sluice box like a cradle, thus the name rocker box or cradle	*Mining*
Rockhead	the top of the first solid rock stratum reached when boring or sinking. Also called 'stone head'.	*Mining*
Rockwell B Hardness	Hardness of metallic materials measured by pressing an indenter against a surface with a specific force. The depth of the indention is also measured to provide a numerical value for that depth. The Rockwell 'B scale' provides more accuracy than HRC 20.	*Petroleum Engineering*
Rockwell C Hardness	A hardness rating of steel or Alloys, measured by pressing an indenter against a surface with a nominated force. Indention also measures the depth of the depth of indention is also measured to provide a numerical value for that depth. The numerical value relates to Tensile Strength. NACE Standard MR-0175 references hardness in determining steel's suitability for use in 'H2S Service'.	*Petroleum Engineering*
Rockwell hardness	A test for hardness similar to the Brinell in which a hardness steel ball (B scale), or a diamond cone (C scale), is pressed against the material to be tested. See Hardness.	*Material Process*
Rockwell hardness	Common mechanical parameter.	*Material Process*
Rockwell hardness no.	A numerical expression of the hardness of a metal as determined with a Rockwell Hardness Tester. There are several hardness scales. The most commonly used are the Rockwell "B" scale for soft metals and the Rockwell "C" scale for hard materials.	*Mechanical*
Rod	Rolled steel or steel with a circular cross section can be a bar, a rod or a round, and there is no generally accepted firm dividing line. Broadly, a rod is from 3/16 to ½ inch in diameter. Rods today are usually rolled in long lengths and coiled.	*Metallurgy*
Rod mill	A rotating cylindrical mill which employs steel rods as a grinding medium.	*Mining*
Rodding	fitting or repairing wooden cage guides in the shaft.	*Mining*
Rod-harkening	an early system of signaling on a haulage incline involving a boy who would listen (harken) for the signals struck on steel rods below ground. (Lancs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rodlet or GAD basket	An open garbage and debris (GAD) basket that may have contain pieces of fuel rods, disassembled fuel rods, and other fuel and nonfuel components.	*Energy*
Rodney	a platform constructed from old rails to hold a large fire. The Rodney was used to light the pit bank around the top of the shaft on a winter's night. (Staffs.).	*Mining*
Rods	cage guide rods in the shaft; or lengths of timber bolted together which formed a link from the pumping engine to the barrel of the pump; or long iron hand-held boring bars for making blasting holes in coal or rock. - see also Jumper.	*Mining*
ROG	reactive organic gases	*Petro-Chemical Abbreviations*
Rogging or Rogging out	clearing out the gummings from under the cut made by a coal-cutting machine (Mids.).	*Mining*
Roll	an undulation in the roof or floor of a coal seam; or the drum of the winding engine (S. Wales); or a sudden break or movement of the roof due to the action of weight.	*Mining*
Roll	(1) A high place in the bottom or a low place in the top of a mine passage, (2) a local thickening of roof or floor strata, causing thinning of a coal seam.	*Mining*
Roll Angle	The angle subtended at the center of a base circle from the origin of an involute to the point of tangency of the generatrix from any point on the same involute. The radian measure of this angle is the tangent of the pressure angle of the point on the involute.	*Mechanical Engineering*
Roll cue	Flight director cue to control roll; in fixed-wing aircraft, a wheel cue; in rotary-wing aircraft, a lateral cyclic cue.	*Aeronautical Engineering*
Roll front	A type of uranium deposition localized as a roll or interface separating an oxidized interior from a reduced exterior. The reduced side of this interface is significantly enriched in uranium.	*Energy*
Roll Mill	An apparatus for mixing a plastic material with compounding ingredients, comprising two rolls placed in close proximity to one another. The rolls turn at different speeds to produce a shearing action to the materials being compounded.	*Engineering Physics*
Roll protection	A framework, safety canopy, or similar protection for the operator when equipment overturns.	*Mining*
Roll rate	Rate of change of roll; time derivative of roll; Symbols—q; Symbols—phi dot; Typical Units—rad/s, deg/s; Dimensions—1/Time.	*Aeronautical Engineering*
Roll rate (2)	Rate of change of roll; time derivative of roll; Symbols: q; Symbols: phi dot; Typical Units: rad/s, deg/s; Dimensions: 1/Time.	*Aeronautical Engineering*
Rolled Pipe	Pipe produced from a forged billet which is pierced by a conical mandrel between two diametrically opposed rolls. The pierced shell is subsequently rolled and expanded over mandrels of increasingly large diameter. Where closer dimensional tolerances are desired, the rolled pipe is cold- or hot-drawn through dies and then machined. One variation of this process produces the hollow shell by extrusion of the forged billet over a mandrel in a vertical, hydraulic piercing press.	*Maintenance and Repair*
Rolled Thread	Threads are cold formed by squeezing the blank between reciprocating serrated dies. This acts to increase the major diameter of the thread over and above the diameter of unthreaded shank (if any), unless an extruded blank is used.	*Fastening*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rolled-throughput yield	Also known as "multiple-point yield," this measure is calculated by multiplying together quality yield values at various points in a production process, not only at the end of the line. The purpose is to make problem areas within a process more visible.	*Quality*
Roller	A round part free to revolve about its outer surface. The face may be straight, tapered or crowned. Rollers may also serve as the rolling support for the load being conveyed.	*Equipment*
Roller	A shipment (usually a truckload or carload) that has been shipped, but not yet sold; e.g., a carlot of California peaches may be loaded and set off for New York without having been sold to anyone there. Shippers may be motivated by hopes that the price of peaches will increase by the time the roller arrives and it will be sold for a higher profit.	*Agriculture*
Roller Bearing	An antifriction bearing comprising rolling elements in the form of rollers.	*Lubrication*
Roller Bed	A series of rollers used to support a conveying medium.	*Equipment*
Roller Centers	The distance measured along the carrying run of a conveyor from the center of one roller to the center of the next roller.	*Manufacturing*
Roller Conveyor	A series of rollers supported in a frame over which objects are advanced manually, by gravity or by power. Links: see Gravity Roller Conveyor or Power Roller Conveyor.	*Manufacturing*
Roller support	In two dimensions, a roller support restrains one translation degree of freedom.	*Engineering Physics*
Rollers	Relatively small-diameter cylinders, or wide-faced sheaves, that serve as support for ropes.	*Wire Rope & Cable*
Rolley	a large horse drawn carriage, which was loaded with 2 to 3 'corves'. The rolley had large wheels that ran on round topped rails. Used for transporting the tubs or corves from the crane to the shaft, (N. East).	*Mining*
Rolleyway	a main haulage road. (Lancs.); or principal horse road (N. East). Often the upper of two. Also called a 'way gate'.	*Mining*
Rolling and Peening	In gear teeth, a form of plastic flow that gives the surface a hammered appearance; metal may be rolled over the teeth tips.	*Lubrication*
Rolling Blackouts	A controlled and temporary interruption of electrical service. These are necessary when a utility is unable to meet heavy peak demands because of an extreme deficiency in power supply.	*Energy*
Rolling element (anti-friction) bearings	A shaft rotates on rollers or balls.	*Reliability Engineering*
Rolling Element Bearing	A friction-reducing bearing that consists of a ring-shaped track that contains free-revolving metal balls. A rotating shaft or other part turns against such a bearing.	*Reliability Engineering*
Rolling Oil	An oil used in hot- or cold-rolling of ferrous and non-ferrous metals to Facilitate feed of the metal between the work rolls, improve the plastic deformation of the metal, conduct heat from the metal, and extend the life of the work rolls. Because of the pressures involved, a rolling oil may be compounded or contain EP additives. In hot rolling, the oil may also be emulsifiable.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Roll-off cleanliness	The fluid system contamination level at the time of release from an assembly or overhaul line. Fluid system life can be shortened significantly by full-load operation under a high fluid contamination condition for just a few hours. Contaminant implanted and generated during the break-in period can devastate critical components unless removed under controlled operating and high performance filtering conditions.	*Oil Analysis*
ROM (Read-Only Memory)	Memory with information placed into it during manufacture that cannot be altered. Serial Communications - Sending bits of information in succession along a single circuit (pair of wires).	*Electrical Engineering*
RON	research octane number	*Petro-Chemical Abbreviations*
Ronk-thing	a slip in the coal whose direction is opposite to that prevailing in the locality (N. Staffs.).	*Mining*
Roof (coal)	The rock immediately above a coal seam. The roof is commonly a shale, often carbonaceous and softer than rocks higher up in the roof strata.	*Energy*
Roof bolt	A long steel bolt driven into the roof of underground excavations to support the roof, preventing and limiting the extent of roof falls. The unit consists of the bolt (up to 4 feet long), steel plate, expansion shell, and pal nut. The use of roof bolts eliminates the need for timbering by fastening together, or "laminating," several weaker layers of roof strata to build a "beam."	*Mining*
Roof bolting	a system of roof support incorporating steel bolts (roof bolts) that are fixed into holes (usually with resin) bored up into the roof.	*Mining*
Roof brushing, (Scot.)	see Ripping.	*Mining*
Roof coal	coal left in situ to form a solid roof. This is done when the strata above the coal is shaley or unstable. Called 'roofers' in Lancashire.	*Mining*
Roof fall	A coal mine cave-in especially in permanent areas such as entries.	*Mining*
Roof insulation	Insulating materials placed underneath the roof or on the roof (building).	*Energy*
Roof jack	A screw- or pump-type hydraulic extension post made of steel and used as temporary roof support.	*Mining*
Roof or ceiling insulation	A building shell conservation feature consisting of insulation placed in the roof (below the waterproofing layer) or in the ceiling of the top floor in the building.	*Energy*
Roof or ceiling insulation, insulation in exterior walls	Any material that when placed between the interior surface of the building and the exterior surface of the building, reduces the rate of heat loss to the environment or heat gain from the environment. Roof or ceiling insulation refers to insulation placed in the roof or ceiling of the top occupied floor in the building. Wall insulation refers to insulation placed between the exterior and interior walls of the building.	*Energy*
Roof or Top	the strata immediately above the coal seam; or the top (ceiling) of a roadway. Also called the 'roof stone'.	*Mining*
Roof pond	**A** solar energy collection device consisting of containers of water located on a roof that absorb solar energy during the day so that the heat can be used at night or that cools a building by evaporation at night.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Roof sag	The sinking, bending, or curving of the roof, especially in the middle, from weight or pressure.	*Mining*
Roof stress	Unbalanced internal forces in the roof or sides, created when coal is extracted.	*Mining*
Roof support	Posts, jacks, roof bolts and beams used to support the rock overlying a coal seam in an underground mine. A good roof support plan is part of mine safety and coal extraction.	*Mining*
Roof support and mine ventilation	are paramount in all underground mining operations. Roof bolting is the principal method of supporting the mine roof. In roof bolting, long bolts, 2 to 10 feet long with an expansion shell or with resin grouting are placed in the mine roof. The bolts reinforce the roof by pulling together rock strata to make a strong beam or by fastening weak strata to strong strata. Mine ventilation, accomplished with fans, is essential to supply fresh air and to remove gases and dust from the mine. To reduce the possibility of coal dust explosions, rock dust is sprayed in an underground coal mine. Rock dust is a very fine noncombustible material (pulverized limestone).	*Energy*
Roof supports	anything used to support the roof, e.g. bolts, arches, rings, powered supports, chocks, timber or hydraulic props.	*Mining*
Roof trusses	A combination of steel rods anchored into the roof to create zones of compression and tension forces and provide better support for weak roof and roof over wide areas.	*Mining*
Roof	The stratum of rock or other material above a coal seam; the overhead surface of a coal working place. Same as "back" or "top."	*Mining*
Roof-bolting machine, or roof bolter	is used to drill holes and place bolts to support the mine roof. Roof bolting units can be installed on a continuous mining machine.	*Energy*
Roofers	see Roof coal. (Lancs.).	*Mining*
Roof-framy	a framy roof is a roof which when allowed to fall, breaks down in large blocks or 'frames' of stones.	*Mining*
Roofing	when the top of a loaded skip became wedged against the roof of a roadway (S. Staffs.).	*Mining*
Room air conditioner	Air-conditioning units that typically fit into the window or wall and are designed to cool only one room.	*Energy*
Room and pillar mining	A method of underground mining in which approximately half of the coal is left in place to support the roof of the active mining area. Large "pillars" are left while "rooms" of coal are extracted.	*Mining*
Room and rance	a method of room and pillar working similar to double stall, practiced in Scotland. The pillar or rance left to support the roof was very narrow as opposed to the normal wide pillars. This system could only be used where there was a very strong roof.	*Mining*
Room Conditions	Ambient environmental conditions under which transducers must commonly operate.	*Electrical*
Room Conditions	The ambient environmental conditions under which sensors must commonly operate, which have been established as follows: (a) Temperature: 25 +- 10 %C (77 +- 18 degrees F). (b) Relative humidity: 90% or less. (c) Barometric pressure: 26 to 32 inches Hg. Note: Tolerances closer than shown are frequently specified for sensor calibration and test environments.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Room heater burning gas, oil, and kerosene	Any of the following heating equipment: circulating heaters, convectors, radiant gas heaters, space heaters, or other nonportable room heaters that may or may not be connected to a flue, vent, or chimney.	*Energy*
Room neck	The short passage from the entry into a room.	*Mining*
Room, a working place	A heading or short stall in room and pillar or room and rance working. (Scot.). -see also Pillar and stall.	*Mining*
Room-and-pillar mining	The most common method of underground mining in which the mine roof is supported mainly by coal pillars left at regular intervals. Rooms are places where the coal is mined; pillars are areas of coal left between the rooms. Room-and-pillar mining is done either by conventional or continuous mining.	*Energy*
Room-and-pillar mining	A method of mining flat-lying ore deposits in which the mined-out area, or rooms, are separated by pillars of approximately the same size.	*Mining*
Roondy coal	large lumps of coal (4-8 inches). (N. East).	*Mining*
Root Edge	A root face of zero width.	*Maintenance and Repair*
Root Face	That portion of the groove face adjacent to the root of the joint. This portion is also referred to as the root land.	*Maintenance and Repair*
Root of Joint	That portion of a joint to be welded where the members to be joined come closest to each other. In cross section, the root of a joint may be a point, a line, or an area.	*Maintenance and Repair*
Root Opening	The separation, between the members to be joined, at the root of the joint.	*Maintenance and Repair*
Root Penetration	The depth which a groove weld extends into the root of a joint as measured on the centerline of the root cross section. Sometimes welds are considered unacceptable if they show incomplete penetration.	*Maintenance and Repair*
Root Reinforcement	Weld reinforcement at the side other than that from which the welding was done.	*Maintenance and Repair*
Root Surface	The exposed surface of a weld on the side other than that from which the welding was done.	*Maintenance and Repair*
Root Cause	A source or origin of an event, failure or defect.	*Reliability Engineering*
Root Cause Analysis	An analysis carried out to determine what actually caused a failure, as opposed to what appears to have been the cause.	*Reliability Engineering*
Root Cause Analysis	Also referred to as RCA. It is a series of problem-solving methods or actions that are aimed at determining the base reason(s) for problems or failure. The stewardship of this process is usually a function of reliability engineering.	*Reliability Engineering*
Root Cause Failure Analysis (RCFA)	Generally stands for a systematic procedure to investigate the root causes of asset failures (failure diagnosis). The diagnosis results are used in maintenance tasks as a proactive way to prevent repetitive failures.	*Reliability Engineering*
Root Circle	A circle coinciding with or tangent to the bottoms of the tooth spaces.	*Gears*
Root collar	The transition zone between stem and root at the ground line of a tree or seedling.	*Forestry*
Root Diameter	Diameter of the root circle.	*Gears*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Root mean square (RMS)	A statistical measure of data; the root of the mean of the square; for variables with mean of zero, the standard deviation is equal to the rms; Compare: root sum square.	*Aeronautical Engineering*
Root sum square (RSS)	A statistical measure of data; the root of the sum of the square; for a vector, its length is equal to the RSS of its scalar elements; Compare: root mean square.	*Aeronautical Engineering*
Root–mean-square-length	Separation distance between the ends of a randomly coiled polymeric molecule.	*Material Process*
Rope	steel cable attached to the cage, or steel cable or chain used in haulage, originally hemp ropes were used.	*Mining*
Rope capel	the fixing mechanism of a winding rope to the top of a cage. -see Cap.	*Mining*
Rope guides	vertical ropes suspended in the shaft to act as guides to the cage. When the guides are girders, they are called 'rigid guides'.	*Mining*
Rope haulage, haulage by ropes	see also Direct rope, Endless rope, Main and tail, Self-acting and Surface driven endless rope	*Mining*
Rope Lay conductor	Conductor constructed of bunch-stranded or concentric-stranded member or members, as a central core, around which are laid one or more helical layers of such members.	*Electrical*
Rope roll	the drum of the winding engine. (N. East).	*Mining*
Rope sheave	see Sheave.	*Mining*
Rosin	A vegetable resin, the molten resinous residue remaining in the still after the distillation of spirits of turpentine from crude turpentine obtained from living pine trees. The molten resin is strained, and solidifies to form a solid rosin.	*Material Process*
Rosin ester	The reaction product of rosin and glycerin. See Ester gum.	*Material Process*
Rotable	A Term Often Used In The Maintenance Of Heavy Mobile Equipment. A Rotable Component Is One Which, When It Has Failed, Or Is About To Fail, Is Removed From The Asset And A Replacement Component Is Installed In Its Place. The Component That Has Been Removed Is Then Repaired Or Restored, And Placed Back In The Maintenance Store Or Warehouse, Ready For Re-Issue.	*Plant Engineering*
Rotary actuator	A device for converting hydraulic energy into rotary motion -- a hydraulic motor.	*Mechanical, Process, and Operations*
Rotary cut	The cutting of veneers from a log by turning it against a broad cutting knife.	*Material Process*
Rotary Cylinder	A cylinder in which fluid force can be applied to the movable element in only one direction.	*Mechanical, Process, and Operations*
Rotary Directional Valve	A valve designed in cylindrical shape. When the valve is turned, it open and closes drilled passages to direct oil.	*Mechanical, Process, and Operations*
Rotary drill	A machine that drills holes by rotating a rigid, tubular string of drill rods to which is attached a bit. Commonly used for drilling large-diameter blastholes in open-pit mines.	*Mining*
Rotary Drilling	In rotary drilling, a drill bit is attached to a length of connected drill pipe. The drill bit, made of tough metal, will grind up rock as the drill is rotated. The broken pieces (cuttings) are flushed upward and out of the hole by circulating a drilling fluid (drilling mud) down through the drill pipe and back to the surface.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rotary Drilling (Air)	With this method, air acts as the drilling fluid and excavation is accomplished the same way as conventional rotary drilling. The bit cuts and breaks up the formation. Air is forced through the drilling pipe and out through holes at the bottom of the rotary bit. A stream of water is often introduced into the air system to help cool the drill bit and control dust. The cuttings move up in the annular space between the drill pipe and the wall of the hole, and collected at the top.	*Petroleum Engineering*
Rotary Drilling (Reverse)	In this technique, the process is reversed. Instead of circulating drilling fluid through the drill pipe and up the outside of the pipe, fluid is fed through the space between the wall of the hole and the drill pipe. It is then pumped up with the cuttings through the hollow part of the drill pipe, and out through a discharge pipe.	*Petroleum Engineering*
Rotary Line	On a rotary drilling rig, it is the wire rope used for raising and lowering the drill pipe, as well as for controlling its position.	*Wire Rope & Cable*
Rotary rig	A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.	*Energy*
Rotary Seal	A mechanical seal which rotates with a shaft and is used with a stationary mating ring.	*Lubrication*
Rotary steerable	a directional drilling system comprising a downhole-adjustable tool located within the bottom hole assembly, which allows for lateral force (magnitude and orientation) control close to the drill bit while drilling and while rotating the drill string.	*Petroleum Drilling*
Rotary Valve	A valve style in which the flow closure member is rotated in the flow stream to modify the amount of fluid passing through the valve.	*Industrial Engineering*
Rotating Cylinder	A cylinder in which relative rotation of the cylinder housing and the piston and piston rod, plunger or ram, is recommended.	*Mechanical, Process, and Operations*
Rotating Equipment	Equipment that moves liquids, solids or gases through a system of drivers (turbines, motors, engines), driven components (compressors, pumps), transmission devices (gears, clutches, couplings) and auxiliary equipment (lube and seal systems, cooling systems, buffer gas systems).	*Lubrication*
Rotating Pressure Vessel Oxidation Test (RPVOT)	The Rotating Pressure Vessel Oxidation Test measures an oil's oxidation stability. The oil sample is placed in a vessel containing a polished copper coil. The vessel is then charged with oxygen and placed in a bath at a constant temperature of 150 degrees Celsius. Stability is expressed in terms of the time it takes to achieve a pressure drop of 25.4 pounds per square inch (psig) pressure drop from maximum pressure.	*Lubrication*
Rotation	the changing of the specific fields used for one crop year to year	*Agriculture*
Rotation	The number of years required to establish and grow trees to a specified size, product, or level of maturity.	*Forestry*
Rotational Molding	In rotational molding, or rotomolding, a product is formed from fine powder within a closed mold, which is rotated in a heating chamber and then a cooling chamber. While the mold is slowly turning and tumbling, it is heated by forced hot air in an oven. As the mold wall heats, the resin begins to stick to the inside of the mold forming a hollow part.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Rotation-Resistant Rope	A wire rope consisting of an inner layer of strand laid in one direction covered by a layer of strand laid in the opposite direction. This has the effect of counteracting torque by reducing the tendency of finished rope to rotate.	*Wire Rope & Cable*
Rotche or Roche	a soft, friable sandstone (S. Staffs.).	*Mining*
Rotor	A rotor is a rotating body whose journals are supported by bearings.	*Electronic Process*
Rouge	A red powder consisting of ferric oxide, usually prepared by calcining ferrous sulfate, used as a pigment and for polishing.	*Material Process*
Rough Top Belt	A belt cover intentionally made with irregular ridges or projection to produce a broken surface for greater traction or carrying abilities. Used for inclined service.	*Equipment*
Rough Weight	Gross Weight.	*Metallurgy*
Roughneck	A worker on a drilling or workover rig whose primary work station is the rig floor. Also referred to as floorhand, floorman or rig crew member.	*Petroleum Drilling*
Roughneck	Drill crew members who work on the derrick floor, screwing together the sections of drill pipe when running or pulling a drillstring.	*Petroleum Drilling*
Round	Planned pattern of drill holes fired in sequence in tunneling, shaft sinking, or stopping. First the cut holes are fired, followed by relief, lifter, and rib holes.	*Mining*
Round coals	best large coal, from which the smalls have been screened. (N. East).	*Mining*
Round ree	an area close to the pit bottom where the bearers stocked the coal they had carried from the workings until they had accumulated enough to fill a creel. (Scot.).	*Mining*
Round test mesh	A sieving screen with round holes, the dimensions of which are of specific sizes to allow certain sizes of coal to pass through while retaining other sizes.	*Energy*
Rounder	an tool resembling a beche externally, used for breaking or cutting off any projection which may have occurred in a borehole or shothole.	*Mining*
Round-Wire Track Strand	Strand composed of concentric layers of round WIRES, used as TRACK CABLE.	*Wire Rope & Cable*
Roundwood	Wood cut specifically for use as a fuel.	*Energy*
Roustabout	Any unskilled manual laborer on the rigsite. Roustabouts are commonly hired to ensure that the skilled personnel that run an expensive drilling rig are not distracted by peripheral tasks, ranging from cleaning up the location to cleaning threads to digging trenches to scraping and painting rig components.	*Petroleum Drilling*
Roustabout	Drill crew members who handle the loading and unloading of equipment and assist in general operations around the rig.	*Petroleum Drilling*
Roustabout	A common laborer around a drilling or a producing well.	*Petroleum Drilling*
Roustabout	Drill crew members who handle the loading and unloading of equipment and assist in general operations around the rig.	*Petroleum Drilling*
Route Maintenance	A mechanic's established route through a facility to fix the small problems. The route mechanic is usually very well equipped so he/she can deal with most small problems. Route maintenance and preventive maintenance activity are sometimes combined.	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	Industry
Routine Maintenance Task	Any maintenance task performed at a regular, predefined interval.	*Maintenance*
Routine Work	Work done on a routine basis where the work and material content is well known and understood (for example, daily or weekly line start-ups).	*Maintenance*
Row	the last trip on a man-haulage system. (Lancs.); or a ridge in the roof or in the pavement. (Scot.); or a fault. (Scot.); or a seam or bed, e.g. the Row-hurst, the Two Row seams of North Staffordshire.	*Mining*
Row crops	Crops planted in rows far enough apart to be mechanically cultivated during their early growing period. Common examples are carrots, onions, potatoes, tomatoes, and commercially grown flowers.	*Agriculture*
Row Dividers	the large points on the end of a combine used to pick-up corn	*Agriculture*
Royalties	The amount exploration and production companies pay to the mineral rights owners of a producing well. Pennsylvania state law requires this rate be no less than 12% of the market price per 1000 cubic feet of gas on the day that gas comes out of the ground. Often mineral rights owners have negotiated higher royalties. It has also been common for E&P companies to deduct well production expenses from these royalties.	*Petroleum Drilling*
Royalties (coal)	Payments from a lessee to the lessor, for the use of the lessor's coal resources. Payments are made in money or in for a stated share of production from the lessor's mineral deposits. Royalty rates may be expressed as an established minimum, a sliding-scale, or a step-scale. A step-scale royalty rate increases by steps as the average production on the lease increases. A sliding-scale royalty rate is based on average production and applies to all production from the lease.	*Energy*
Royalty	A contractual arrangement providing a mineral interest that gives the owner a right to a fractional share of production or proceeds there from, that does not contain rights and obligations of operating a mineral property, and that is normally free and clear of exploration, developmental and operating costs, except production taxes.	*Energy*
Royalty	An amount of money paid at regular intervals by the lessee or operator of an exploration or mining property to the owner of the ground. Generally based on a certain amount per ton or a percentage of the total production or profits. Also, the fee paid for the right to use a patented process.	*Mining*
Royalty - Royalties Does not refer to new "shaleionaires" but rather the percentage of proceeds from the sale of oil and gas from a well that the mineral rights owner receives Royalty percentages in some South Texas oil leases are as high as 27%	Royalty - Royalties Does not refer to new "shaleionaires" but rather the percentage of proceeds from the sale of oil and gas from a well that the mineral rights owner receives. Royalty percentages in some South Texas oil leases are as high as 27%.	*Petroleum Drilling*

Term	Definition	*Industry*
Royalty cost A share of the profit or product reserved by the grantor of a mining lease, such as a royalty paid to a lessee	Royalty cost: A share of the profit or product reserved by the grantor of a mining lease, such as a royalty paid to a lessee.	*Energy*
Royalty interest (including overriding royalty) These interests entitle their owner(s) to a share of the mineral production from a property or to a share of the proceeds there from. They do not contain the rights and obligations of operating the property and normally do not bear any of the costs of exploration, development, and operation of the property	Royalty interest (including overriding royalty): These interests entitle their owner(s) to a share of the mineral production from a property or to a share of the proceeds there from. They do not contain the rights and obligations of operating the property and normally do not bear any of the costs of exploration, development, and operation of the property.	*Energy*
Royalty interest An interest in a mineral property provided through a royalty contract	Royalty interest: An interest in a mineral property provided through a royalty contract.	*Energy*
Royalty payment	The cash or kind paid to the owner of mineral rights.	*Petroleum Drilling*
rpm	Revolutions per minute	*General*
RPU	See: Railway Patrolmen's International Union (AFL-CIO)	*Industrial Relations*
RS	Rising stem - A valve stem with threads arranged so that as the stem turns, the threads engage a stationary threaded area and lift the stem along with the closure element attached to it.	*Mechanical*
RS Rising stem	A valve stem with threads arranged so that as the stem turns, the threads engage a stationary threaded area and lift the stem along with the closure element attached to it.	*General Mechanical*
RSE	Relative Standard Error	*Energy*
RSI	Registration Systems, Incorporated (CMA monitoring agency)	*Petro-Chemical Abbreviations*
RT	Real Time	*Energy*
RTD	Resistance temperature detector.	*Electrical*
RTDG	See: Radio and Television Directors Guild (AFL-CIO)	*Industrial Relations*
RTIF	See: Railway Trainmen and Locomotive Firemen; Association of (Ind)	*Industrial Relations*
RTJ	'Ring Type Joint'. Also see RTJ Flanges.	*Petroleum Engineering*
RTJ or R.T.J.	Ring Type Joint - A flange connection using a specially shaped soft metal ring as a gasket. Generally used on high pressure valves and not widely used in the pipeline industry.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	Industry
RTJWN	See 'WN-RTJ'	*Petroleum Engineering*
RTU	Remote Terminal Unit	*Control Engineering*
Rubber	A material that is capable of recovering from large deformations quickly and forcibly, and can be, or already is, modified to a state in which it is essentially insoluble (but can swell) in boiling solvent.	*Electrical*
Rubbers	wooden blocks for pump rods to slide on. (Scot.); or lengths of timber used to guide hutches around curves. (Lancs.), (Scots.).	*Mining*
Rubbing guides	guide ropes suspended in the centre of the shaft to safeguard against the cages coming into contact with one another when passing	*Mining*
Rubbing surface	The total area (top, bottom, and sides) of an airway.	*Mining*
Rubbish	another name for firedamp (N. Staffs.); or debris left in old workings (Lancs.).	*Mining*
Rubbish jigs	jigs driven specifically to act as roadways for the transfer of debris for stowage.	*Mining*
Rubble	screened coal. (Som.); or slack or small coal (S. West).	*Mining*
Rucks or Rooks	colliery spoil heaps.	*Mining*
Rudder	A control surface on fixed-wing aircraft, usually mounted at aft end of the fuselage sticking up (like a dorsal fin), that controls yaw (heading), and is controlled by the pedals; Symbols: delta sub R; Typical Units: rad, deg.	*Aeronautical Engineering*
Rudding	pit rubbish or debris. (N. East).	*Mining*
RUL	regular unleaded gasoline	*Petro-Chemical Abbreviations*
Rulemaking (regulations)	The authority delegated to administrative agencies by Congress or State legislative bodies to make rules that have the force of law. Frequently, statutory laws that express broad terms of a policy are implemented more specifically by administrative rules, regulations, and practices.	*Energy*
Rumen	the first large compartment of the stomach of a bovine; its bacteria and protozoa break down cellulose	*Agriculture*
Run	The portion of a fitting having its end in line, or nearly so, as distinguished from branch connections, side outlets, etc.	*Maintenance and Repair*
Run	a mine, to cut or drive a mine. (Scot.).	*Mining*
Run off	That portion of the precipitation that flows over the land surface and ultimately reaches streams to complete the water cycle. Melting snow is an important source of this water as well as all amounts of surface water that move to streams or rivers through any given area of a drainage basin.	*Energy*
Run rider	a lad who accompanied the train of tubs along the haulage road.	*Mining*
Run the tow	sliding down the shaft on the winding rope. A common practice in shallow mines, usually at the weekend or at night, if there was no engine man in attendance, or to run empty cages in the shaft after coal winding prior to winding the men. This was done to test the winding ropes, as a safety measure. (Scots.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Run-in period	A period before randomisation when participants are monitored but receive no treatment (or they sometimes all receive one of the study treatments, possibly in a blind fashion). The data from this stage of a trial are only occasionally of value but can serve a valuable role in screening out ineligible or non-compliant participants, in ensuring that participants are in a stable condition, and in providing baseline observations. A run-in period is sometimes called a washout period if treatments that participants were using before entering the trial are discontinued.	*Quality Engineering*
Runner	In a mold, the groove that connects the cavity with the gate through which the plastics composition flows.	*Material Process*
Runner	In an injection or transfer mold, the feed channel, usually of circular cross section, that connects the sprue with the cavity gate. The term is also used for the plastic piece formed in this channel.	*Engineering Physics*
Runner-on	the man who loaded tubs at the bottom of the shaft.	*Mining*
Running a mine	driving a drift entirely in the coal in a steep inclined seam. (Scot.).	*Mining*
Running amain	the breaking and running of the winding rope down the shaft. (Scot.).	*Mining*
Running and Quick-Start Capability	Generally refers to generating units that can be available for load within a 30-minute period.	*Energy*
Running balk	a balk set in the direction of a drift, at the side, as opposed to a cross it, to form a support for the cross balks. A common method of timbering through an old board or place were the roof had fallen heavily.	*Mining*
Running bridge	see Banking wagon.	*Mining*
Running gug	a self-acting incline.	*Mining*
Running measures or Running ground	sand and gravel, which contain large amounts of water. e.g. running sand or other incohesive material through which an excavation can only be maintained by means of complete peripheral support.	*Mining*
Running the brae	hauling tubs up an incline using a winch. (Scot.).	*Mining*
Running the drum	lowering a drum or cylinder through soft ground to support the top section of a sinking shaft.	*Mining*
Runoff	Precipitation flowing over land to surface streams, rivers, and lakes. Runoff may be classified according to speed of appearance after rainfall or melting snow as direct runoff or base runoff; and according to source as surface runoff, storm interflow, or groundwater runoff.	*Petroleum Engineering*
Run-of-mine	Raw material as it exists in the mine; average grade or quality.	*Mining*
Run-of-mine	A term used loosely to describe ore of average grade.	*Mining*
Run-of-mine coal	Coal as it comes from the mine prior to screening or any other treatment.	*Energy*
Run-of-river hydroelectric plant	A low-head plant using the flow of a stream as it occurs and having little or no reservoir capacity for storage.	*Energy*
Runout Table	The shear allows plate to be cut to customer specifications in thicknesses up to 1.250".	*Steel*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Run-to-Failure	No Scheduled Maintenance - An Equipment Maintenance Strategy, Where No Routine Maintenance Tasks Are Performed On The Equipment. The Only Maintenance Performed On The Equipment Is Corrective Maintenance, And Then Only After The Equipment Has Suffered A Failure. Also Described As A No Scheduled Maintenance Strategy.	*Management*
Run-To-Failure (RTF)	An equipment maintenance strategy, where no routine maintenance tasks are performed on the equipment. The only "planned" maintenance performed on the equipment is corrective maintenance after the equipment has suffered a failure. Run-To-Failure is a conscious decision as opposed to break down maintenance. Also related to "throwaway maintenance" (Run to failure followed by replacement), and "no scheduled maintenance". See also No Scheduled Maintenance and Break Down Maintenance	*Maintenance*
Rupture	Failure that is accompanied by significant plastic deformation.	*Engineering Physics*
Rupture	In the breaking strength or tensile strength tests the point at which a material physically comes apart as opposed to yield strength, elongation, etc.	*Electrical*
Rupture disc (blow-out disc)	An emergency over-pressure relief device, employing a relatively thin diaphragm, designed to burst at a specified pressure. Cannot be reset – must be replaced after rupture event.	*Mechanical*
Rural Business-Cooperative, (RBS)	An organization within the USDA.	*Agriculture*
Rural Electric Cooperative	A nonprofit, customer-owned electric utility that distributes power in a rural area.	*Energy*
Rural Electric Cooperative (Co-op) (also called a cooperatively owned electric utility)	In the United States, a rural electric cooperative is a customer-owned utility created to transmit and distribute power in rural areas. Rural electric cooperatives benefit from below-market financing from the Rural Utilities Service (formerly the Rural Electrification Administration), as well as low-cost power from federal hydroelectric projects. In addition, most do not pay state or federal income taxes. Typically, a board of directors sets the rates for rural electric cooperatives elected from among the cooperative's members. Today, rural electric cooperatives serve about 11 percent of U.S. electric customers.	*Energy*
Rural Electrification Administration	REA, a former USDA agency that administered loan programs for electrification and telephone service in rural areas. It was created in 1935 by executive order as an independent federal bureau and incorporated in USDA in 1939. The administration was abolished in 1994. It's functions are now performed by the Rural Utilities Service in USDA.	*Agriculture*
Rural Electrification Administration (REA)	A lending agency of the U. S. Department of Agriculture, the REA makes self-liquidating loans to qualified borrowers to finance electric and telephone service to rural areas. The REA finances the construction and operation of generating plants, electric transmission and distribution lines, or systems for the furnishing of initial and continued adequate electric services to persons in rural areas not receiving central station service.	*Energy*
Rural Utilities Service, (RUS)	An agency of the USDA. Helps rural utilities expand and keep their technology up to date, and to establish such new services as distance learning and telemedicine.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
RUS	Rural Utilities Service, an agency of the USDA. Helps rural utilities expand and keep their technology up to date, and to establish such new services as distance learning and telemedicine.	*Agriculture*
Rush	the sudden weighting of a strong roof when the pillars were being worked out. (Scot.).	*Mining*
Rusk	small slack. The next grade above dust or dead small. (N. East).	*Mining*
Rust	black shale stained by ochre.	*Mining*
Rust	corrosion product consisting of hydrated iron oxides; this term is applicable only to ferrous (iron-containing) alloys	*Materials Process*
Rust Inhibitor	A type of corrosion inhibitor used in lubricants to protect surfaces against rusting.	*Lubrication*
Rust Preventative	Compound for coating metal surfaces with a film that protects against rust. Commonly used to preserve equipment in storage.	*Lubrication*
Rust prevention test (turbine oils)	A test for determining the ability of an oil to aid in preventing the rusting of ferrous parts in the presence of water.	*Oil Analysis*
Rust staining	reaction between exposed intermetallic layers (specifically the iron portion of the layers) with oxygen, that cause mild red or brown staining.	*Materials Process*
Rusting	A common corrosion process for ferrous alloys.	*Material Process*
Rusty coal	coal with a high proportion of pyrites, which has changed color due to the effect water or oxidation. (N. East)—see also Brassy coal.	*Mining*
Ruttles	heavily faulted and shattered ground running roughly parallel to the plane of the fault. (Yorks.).	*Mining*
R-value	A measure of a material's resistance to heat flow in units of Fahrenheit degrees x hours x square feet per Btu. The higher the R-value of a material, the greater its insulating capability. The R-value of some insulating materials is 3.7 per inch for fiber glass and cellulose, 2.5 per inch for vermiculite, and more than 4 per inch for foam. All building materials have some R-value. For example, a 4-inch brick has an R-value of 0.8, and half-inch plywood has an R-value of 0.6. The table below converts the most common "R" values to inches. For other "R" values, divide the "R" value by 3 to get the number of inches.	*Energy*
RVP	See Reid Vapor Pressure.	*Energy*
RWD	rear-wheel drive	*Mechanical*
RWDSU	See: Retail, Wholesale and Department Store Union (AFL-CIO)	*Industrial Relations*
RX	A prefix for API Spec. 6A self energizing ring gasket seal rings. RX ring gaskets will fit all R ring grooves in API-6B flanges and only RX ring gaskets fit 'SR' ring grooves in API Spec. 16A hubs. RX gaskets are supplied in low alloy cad plated carbon steel, stainless steel and all open grades of steel.	*Petroleum Engineering*
RYA	See: Railroad Yardmasters of America (AFL-CIO)	*Industrial Relations*
RYNA	See: Railroad Yarmasters of North America, Inc. (Ind)	*Industrial Relations*
Ryznar Index	An empirical method, often used in combination with the Langelier's Index, to predict the scaling tendencies of water. It is based on a study of operating results with water of various saturation indices.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
S	S	*Forestry*
--S--	--S--	*Petroleum Drilling*
Sabbaticals	a term referring to the periodic time off for research or study for professional people and, especially, teachers in universities.	*Industrial Relations*
Sabotage	direct action by employees to injure or destroy an employer's income or property.	*Industrial Relations*
Sacrificial anode	Use of a less noble material to protect a structural metal from corrosion.	*Material Process*
Sacrificial Coating	A coating that provides corrosion protection wherein the coating material corrodes in preference to the substrate, thereby protecting the latter from corrosion.	*Paint and Coatings*
Saddle back	a roll or undulation in the roof or pavement of a roadway. (Scot.) -see Roll, or an anticline or up-fold in the strata.	*Mining*
Saddle Flange	Also known as tank flange or boiler flange. A curved flange shaped to fit a boiler, tank, or other vessel and to receive a threaded pipe. A saddle flange is usually riveted or welded to the vessel.	*Maintenance and Repair*
Saddles	cast iron fittings confining the tram and tub on the rolley. (N. East).	*Mining*
SAE	Society of Automotive Engineers	*Petro-Chemical Abbreviations*
SAE	Society of Automotive Engineers (sets standards for many hydraulic components)	*Mechanical, Process, and Operations*
SAE Port	A straight thread port used to attach tube and hose fittings. It employs an "O" ring compressed in a wedge-shaped cavity. A standard of the Society of Automotive Engineers J514 and ANSI/B116.1.	*Mechanical, Process, and Operations*
SAE Port	A straight thread port used to attach tube and hose fittings. It employs an "O" ring compressed in a wedge-shaped cavity. A standard of the Society of Automotive Engineers J514 and ANSI/B116.1	*Lubrication*
SAE Viscosity	The viscosity classification of a motor oil according to the system developed by the Society of Automotive Engineers and now in general use. "Winter" grades are defined by viscosity measurements at low temperatures and have "W" as a suffix, while "Summer" grades are defined by viscosity at 100° C and have no suffix. Multigrade oils meet both a winter and a summer definition and have designations such as SAE 10W-30, etc.	*Lubrication*
Safe Drinking Water Act	Federal law that regulates drinking water quality.	*Petroleum Drilling*
Safe Working Load	This term is potentially misleading and is, therefore, in disfavor. Essentially, it refers to that portion of the nominal rope strength that can be applied either to move or sustain a load. It is misleading because it is only valid when the rope is new and equipment is in good condition. See RATED CAPACITY.	*Wire Rope & Cable*
Safe Yield	The amount of groundwater that can be taken from an aquifer without depleting the aquifer beyond its ability to be replenished or lowering the water table.	*Petroleum Engineering*
Safety	[of an intervention:] Refers to serious adverse effects, such as those that threaten life, require or prolong hospitalization, result in permanent disability, or cause birth defects. Indirect adverse effects, such as traffic accidents, violence, and damaging consequences of mood change, can also be serious.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Safety	efforts by management, labor and government to prevent, an eliminate the causes of accidents.	*Industrial Relations*
Safety Appliance	any device or other protection designed to cover dangerous parts of machinery or equipment, particularly moving parts.	*Industrial Relations*
Safety Campaigns	organized programs instituted by companies or jointly by companies and unions to educate employees to adopt a positive attitude towards safety ward practices.	*Industrial Relations*
Safety Case	A safety case is a structured argument that presents evidence that is intended to demonstrate that a system is safe. More specifically, a safety case aims to show that specific safety claims are met.	*Reliability Engineering*
Safety Clause	a clause found in some collective bargaining agreements which provides for safety committees, either joint committees or union committees working with the company for the purpose of investigating situations which are unsafe.	*Industrial Relations*
Safety Clothing	personal apparel or protective equipment worn by the worker in order to reduce hazards of the job and to prevent accidents.	*Industrial Relations*
Safety Committee	a group generally designated by labor and management which has as its prime function the review and encouragement of safety practices within the plant.	*Industrial Relations*
Safety Consequence	A Failure Has Safety Consequences If It Causes A Loss Of Function Or Other Damage That Could Hurt Or Kill Someone.	*Management*
Safety Critical Element (SCE)	These are physical measures put in place to prevent potential hazards becoming events and subsequently escalating to create uncontrollable situation. Each SCE should have an associated performance standard against which its performance should be measured to ensure it fulfills the required criteria.	*Reliability Engineering*
Safety Department	that unit in the plant responsible for the prevention of accidents, and the administration of safety in th establishment.	*Industrial Relations*
Safety Education	all of the activities which in any way relate to the prevention of accidents and safe operation on the job.	*Industrial Relations*
Safety Engineer	the person in the plant, generally included in the personnel department, who has the prime responsibility of seeing to it that the plant operates with a minimum of accidents and with the optimum conditions for safe operations.	*Industrial Relations*
Safety Factor	See DESIGN FACTOR.	*Wire Rope & Cable*
Safety fuse	A train of powder enclosed in cotton, jute yarn, or waterproofing compounds, which burns at a uniform rate; used for firing a cap containing the detonation compound which in turn sets off the explosive charge.	*Mining*
Safety glass	A product made by cementing two sheets of glass together with a sheet of transparent, colorless plastics material between to render it shatterproof.	*Material Process*
Safety handrail	Railing around top of tower, platforms, and stairways; usually composed of top handrail, kneerail, and toeboard. (See Handrail.)	*Facility Engineering*
Safety Harness	A harness, made of synthetic material, to protect a person in the event of a fall. The harness system should allow a worker to free fall no more than two feet.	*Petroleum Engineering*
Safety Instrumented Function (SIF)	A safety function with a specified safety integrity level which is necessary to achieve functional safety. A Safety Instrumented Function can be either a safety instrumented protection function, or a safety instrumented control function.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Safety Instrumented System (SIS)	A function to be implemented by a SIF, or other technology safety related system, or external risk reduction facilities, which is intended to achieve or maintain a safe state for the process, with respect to a specific hazardous event. The terms SIS and SIF are often used almost interchangeably. It should be noted, though, that a Safety Instrumented System is a combination of one or more Safety Instrumented Functions.	*Reliability Engineering*
Safety Integrity Level (SIL)	The Safety Integrity Level (SIL) of a process is a measure of its safety, in terms of the extent to which a user may expect that process to perform safely, and in the case of failure to fail in a safe manner.	*Reliability Engineering*
Safety lamp	A lamp with steel wire gauze covering every opening from the inside to the outside so as to prevent the passage of flame should explosive gas be encountered.	*Mining*
Safety Measure	any policy, action, pr device for the purpose of safeguarding the welfare of the individual in reducing accidents or protecting and remedying health and safety conditions.	*Industrial Relations*
Safety Movement	a broad program, generally of an educational nature or sometimes dealing with legislation, to convince employers and employees as well as legislators about the importance of protecting security and safety for individuals on the job.	*Industrial Relations*
Safety pit, A 'Safety Lamp Mine'	A gassy mine and one in which safety lamps must be used. (Scot.).	*Mining*
Safety PLC	A PLC specifically designed to be reliable through the device of redundancy. It could be used either for safety reasons or to minimize the commercial impact of a serious failure.	*Control Engineering*
Safety Programs	any organized set of plans designed to meet safety problems in a plant.	*Industrial Relations*
Safety Regulations	those state laws and regulations dealing specifically with the health and safety conditions of employees.	*Industrial Relations*
Safety Rope	Plastic rope used to secure a pump in case of pipe breakage.	*Petroleum Engineering*
Safety valve	A quick opening, pop action valve used for fast relief of excessive pressure.	*Mechanical*
Safety-Improvement Programs	Practices intended to constantly improve safety within a plant or across a company, including, but not limited to, safety teams, safety awareness programs and communications, safety "days," safety training, and setting of continuous-improvement goals targeting safety metrics, such as OSHA reportable or lost-workday rates.	*Reliability Engineering*
Sagger, Segger, Sagre or Seggar clay	a type of fireclay.	*Mining*
Salable coal	The shippable product of a coal mine or preparation plant. Depending on customer specifications, salable coal may be run-of-mine, crushed-and-screened (sized) coal, or the clean coal yield from a preparation plant.	*Energy*
Salable natural gas	Natural gas marketed under controlled quality conditions.	*Energy*
Salami Tactics	a term used in political parlance; a method which Matyas Rakosi, the dictator of Hungary, advocated in order to attain objectives.	*Industrial Relations*
Salaried Employee	generally a worker who is not on an hourly or an incentive rate.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Salary	the compensation actually received by an employee, white collar or executive, for a period of time rather than for actual hours of work.	*Industrial Relations*
Salary and Commission	personnel engaged in sales frequently receive compensation on the basis of a percentage of total sales.	*Industrial Relations*
Salary Rate	the actual annual, monthly, or weekly rate for a particular type of salaried employment.	*Industrial Relations*
Salers	A French breed of beef cattle.	*Agriculture*
Sales	See Energy sales.	*Energy*
Sales for Resale	Energy supplied to other utilities and agencies for resale.	*Energy*
Sales for resale (electric)	A type of wholesale sales covering energy supplied to other electric utilities, cooperatives, municipalities, and Federal and state electric agencies for resale to ultimate consumers. FERC definition	*Energy*
Sales to end users	Sales made directly to the consumer of the product. Includes bulk consumers, such as agriculture, industry, and utilities, as well as residential and commercial consumers.	*Energy*
Sales type	Sales categories of sales to end-users and sales for resale.	*Energy*
Sales volume (coal)	The reported output from Federal and/or Indian lands, the basis of royalties. It is approximately equivalent to production, which includes coal sold, and coal added to stockpiles.	*Energy*
Salesmen's Compensation	procedures used by various companies to compensate salesmen for their effort.	*Industrial Relations*
Salesmen's Training	the procedures used by companies to supervise and train their salesmen in order to increase their effectiveness and to analyze and improve the marketing procedures of the company.	*Industrial Relations*
Salicylic ester acid (HOC6H4COOH)	Monoclinic colorless needles from water. An acid catalyst used as an accelerator or hardener in phenolics, ureas, alkyds, and various coatings.	*Material Process*
Salinization	Condition where the salt content of soil accumulates above normal levels; occurs in parts of the world where water containing high salt concentrations evaporates from fields irrigated with standing water.	*Petroleum Engineering*
Sally, Sylveste	prop with-drawer. (Scot.).	*Mining*
Salt Bridge	The salt bridge of a reference electrode is that part of the electrode which contains the filling solution to establish the electrolytic connection between reference internal cell and the test solution. Auxiliary Salt Bridge: A glass tube open at one end to receive intermediate electrolyte filling solution, and the reference electrode tip and a junction at the other end to make contact with the sample.	*General Engineering*
Salt Bridge	The salt bridge of a reference electrode is that part of the electrode which contains the filling solution to establish the electrolytic connection between reference internal cell and the test solution. Auxiliary Salt Bridge—A glass tube open at one end to receive intermediate electrolyte filling solution, and the reference electrode tip and a junction at the other end to make contact with the sample.	*Electronic Process*
Salt Effect (fx)	The effect on the activity coefficient due to salts in the solution.	*General Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Salt gradient solar ponds	These consist of three main layers. The top layer is near ambient and has low salt content. The bottom layer is hot, typically 160° F to 212° F (71° C to 100° C), and is very salty. The important gradient zone separates these zones. The gradient zone acts as a transparent insulator, permitting the sunlight to be trapped in the hot bottom layer (from which useful heat is withdrawn). This is because the salt gradient, which increases the brine density with depth, counteracts the buoyancy effect of the warmer water below (which would otherwise rise to the surface and lose its heat to the air). An organic Rankine cycle engine is used to convert the thermal energy to electricity.	*Energy*
Salt Tablets	sodium chloride which is administered in tablet form or in a solution as a means of preventing heat exhaustion.	*Industrial Relations*
Salt water	water with high concentrations of sodium chloride or other salts	*Materials Process*
Salting	The act of introducing metals or minerals into a deposit or samples, resulting in false assays. Done either by accident or with the intent of defrauding the public.	*Mining*
Salting a Mine	Placing mineral or ore in barren places to swindle.	*Mining*
Salvage cut	The harvesting of dead or damaged trees or of trees in danger of being killed by insects, disease, flooding, or other factors.	*Forestry*
SAMA	Scientific Apparatus Makers Association. An association that has issued standards covering platinum, nickel, and copper resistance elements (RTD's).	*Electrical*
SAMA	Scientific Apparatus Makers Association. An association that has issued standards covering platinum, nickel, and copper resistance elements (RTDs).	*Electronic Process*
Sammy	ironstone nodules found in the strata. (Mids.); or an easy job (S. Mids).	*Mining*
Sample	A small portion of rock or a mineral deposit taken so that the metal content can be determined by assaying.	*Mining*
Sample	A small portion of rock or mineral deposit, usually taken for the purpose of being assayed to determine possible content of valuable elements.	*Mining*
Sample (coal)	A representative fraction of a coalbed collected by approved methods, guarded against contamination or adulteration, and analyzed to determine the nature; chemical, mineralogic, and (or) petrographic composition; percentage or parts-per-million content of specified constituents; heat value; and possibly the reactivity of the coal or its constituents.	*Energy*
Sample Interval	The rate at which a controller samples the process variable, and calculates a new output. Ideally, the sample interval should be set between 4 and 10 times faster than the process dead time. See a presentation on What Sample Interval Should I Use?	*Process Control*
Sample Piping	All piping, valves, and fittings used for the collection of samples of gas, steam, water, oil, etc.	*Maintenance and Repair*
Sample preparation	Fluid factors that can enhance the accuracy of the particulate analysis. Such factors include particle dispersion, particle settling, and sample dilution.	*Oil Analysis*
Samples	The wellbore drill cuttings obtained at definite depth intervals during drilling. These cuttings can be examined to determine the rock type, the formation being drilled, and indications of gas content.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sampling	Cutting a representative part of an ore (or coal) deposit, which should truly represent its average value.	*Mining*
Sampling frequency	Rate of a periodic process; 1/T where T is the period; Symbols: f sub s; Typical Units: Hz; Dimensions: 1/Time.	*Aeronautical Engineering*
Sampling Period	The time interval between observations in a periodic sampling control system.	*Process Control*
Sampling rate	The number of readings an A/D converter takes per second or per minute.	*Reliability Engineering*
Samson block	two girders in the shape of a 'T'. The cross of the 'T' is pivoted and should a hutch run away on an incline the girder is tripped by a wire and falls blocking the road. -see also Warwick.	*Mining*
Sand King	These consist of hoppers, conveyor belts and other equipment that handle frac sand that is brought to the well location by truck. Frac sand is used as a "prop-pant" in hydraulic fracturing. It helps keep the tiny fractures which are created by high-pressure water open, so that oil and gas can seep out.	*Petroleum Drilling*
Sand Line	In well drilling, it is the wire rope that operates the bailer that removes water and drill cuttings.	*Wire Rope & Cable*
Sandarac	A hard but natural resin from Africa. It has an odor somewhat like turpentine, and a sharp balsamic taste, and is used in varnishes.	*Material Process*
Sandstone	A sedimentary rock consisting of quartz sand united by some cementing material, such as iron oxide or calcium carbonate.	*Mining*
Sandstone	A sedimentary rock consisting of grains of sand cemented together.	*Mining*
Sanitary Protection	Includes grout in the annular space around the casing, seals between concrete tiles, or at the point of entry of water and electrical lines, sanitary well caps, and well seals.	*Petroleum Engineering*
Sanitizer	An agent that reduces the number of bacteria to a safe level, but does not completely eliminate them, as judged by public health requirements. Usually in foodservice areas.	*Chemistry*
Sanitizing	The destruction of pathogenic and other kinds of microorganisms. See Sterilizing.	*Industrial*
Santa Gertrudis	A beef breed developed on the King Ranch in Texas. Genetically, it is 3/8 Brahman and 5/8 Shorthorn. Registry is maintained by Santa Gertrudis Breeders International.	*Agriculture*
Santicizer	A trade name for a series of plasticizers for lacquers and plastics.	*Material Process*
Santolite	A trade name for sulfonamide- aldehyde resins, used with plasticizers in plastics.	*Material Process*
Sapling	A small tree, usually between 2 and 4 inches diameter at breast height.	*Forestry*
Saponification	The formation of a metallic salt (soap) due to the interaction of fatty acids, fats, or esters generally with an alkali.	*Lubrication*
Saponification	The process of converting a fat into soap by treating it with an alkali. Also, the process used by some cleaners to remove grease and oil.	*Chemistry*
Saponification number	The number of milligrams of potassium hydroxide required to neutralize all the acid in one gram of resin or other substance.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Saponification Number	The number of milligrams of potassium hydroxide (KOH) that combine with one gram of oil under conditions specified by test method ASTM D 94. Saponification number is an indication of the amount of fatty saponifiable material in compounded oil. Caution must be used in interpreting test results if certain substances - such as sulfur compounds or halogens - are present in the oil, since these also react with KOH, thereby increasing the apparent Saponification number.	*Lubrication*
Saprophyte	An organism living on dead organic matter.	*Forestry*
Saran	Trade name for thermoplastics consisting of polymers of vinylidene chloride or copolymers of same with lesser amounts of other unsaturated compounds.	*Engineering Physics*
Sargol	A special type of joint in which a lip is provided for welding to make the joint fluid tight, while mechanical strength is provided by bolted flanges. The Sargol joint is used with both Van Stone pipe and fittings.	*Maintenance and Repair*
Sarlun	An improved type of Sargol joint.	*Maintenance and Repair*
Sash	sulfated ash	*Petro-Chemical Abbreviations*
Satin	A plastic finish having a satin or velvety appearance.	*Material Process*
Saturated	Pores filled with water.	*Petroleum Engineering*
Saturated Steam	Once boiling point is reached, and the pressure remains constant, additional heating will not cause a rise in temperature, yet turns the water into saturated steam. As the temperature in the system remains constant, the energy potential per unit mass is increased in the steam.	*Industrial*
Saturated Thickness	Total water-bearing thickness of an aquifer.	*Petroleum Engineering*
Saturated zone	the zone in which all the voids in the rock or soil are filled with water at greater than atmospheric pressure. The water table is the top of the saturated zone in an unconfined aquifer.	*Chemical*
Saturation induction	The apparent maximum value of induction for a ferromagnetic material under the maximum applied field.	*Material Process*
Saturation Level	The amount of water that can dissolve in a fluid.	*Lubrication*
Saturation polarization	Polarization of a ferroelectric material due to maximum domain growth.	*Material Process*
Saturation range	Temperature range over which conductivity in a p-type semiconductor is relatively constant due to the fact that all acceptor levels are saturated with electrons.	*Material Process*
Saturation Voltage	The voltage drop appearing across a control device that is fully turned On.	*Electrical Engineering*
Saudi Arabia	(1960-present)	*Energy*
Savings Fraction	The percentage of consumption from using the old technology that can be saved by replacing it with the new, more efficient demand-side management technology. For example, if a 60-watt incandescent lamp were replaced with a 15-watt compact fluorescent lamp, the savings fraction would be 75 percent because the compact fluorescent lamp uses only 25 percent of the energy used by the incandescent lamp.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sawlog or Sawtimber	A log or tree that is large enough (usually 10 to 12 inches in diameter) to be sawed into lumber.	*Forestry*
Sawney	to lower full tubs down an inclined road or face using a rope or chain wrapped around a prop to act as a brake. (Mids.).	*Mining*
Saybolt Universal Viscosity (SUV) or Saybolt Universal Seconds, (SUS)	The time in seconds required for 60 cubic centimeters of a fluid to flow through the orifice of the Standard Saybolt Universal Viscometer at a given temperature under specified conditions. (ASTM Designation D 88.)	*Oil Analysis*
SBE	severity bias estimate	*Petro-Chemical Abbreviations*
SBX	A Ring Gasket the same as BX gasket but drilled with a vent hole for subsea use.	*Petroleum Engineering*
Scabbit parting	a rough parting or break in the roof. (Scot.).	*Mining*
Scabby	sticky.	*Mining*
Scabby roof	a rough sandstone roof to which the coal has a tendency to stick. The coal had then to be hacked down with the pick. (Scot.).	*Mining*
SCADA	Supervisory Control And Data Acquisition software.	*Control Engineering*
SCADA (supervisory control and data acquisition)	A SCADA system is a computer system that gathers and analyses data on equipment and processes in industrial processing plants such as pulp and paper mills, oil refineries and water treatment facilities. It may perform other functions in power networks, such as load management, load curtailment and restoration, distribution automation, and facilities management functions.	*Electrical*
SCADA Supervisory Control And Data Acquisition	SCADA system refers to the combination of telemetry and data acquisition. It consists of collecting information, transferring it back to a central site, carrying out necessary analysis and control, and then displaying this data on a number of operator screens. The SCADA system is used to monitor and control a plant or equipment. Control may be automatic or can be initiated by operator commands. SCADA system incorporates both hardware and software and provides central monitoring and control of plant and facilities. SCADA typically consist of a "master" terminal unit (MTU) and one or more "remote" terminal units (RTU).	*Reliability Engineering*
Scaffold	a wooden platform fixed across a shaft. In the case of a permanently abandoned pit, where it is not filled up from the bottom, a scaffold was sometimes put in, a short distance from the top, above which the pit was filled up.	*Mining*
Scalar	A mathematical entity which has a numeric value but no direction (in contrast to a vector).	*Engineering Physics*
Scale	The deposition on heat transfer surfaces of material normally in solution, as opposed to fouling, which is deposition of material normally in suspension.	*Chemical Engineering*
Scale	Calcium or mineral deposits in steam boilers and in steam and water pipes.	*Chemistry*
Scale Dipping	The process of removing scale prior to a "Bright Dip."	*Metallurgy*
Scale or Skail	a current of air that is purposely allowed to take a short cut to rejoin the main current. Often used in sections of the mine off the main ventilation current, or an air leakage finding its way back into the return airway thereby reducing the amount of air getting to the workings.	*Mining*
Scaling	Heavy surface oxidation on metals caused by heating in air or in other oxidizing atmospheres.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Scallop or Skelp	to pull down and hew the coal using only a pick. i.e. without kirving, nicking and wedging or bringing it down with powder. (N. East).	*Mining*
Scaly	Showing a flaked surface appearance.	*Material Process*
Scammed	sooty. (N. East).	*Mining*
Scamy or Scammy post	soft, jointy freestone in thin layers mixed with mica. (N. East).	*Mining*
Scan Technique	A method of scanning objects. The two general categories are through and reflective scan.	*Electrical Engineering*
Scanner	Bar code device which produces a signal representing the bars and spaces of a bar code.	*Gears*
Scanning electron microscope (SEM)	Instrument for obtaining microstructural images using a scanning electron beam.	*Material Process*
Scanning tunneling microscope (STM)	An instrument capable of providing direct imager of atomic packing patterns by monitoring the quantum mechanical tunneling of electrons near the sample surface.	*Material Process*
SCAQM	South Coast Air Quality Management (California)	*Petro-Chemical Abbreviations*
Scares	thin layers of pyrites or spar inter-stratified in coal seams, or similar layers of coal found in sandstone or shale.	*Mining*
Scarifying	The removal of the top litter layer of soil in order to prepare a site for planting.	*Forestry*
Scarp	An escarpment, cliff or steep slope along the margin of a plateau, mesa or terrace.	*Mining*
Scars	clinker. (N. East).	*Mining*
Scatter	a rumbling or falling noise in the shaft. (Yorks.).	*Mining*
SCE	Saturated calomel electrode.	*General*
SCF	speed correction factors	*Petro-Chemical Abbreviations*
scfm	Standard cubic feet per minute*	*General*
Schaffler	a small Austrian made shot firer.	*Mining*
Schedule	A statement of the pricing format of electricity and the terms and conditions governing its applications.	*Energy*
Schedule	A system for indicating the wall thickness of pipe. The higher the schedule number, the thicker the wall for a certain pipe size.	*General Mechanical*
Schedule Compliance	One Of The Key Performance Indicators Often Used To Monitor And Control Maintenance. It Is Defined As The Number Of Scheduled Work Orders Completed In A Given Time Period (Normally One Week), Divided By The Total Number Of Scheduled Work Orders That Should Have Been Completed During That Period, According To The Approved Maintenance Schedule For That Period. It Is Normally Expressed As A Percentage, And Will Always Be Less Than Or Equal To 100%. The Closer To 100%, The Better The Performance For That Time Period.	*Management*
Schedule Numbers	Approximate values of the expression 1000P/S, where P is the service pressure and S is the allowable stress, both expressed in pounds per square inch.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Schedule of Cost of Goods Manufactured	A schedule showing the direct materials, direct labor, and manufacturing overhead costs incurred for a period and assigned to Work in Process and completed goods.	*Procurement*
Scheduled Discard Task	A Maintenance Task To Replace A Component With A New Component At A Specified, Pre-Determined Frequency, Regardless Of The Condition Of The Component At The Time Of Its Replacement. An Example Would Be The Routine Replacement Of The Oil Filter On A Motor Vehicle Every 6,000 Miles. The Frequency With Which A Scheduled Discard Task Should Be Performed Is Determined By The Useful Life Of The Component.	*Management*
Scheduled Downtime	A period of time when the equipment is not available to perform its intended function due to planned downtime events. These include maintenance delay (delay after an interrupt is reported, but before anyone arrives to repair it); production test; preventive maintenance; change of consumables; setup; and facilities-related downtime.	*Maintenance*
Scheduled Maintenance	Any maintenance work that is planned and included on an approved maintenance schedule.	*Maintenance*
Scheduled Operating Time	The Time During Which An Asset Is Scheduled To Be Operating, According To A Long-Term Production Schedule.	*Plant Engineering*
Scheduled Outage	An outage that results when a component is deliberately taken out of service at a selected time, usually for the purposes of construction, maintenance, or testing.	*Energy*
Scheduled Restoration Task	A Maintenance Task To Restore A Component At A Specified, Pre-Determined Frequency, Regardless Of The Condition Of The Component At The Time Of Its Replacement. An Example Would Be The Routine Overhaul Of A Slurry Pump Every 1,000 Operating Hours. The Frequency With Which A Scheduled Restoration Task Should Be Performed Is Determined By The Useful Life Of The Component.	*Management*
Scheduled Work	Work written up after an inspection and known about for a fixed period of time (e.g. 1 day) in advance. A maintenance scheduler or planner inputs the work into the schedule. Sometimes the inspection yields work that must be done immediately which becomes emergency or DIN. Scheduled work is part of a planned maintenance or corrective maintenance program.	*Maintenance*
Scheduled Work Order	A Work Order That Has Been Planned And Included On An Approved Maintenance Schedule.	*Management*
Scheduling	The process of determining what maintenance jobs gets worked on, when, and by whom based on the priority and resource/equipment availability. This process should take place before the job is executed.	*Maintenance*
Scheduling coordinators	Entities certified by the Federal Energy Regulatory Commission (FERC) that act on behalf of generators, supply aggregators (wholesale marketers), retailers, and customers to schedule the distribution of electricity.	*Energy*
Scheduling Coordinators	Entities certified by the Federal Energy Regulatory Commission that act as a go-between with the Independent System Operator on behalf of generators, supply aggregators (wholesale marketers), retailers, and customers to schedule the distribution of electricity.	*Energy*
Schinkage mark	A series of a short creases or wrinkles in a plastic, believed to be caused by shrinkage before complete hardening.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Schist	A foliated metamorphic rock the grains of which have a roughly parallel arrangement; generally developed by shearing.	*Mining*
Schottky defect	A pair of oppositely charged ion vacancies.	*Material Process*
Science	Science is connecting previous knowledge (old knowledge), known scientific facts, scientific laws and hypothesis, such as, from they can be derived new knowledge in given domain.	*Material Process*
Science Citation Index	A database of reports of studies that also enables the user to identify which reports have cited a specific report of a study. Often used to identify most recent research in a field.	*Quality Engineering*
Scintillation counter	An instrument used to detect and measure radioactivity by detecting gamma rays; more sensitive than a Geiger counter.	*Mining*
Sclit	slaty coal or coaly blaes, cf slate. (Scot.).	*Mining*
Scobbed	when a hutch was filled by using large flat pieces to block off the bottom and then filling on top of them.	*Mining*
Sconcing	a method of ventilating part of the workings where the full force of the air current is used.	*Mining*
Scoop	a rubber-tired haulage vehicle used in thin coalbeds.	*Energy*
Scoop	A rubber tired-, battery- or diesel-powered piece of equipment designed for cleaning runways and hauling supplies.	*Mining*
Scoop loading	An underground loading method by which coal is removed from the working face by a tractor unit equipped with a hydraulically operated bucket attached to the front; also called a front-end loader.	*Energy*
Scope Of Work	The purpose is to provide bidders with a clear, accurate, and complete description of the work to be performed, including inspection, test and acceptance (see Statement of Work).	*Procurement*
Scorch	Appearing as if tissues were burned by heat; usually affecting marginal portions of leaves.	*Forestry*
Scoring	Scratching of the surface of a mold.	*Material Process*
Scoring	Distress marks on sliding metallic surfaces in the form of long, distinct scratches in the direction of motion. Scoring is an advanced stage of scuffing.	*Lubrication*
Scoring size	A particulate whose dimensions are such that it is capable of entering a working clearance.	*Mechanical, Process, and Operations*
Scotch	a wooden wedge used to brake vehicles; or a steel or iron rod often shaped like a shepherds crook placed in the spokes of tub wheels to brake them on an incline. (Lancs.) – see Locker; or a compressed air brake used to control the speed of mine cars; or a piece of stone or dirt (S. Mids.); or the lower lift or section of a thick seam which was wedged up when driving a heading (Leics.).	*Mining*
Scotch Tape Test	A method for evaluating the adhesion of a coating to a substrate. The scotch tape is adhered to the coating and then pulled away. The degree to which the coating peels away from the substrate with the tape indicates its adhesion.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Scotch yoke Operator (Used on quarter turn valves)	A quarter turn operator using a scotch yoke mechanism rather than gears. The "Scotch Yoke" has a torque output at the beginning and ending of its stroke that is generally twice the magnitude of the torque output in the center of its stroke.	*Mechanical*
Scour	to drive a heading or roadway (a gob road or scouring) through the waste. (Mids.).	*Mining*
Scour	Remove grease, dirt, and other extraneous matter from wool.	*Material Process*
Scovens	forks for filling coal into tubs (S. Staffs.).	*Mining*
Scowl	a brow, to drive a heading or roadway by guesswork. (F. of D.).	*Mining*
SCOWT	sprig clutch overrunning wear test	*Petro-Chemical Abbreviations*
SCPI	Sequential Central Port Injector	*Petro-Chemical Abbreviations*
SCR	Silicon controlled rectifier.	*Electrical*
SCR	Silicone controlled rectifier.	*Electronic Process*
Scrap	All products of a processing operation which are not present in the primary finished articles. This includes flash, runners, sprues, excess parison, trimmings from film conveying operations, and reject articles. Scrap from operations can usually be reclaimed for reuse in the processor's plant or for sale to a commercial reclaimer.	*Engineering Physics*
Scrap/rework costs	Parts or materials wasted in the production process, plus the cost of fixing defective products so that they pass final inspection.	*Quality*
Scraper	a tool with a flat turned up end made of wood, brass or copper and used for cleaning and stemming shotholes; or a scraper chain conveyor, a steel conveyor comprising chains and steel bars running in pans; or the man who clears away the cuttings while a coal cutter machine is working.	*Mining*
Scraper box loading	a method of transporting coal along a face in which a series of box-like structures moves to and fro gathering the coal and moving it to the gate end.	*Mining*
Scraper loader	a mechanical device for loading or packing broken material by which an open-ended bucket is drawn to and fro through the material using main and tail ropes. –see Slusher.	*Mining*
Scratch	Shallow mark, groove, furrow, or channel.	*Material Process*
Scratching	Fine abrasive furrows in the direction of sliding.	*Lubrication*
Screen	(See Shield.)	*Electrical*
Screening	The process of stressing products so that defective units can be identified, then repaired or replaced. A winnowing out.	*Reliability Engineering*
Screenings	The undersized coal from a screening process, usually one-half inch or smaller.	*Energy*
Screens	various types of mechanical apparatus used for sorting the coal into different sizes such as bars of iron various distances apart or metal plates with holes; or a cloth brattice or curtain hung across a roadway to direct the ventilation current. Also called 'Traps'. (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Screen-trapper	a screen attendant. (N. East).	*Mining*
Screw	A headed threaded fastener that is designed to be used in conjunction with a pre formed internal thread or alternatively forming its own thread. Historically, it was a threaded fastener with the thread running up to the head of the fastener that has no plain shank. However this definition has largely been superseded to avoid confusion over the difference between a bolt and a screw.	*Maintenance*
Screw	In extrusion, the shaft provided with helical grooves, which conveys the material from the hopper outlet through the barrel and forces it out through the die.	*Engineering Physics*
Screw dislocation	Linear defect with the Burgers vector parallel to the dislocation line.	*Material Process*
Screw Flight	The helical metal thread of a screw in an extruder or injection molding machine.	*Engineering Physics*
Screw Speed	The rate of revolution (in rpm) of an extruder or injection molding machine screw.	*Engineering Physics*
Screw Thread	A ridge of constant section which is manufactured so that a helix is developed on the internal or external surface of a cylinder.	*Maintenance*
Screw Tip	In molding, the tip of the reciprocating screw is the ram face that pushes the melt into the mold, and it contains the shutoff valve (nonreturn valve) which prevents the melt from sliding backward along the flights of the screw.	*Engineering Physics*
Screw, Cone	Cone - Pointed end, this type generates the highest torsional holding power and is typically used for a permanent connection.	*Maintenance*
Screw, Cup	Cup - Hollowed end, is the most commonly used point style. Used when the digging in of the point is not undesirable.	*Maintenance*
Screw, Dog	Dog - Flat end with the threads stopping short of the end with the end fitting into a hole.	*Maintenance*
Screw, Flat	Flat - Cause little damage to the shaft and are used when frequent adjustment is required.	*Maintenance*
Screw, Oval	Oval - Rounded end that is typically used when frequent adjustment is required. The oval end prevents/reduces indentation.	*Maintenance*
Screw, Set	A set screw is a threaded fastener that is typically used to hold a sleeve, collar or gear on a shaft to prevent relative motion. It is a threaded member that normally does not have a head. Unlike most other threaded fasteners it is basically a compression device normally used to generate axial thrust. Various socket types are provided to allow the set screw to be rotated. These types include hexagon socket, fluted socket, screwdriver slot and square head. Various point designs are available (the part of the set screw that rotates against the shaft being secured) and include:	*Maintenance*
Screw, Shank	That portion of a bolt between the head and the threaded portion.	*Maintenance*
Screwed ends	Internally threaded end connections supplied on some valves. Usually tapered pipe threads (NPT).	*Mechanical*
Scrin	irregular ironstone nodules. (Derbys.).	*Mining*
Scroll	To move all or part of the screen material up to down, left or right, to allow new information to appear.	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Scroll drum	a conical winding drum.	*Mining*
Scronge	loose and broken strata created by working underneath (S. Wales).	*Mining*
Scrubbed Tires	Also known as Scuffed Tires, which have a few laps on them to remove the outer sheen and provide more consistent traction. See Heat Cycles.	*NASCAR*
Scrubber	Any of several forms of chemical/physical devices that remove sulfur compounds formed during coal combustion. These devices, technically know as flue gas desulfurization systems, combine the sulfur in gaseous emissions with another chemical medium to form inert "sludge," which must then be removed for disposal.	*Mining*
Scrubbing	very thin layers of soft matter such as clay, sooty coal etc. (Leics.); or iron pyrites embedded in the coal. (Mids.).	*Mining*
Scud	inferior coal, often close to the top of a seam where it is left up to form the roof. (Yorks.); occasionally seatearth.	*Mining*
Scuffing	Abnormal engine wear due to localized welding and fracture. It can be prevented through the use of antiwear, extreme-pressure and friction modifier additives.	*Oil Analysis*
Scuffing particles	Large twisted and discolored metallic particles resulting from adhesive wear due to complete lubricant film breakdown.	*Oil Analysis*
Scuft	to throw dirt back.	*Mining*
Scufting shovel	a shovel with a flat blade used for cleaning up 'gummings'.	*Mining*
Scuftings	see Gummings.	*Mining*
Scutch or Scutch out	to make a vertical cut down each side of a face prior to bringing down the coal by wedging or blasting. -see also Knicking, Kirving and Shearing. (Scot.).	*Mining*
Scutcheon	a piece of coal or blaes left in the roof. (Scot.).	*Mining*
Scuvin	fork used to load lump coal on the face to separate it from the slack (S. Staffs.).	*Mining*
Scythe	a blade with a long handle used to cut grass, grain, and other crops	*Agriculture*
SD	Standard deviation, also abbreviated s	*Quality*
SE	See Standard error	*Quality Engineering*
SEA	Selective Enforcement Audit	*Petro-Chemical Abbreviations*
Sea coal or sea cole	originally coal gathered from the beaches of the North East coast. The term sea coal was used for coal mined inland to differentiate it from charcoal.	*Mining*
Seal	A device designed to prevent the movement of fluid from one area to another, or to exclude contaminants.	*Lubrication*
Seal Assembly	A group of parts, or a unitized assembly, that includes sealing surfaces, provisions for initial loading, and a secondary sealing mechanism that accommodates the radial and axial movement necessary for installation and operation.	*Lubrication*
Seal Chamber	The area between the seal chamber bore and a shaft in which a mechanical seal is installed.	*Lubrication*
Seal compatibility	Ability of a lubricant formulation to not influence the physical dimensions and/or properties of any elastomer seals it comes in contact with.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Seal Contact Area	The areas that gaskets seal against in any type connection.	*Petroleum Engineering*
Seal Face	It is either of the two lapped surfaces in a mechanical seal assembly forming the primary seal.	*Lubrication*
Seal Face Width	The radial distance from the inside edge to the outside edge of the sealing face.	*Lubrication*
Seal Swell (rubber swell)	The swelling of rubber (or other elastomers) gaskets, or seals when exposed to petroleum, synthetic lubricants, or hydraulic fluids. Seal materials vary widely in their resistance to the effect of such fluids. Some seals are designed so that a moderate amount of swelling improves sealing action.	*Lubrication*
Seal weld	A weld that does not contribute anything to the mechanical integrity of an assembly, made purely to seal or prevent leakage from, for instance, a threaded joint.	*General Mechanical*
Seal weld	A weld that does not contribute anything to the mechanical integrity of an assembly, but is made purely to seal or prevent leakage from, for instance, a threaded joint.	*Mechanical*
Seal, Dynamic	A sealing element used between parts that have relative motion, i.e., stem seals, seat seal o-rings, etc.	*Mechanical*
Seal, Pressure activated	A sealing device in which sealing action is aided by fluid pressure.	*Mechanical, Process, and Operations*
Seal, Static	A sealing element used as a gasket between two non-moving parts, i.e. valve bonnet o-ring, ball valve body o-ring, flange gasket.	*Mechanical*
Sealant	Refers to a slurry consisting of clean water and at least 20 percent bentonite solids, or other material equivalent to a slurry with the ability to form a permanent, watertight barrier.	*Petroleum Engineering*
Sealant, Sealer	A preparation of resin or wax type materials for sealing the porosity in coatings.	*Paint and Coatings*
Seale	The name for a type of strand pattern that has two adjacent layers laid in one operation with any number of uniform sized wires in the outer layer, and with the same number of uniform but smaller sized wires in the inner layer.	*Wire Rope & Cable*
Sealed Motor Bearing	These bearings have rubbing seals that seal against recesses in the inner ring shoulder. They are lubricated for life. Under extreme conditions, their life can be short.	*Reliability Engineering*
Sealer	A coating designed to penetrate and provide the initial protection to a floor surface by filling the tiny holes. Also, a product which prevents color bleeding.	*Chemistry*
Sealing	A process which, by absorption of a sealer into thermal spray coatings, seals porosity and increases resistance to corrosion of the underlying substrate material.	*Paint and Coatings*
Seal-welding	a weld used primarily to obtain tightness and prevent the flow of cleaning solutions and zinc into otherwise enclosed areas, to prevent flash steaming that causes localized ungalvanized areas	*Materials Process*
Seam	A bed of coal lying between a roof and floor. Equivalent term to bed, commonly used by industry.	*Energy*
Seamless Pipe	A wrought tubular product made without a welded seam. It is manufactured by hot-working steel or, if necessary, by subsequently cold-finishing the hot-worked tubular product to produce the desired shape, dimensions, and properties.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	Industry
Search pattern	Basic guidance mode; provides lateral steering guidance to fly an expanding square search pattern, creeping line search pattern, or sector search pattern.	*Aeronautical Engineering*
Search strategy	1. The methods used by a Cochrane Review Group (CRG) to identify trials within the CRG's scope. This includes handsearching relevant journals, searching electronic databases, contacting drug companies, other forms of personal contact and checking reference lists. CRGs must describe their search strategy in detail in the CRG's module. Authors can refer to the CRG's search strategy when preparing a Cochrane Review, and if necessary supplement this with a description of their own additional searches. 2. The methods used by a reviewer to locate relevant studies, including the use of a CRG's trials register. 3. The combination of terms used to identify studies in an electronic database such as MEDLINE.	*Quality Engineering*
Searchers	the men who carry out the search for contraband when men are going into the mine at the beginning of a shift.	*Mining*
Seasonal energy efficiency ratio (SEER)	Ratio of the cooling output divided by the power consumption. It is the Btu of cooling output during its normal annual usage divided by the total electric energy input in watt hours during the same period. This is a measure of the cooling performance for rating central air conditioners and central heat pumps. The appliance standards required a minimum SEER of 10 for split-system central air conditioners and for split-system central heat pumps in 1992. (The average heat pump or central air conditioner sold in 1986 had an SEER of about 9.)	*Energy*
Seasonal pricing	A special electric rate feature under which the price per unit of energy depends on the season of the year.	*Energy*
Seasonal rates	Different seasons of the year are structured into an electric rate schedule whereby an electric utility provides service to consumers at different rates. The electric rate schedule usually takes into account demand based on weather and other factors.	*Energy*
Seasonal units	Housing units intended for occupancy at only certain seasons of the year. Seasonal units include units intended only for recreational use, such as beach cottages and hunting cabins. It is not likely that this type of unit will be the usual residence for a household, because it may not be fit for living quarters for more than half of the year.	*Energy*
Seasoned wood	Wood, used for fuel, that has been air dried so that it contains 15 to 20 percent moisture content (wet basis).	*Energy*
Seat	That part of a valve against which the closure element (gate, ball) effects a tight shut-off. In many ball valves and gate valves, it is a floating member containing a soft seating element (usually an o-ring).	*Mechanical*
Seat	The part of a valve against which the closure element effects a tight shut-off.	*General Mechanical*
Seat Load	The contact force between the seat and the valve plug. When an actuator is selected for a given control valve, it must be able to generate enough force to overcome static, stem and dynamic unbalance with an allowance made for seat load.	*Industrial Engineering*
Seat or Seating	floor of a coal seam. (Lancs.).	*Mining*
Seat Ring	A part of the flow passageway that is used in conjunction with the closure member to modify the rate of flow through the valve.	*Industrial Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Seatearth	the floor or 'fireclay' beneath the coal seam. Also known in Derbyshire as 'sole'.	*Mining*
Sebacic acid (COO(CH2)8COOH)	Thin colorless leaflets, A dibasic acid used in the production of alkyd resins and Nylons.	*Material Process*
sec	Second	*General*
sec-Octyl alcohol	A solvent – alcohol.	*Material Process*
Second means of egress	the alternative roadways or route from the working areas of the mine that would be used if an emergency arose and the usual means of exit from the mine were blocked or impassable.	*Mining*
Second Quantum Number (λ)	Describes the shape of the electron cloud	*Physics*
Second working	the partial or total extraction of coal pillars in bord and pillar mining.	*Mining*
Secondary bond	Atomic bond without electron transfer or sharing.	*Material Process*
Secondary bonds	weak interactions of molecules formed by bonded atoms	*Physics*
Secondary Damage	Any Additional Damage To Equipment, Above And Beyond The Initial Failure Mode, That Occurs As A Direct Consequence Of The Initial Failure Mode.	*Management*
Secondary Device	A part of the flowmeter which receives a signal proportional to the flowrate, from the primary device, and displays, records and/or transmits the signal.	*General*
Secondary enrichment	Enrichment of a vein or mineral deposit by minerals that have been taken into solution from one part of the vein or adjacent rocks and redeposited in another.	*Mining*
Secondary Failure	A failure caused either directly or indirectly by another failure or fault.	*Reliability Engineering*
Secondary Function	A Term Used In Reliability Centered Maintenance. The Secondary Functionality Required Of An Asset - Generally Not Associated With The Reason For Acquiring The Asset, But Now That The Asset Has Been Acquired, The Asset Is Now Required To Provide This Functionality. For Example A Secondary Function Of A Pump May Be To Ensure That All Of The Liquid That Is Pumped Is Contained Within The Pump (i.e., The Pump Does not Leak). An Asset May Have Tens Or Hundreds Of Secondary Functions Associated With It.	*Management*
Secondary heating equipment	Space-heating equipment used less often than the main space-heating equipment.	*Energy*
Secondary heating fuel	Fuels used in secondary space-heating equipment.	*Energy*
Secondary Insulation	Any extremely high resistance material which is placed over primary insulation to protect it from abrasion.	*Electrical*
Secondary outcome	An outcome used to evaluate additional effects of the intervention deemed a priori as being less important than the primary outcomes. See also: Outcome	*Quality Engineering*
Secondary Recovery	Recovery of oil or gas from a reservoir by artificially maintaining or enhancing the reservoir pressure by injecting gas, water or other substances into the reservoir rock.	*Petroleum Drilling*
Secondary recovery	Recovery of oil or gas from a reservoir by artificially maintaining or enhancing the reservoir pressure by injecting gas, water or other substances into the reservoir rock.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Secondary roof	The roof strata immediately above the coalbed, requiring support during the excavating of coal.	*Mining*
Secondary Standard	pH buffer solutions which do not meet the requirements of primary standard solutions but provide coverage of the pH range not covered by primary standards. Used when the pH value of the primary standard is not close to the sample pH value.	*General Engineering*
Secondary study	A study of studies: a review of individual studies (each of which is called a primary study). A systematic review is a secondary study.	*Quality Engineering*
Second-order filter	A smoothing filter in which the output follows the input, only more slowly; It is usually implemented in software as a difference equation of period T. When the second-order filter is used in avionics, it is commonly to smooth data, and to wash out transients at mode change. Usually, a first-order filter suffices, and it being less expensive, is chosen over a second-order filter. Typical values for omega sub n, a, and b are 0.1-2 rad/s, and zeta 0.1-0.9. It should also be noted that two first-order filters can be chained together to form a second-order filter that is critically damped or overdamped. When implementing a second-order filter on normalized variables, such as angles, the discontinuities require special treatment.	*Aeronautical Engineering*
Secretariat	Former name of the administrative office of The Cochrane Collaboration, based in Oxford, England. It is now called the Cochrane Operations Unit (COU). See also: Cochrane Operations Unit (COU)	*Quality Engineering*
Sec-Tetradecyl alcohol	A solvent - alcohol.	*Material Process*
Section	A portion of the working area of a mine.	*Mining*
Section Modulus	A property of a cross sectional shape, which depends on shape, and orientation. Section modulus is usually denoted S, and S = I/c, where I = moment of inertia about an axis through the centroid, and c is the distance from the centroid to the extreme edge of the section.	*Engineering Physics*
Section view	same as directional vertical section view.	*Petroleum Drilling*
Sector	See Energy-use sectors	*Energy*
Sector search	A pattern of concentric arcs followed for searching the ground from an aircraft; Compare: creeping line search, expanding square search.	*Aeronautical Engineering*
Securite	an early flameless explosive composed of 80% ammonium nitrate, 17% dinitrobenzol and 3% ammonium oxalate. Invented by a German, Mr. Schoenewez. It was made from the bye-products of coke ovens and gas works. Said to be about four time as forcible as blasting powder. It was exploded by detonator and could not be exploded by ordinary concussions or blows, nor by a burning or a glowing body.	*Mining*
Securitization	The act of pledging assets to a creditor through a note, lien or bond. This is a mechanism to allow a utility to recover stranded costs up front in a single lump sum payment. Under a securitization scheme, the legislature or utility commission orders customers to pay a surcharge as part of their electric bill. That surcharge must be paid within the utility's original service territory, regardless of who supplies the electricity to customers.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Securitize	To aggregate contracts into one pool, which then offers shares for sale in the investment market. This strategy diversifies project risks from what they would be if each project were financed individually, thereby reducing the cost of financing.	*Energy*
Sediment	Solid particles of organic or inorganic material, generally from weathered rock.	*Filtration*
Sedimentary Rock	Rocks from the consolidation of loose sediment accumulated in layers.	*Petroleum Engineering*
Sedimentary rocks	Secondary rocks formed from material derived from other rocks and laid down under water. Examples are limestone, shale and sandstone.	*Mining*
Sedimentation	The deposition or settling of soil particles suspended in water.	*Forestry*
Seebeck Coefficient	The derivative (rate of change) of thermal EMF with respect to temperature, normally expressed as millivolts per degree.	*Electrical*
Seebeck Effect	When a circuit is formed by a junction of two dissimilar metals and the junctions are held at different temperatures, a current will flow in the circuit caused by the difference in temperature between the two junctions.	*Electrical*
Seebeck effect	The development of an induced voltage in a simple electrical circuit as the result of a temperature differential.	*Material Process*
Seebeck EMF	The open circuit voltage caused by the difference in temperature between the hot and cold junctions of a circuit made from two dissimilar metals.	*Electrical*
Seebeck potential	Induced voltage due to a dissimilar metal thermocouple between two different temperatures.	*Material Process*
Seed tree cut	A harvesting method in which a few scattered trees are left in the area to provide seed for a new forest stand.	*Forestry*
Seed year	A year in which a given species produces a large seed crop over a sizable area.	*Forestry*
Seedling	A tree, usually less than 2 inches diameter at breast height.	*Forestry*
Seepage	The slow movement of water through small cracks or pores. The loss of water by infiltration into the soil from a body of water or a field.	*Petroleum Engineering*
SEER	See Seasonal Energy Efficiency Ratio	*Energy*
Seg	to bend down in the middle, to sag, as in roof bending. (N. East).	*Mining*
Seggar or Sagre	clay, fireclay, clunch or spavin.	*Mining*
Segmented Flanges	Also called "Dual" or "5 Bolt" flanges. Used to connect valves and tubing head adaptors on Christmas Trees where 2 producing tubing strings hang inside a single cased well bore. A 'dual completion' they have a special eccentric configuration that allows the producing tubing to have a small clearance profile.	*Petroleum Engineering*
Segregation	A close succession of parallel, rather narrow and sharply defined, wavy lines of color on the surface of a plastic differing in shade from surrounding areas, and creating the impression that components of the plastic have separated.	*Material Process*
Segregation coefficient	Ratio of the saturation impurity concentrations for the solid and liquid solution phases.	*Material Process*
Seismic	Having to do with earth motion, as earthquakes. A kind of sensor that depends upon the inertia of an internal mass to generate a signal, as an accelerometer or velocity pickup.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Seismic line	Linear corridor created to position geophones to facilitate recording geophysical information.	*Petroleum Engineering*
Seismic prospecting	A geophysical method of prospecting, utilizing knowledge of the speed of reflected sound waves in rock.	*Mining*
Seismic Survey	This refers to a geophysical survey in which vibrations are produced on the surface using specialized equipment and explosive charges. Those vibrations are then recorded using geo-phones which are placed over a large area of ground and connected by seismic cables. The recordings from these vibrations are then analyzed by geoscientists who use them to create a 3-D model of underground rock formations and pockets of oil and gas. Most seismic surveys done nowadays utilized three-dimensional or 3-D technology which gives petroleum geologists a better picture of underground oil and gas reservoirs.	*Petroleum Drilling*
Seize	To make a secure binding at the end of a wire rope or strand with SEIZING WIRE or SEIZING STRAND.	*Wire Rope & Cable*
Seizer	an 'L'-shaped iron arrester device used at the bottom of an incline, mounted between the rails, to hold the chain whilst the empties are attached.	*Mining*
Seizing Strand	Small strand usually of 7 wires made of soft annealed wire.	*Wire Rope & Cable*
Seizing Wire	Soft annealed wire.	*Wire Rope & Cable*
Selected	Measured data picked from one of many sensors; Selecting is the process of choosing the "best" parameter from multiple copies of that parameter, from multiple, identical devices or similar devices. Compare: derived, estimated, filtered, measured, raw, smoothed.	*Aeronautical Engineering*
Selection Bias	A bias in assignment or a confounding variable that arises from study design rather than by chance. These can occur when the study and control groups are chosen so that they differ from each other by one or more factors that may affect the outcome of the study.	*Analysis*
Selective absorber	A solar absorber surface that has high absorptance at wavelengths corresponding to that of the solar spectrum and low emittance in the infrared range.	*Energy*
Selective cutting	The periodic removal of individual trees or groups of trees to improve or regenerate a stand.	*Forestry*
Selective mining	The object of selective mining is to obtain a relatively high-grade mine product; this usually entails the use of a much more expensive stopping system and high exploration and development costs in searching for and developing the separate bunches, stringers, lenses, and bands of ore.	*Mining*
Selector Valve	A valve which selects one of two or more circuits in which to direct oil, usually operates manually.	*Mechanical, Process, and Operations*
Selenium (Se8)	Amorphous red powder. Used as a catalyst, and also as a filler for fireproofing compounds and giving good electrical insulating properties.	*Material Process*
Self	Ability of a symbology to guard against undetected errors.	*Gears*
Self advancing support	see Powered supports.	*Mining*
Self Heating	Internal heating of a transducer as a result of power dissipation.	*General*
Self Heating	Internal heating of a transducer as a result of power dissipation.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Self Loosening	Threaded fasteners can come loose on occasions without human intervention. This loosening can be due to creep, embedding, stress relaxation or the fastener self-rotating (which is often called vibration loosening). Creep, embedding and stress relaxation will generally not completely loosen a fastener, these loosening mechanisms occur without the nut rotating relative to the bolt. The term self loosening is sometimes used for the nut rotating relative to the bolt without human intervention. It is know that the fastener can self rotate under the action of transverse joint movement that can completely loosen a tightened fastener such that the nut will become detached from the bolt.	*Maintenance*
Self propagating high temperature synthesis (SHS)	Material processing involving the heat evolved by certain chemical reactions to sustain the reaction and produce the final product.	*Material Process*
Self relieving	The process whereby excessive internal body pressure, in some valves, is automatically relieved either into the upstream or downstream line by forcing the seats away from the closure element.	*Mechanical*
Self rescuer	a self-contained small breathing device, worn on the belt of the miner, which, in the event of an explosion underground, when used by the miner, gives him a limited time to walk into an area of fresh air. The device is primarily a filter containing a compound (hopcolite) to absorb harmful carbon monoxide together with a mouth piece and nose clip.	*Mining*
Self Contained Control	A photoelectric control in which all three phases of control: sensing, signal conditioning, and output: occur in a single device.	*Electrical Engineering*
Self-Contained Sensor	A proximity sensor in which all three phases of control, sensing, signal conditioning, and output, occur in a single device.	*Electrical Engineering*
Self-acting incline	an inclined roadway down which coal was transported by means of a rope travelling around a pulley or a drum at the top of the incline. The weight of the loaded wagon was sufficient to draw up the empty ones attached to the other end of the rope on a second parallel track. –see also Jig.	*Mining*
Self-bonding Coatings	A name given to thermal spray coatings that are capable of bonding to clean smooth surfaces. Bond and "one-step" coatings are normally in this group. These are particularly important where grit blasting or surface roughening processes must be omitted.	*Paint and Coatings*
Self-contained breathing apparatus	A self-contained supply of oxygen used during rescue work from coal mine fires and explosions; same as SCSR (self-contained self rescuer).	*Mining*
Self-diffusion	Atomic scale migration of a species in its own phase.	*Material Process*
Self-directed natural work teams	Nearly autonomous teams of empowered employees, including hourly workers, that share a common workspace and/or responsibility for a particular process or process segment. Typically such teams have authority for day-to-day production activities and many supervisory responsibilities, such as job assignments, production scheduling, maintenance, materials acquisition, training, quality assurance, performance appraisals, and customer service. Often called "self-managed" work teams. All self-directed teams are empowered.	*Quality*
Self-Generation	A generation facility dedicated to serving a particular retail customer, usually located on the customer's premises. The facility may either be owned directly by the retail customer or owned by a third party with a contractual arrangement to provide electricity to meet some or all of the customer's load.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Self-Generator	A plant whose primary product is not electric power, but does generate electricity for its own use or for sale on the grid; for example, industrial combined heat and power plants.	*Energy*
Self-induced vibration	Also called self-excited vibration, results from conversion of non-oscillatory energy into vibration, as wind exciting telephone wires into mechanical vibration.	*Reliability Engineering*
Self-potential	A technique, used in geophysical prospecting, which recognizes and measures the minute electric currents generated by sulfide deposits.	*Mining*
Self-relieving	The process by which excessive internal body cavity pressure is automatically relieved either into the upstream or downstream line generally found in ball valves	*General Mechanical*
Self-rescuer	A small filtering device carried by a coal miner underground, either on his belt or in his pocket, to provide him with immediate protection against carbon monoxide and smoke in case of a mine fire or explosion. It is a small canister with a mouthpiece directly attached to it. The wearer breathes through the mouth, the nose being closed by a clip. The canister contains a layer of fused calcium chloride that absorbs water vapor from the mine air. The device is used for escape purposes only because it does not sustain life in atmospheres containing deficient oxygen. The length of time a self-rescuer can be used is governed mainly by the humidity in the mine air, usually between 30 minutes and one hour.	*Mining*
Selftest	A test internal to a device.	*Aeronautical Engineering*
Seller type	Categories of major refiners and other refiners and gas plant operators.	*Energy*
SEM	Scanning electron microscope.	*Lubrication*
Semi Conductor	A solid material characterized by comparatively high resistivities.	*Electrical*
Semianthracite	See Anthracite	*Energy*
Semi-autogenous grinding (SAG)	A method of grinding rock into fine powder whereby the grinding media consist of larger chunks of rocks and steel balls.	*Mining*
Semiautomatic Arc Welding	Arc welding with equipment which controls only the filler metal feed. The advance of the welding is manually controlled.	*Maintenance and Repair*
Semi-automatic press	A press in which the mold parts are secured directly to the top and bottom of the press with facilities for automatically parting the mold and ejecting the pieces. Mechanical or hydraulic means are necessary to open the press and mold.	*Material Process*
Semi-circle	A measure of angle, 1 semi-circle = pi rad = 190 deg; angles from physical devices are often reported in semi-circles in order to compress data.	*Aeronautical Engineering*
Semiconductor	A semiconductor is a material whose electrical properties can be significantly influenced by physical factors (mostly electrical conditions, but also pressure, temperature, light, etc). This means that a semiconductor will behave either as an insulator or a conductor of electricity, depending on the conditions to which it is exposed. They are a fundamental component of electronic devices. Because of their ability to respond to external conditions, semiconductors are commonly used in sensor systems.	*Electrical*
Semiconductor	Material with a level of electrical conductivity intermediate between that for an insulator and a conductor, for example, a conductivity between 10-4 W-1 m-1 and 10+4 W-1 m-1.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Semiconductors	materials having a conductivity range between that of conductors and insulators	*Physics*
Semi-Finished Steel	Steel shapes, for example blooms, billets or slabs, that later are rolled into finished products such as beams, bars or sheet.	*Metallurgy*
Semigloss	A plastics surface finish having a reflectivity between satin and gloss.	*Material Process*
Semipositive mold	A modified flash mold which at the last 1/32 inch to 1/16 inch of travel becomes positive.	*Material Process*
Semisolid	Any substance having the attributes of both a solid and a liquid. Similar to semiliquid but being more closely related to a solid than a liquid. More generally, any substance in which the force required to produce a deformation depends both on the magnitude and on the rate of the deformation.	*Oil Analysis*
Semisteel	A high grade of cast iron made by the addition of steel scrap to pip iron in a cupola or electric furnace. More correctly described as high-strength gray iron.	*Maintenance and Repair*
Sems	A screw and washer assembly. A screw or bolt which has a captive washer. The washer is frequently loose on the plain shank of the fastener, the shank diameter being equal to the effective diameter of the thread; the thread being rolled from this diameter. The origin of the word is a frequent question. In the 1930's E. C. Crowther was a representative for a company that sold both shakeproof washers and screws. He came up with the idea of placing the washer on the screw before it was thread rolled. The major diameter of the screw being larger than the washer hole prevents it from coming off. The Illinois Tool Works made machines that produced these patented pre-assembled washers and screws. The s at the end of SEMs is thought to have been subsequently picked up because they are not usually purchased individually. In spite of the original patents and trademarks the word SEMS is generally recognized as a generic term applicable to screw and washer assemblies.	*Maintenance*
Senescence	Aging of tissues; growing old.	*Forestry*
Sensing Distance	The maximum recommended distance between the sensor and standard target at which sensor will effectively and reliably detect the target.	*Electrical Engineering*
Sensing Element	That part of a transducer which reacts directly in response to input.	*Electrical*
Sensing Element	That part of the transducer which reacts directly in response to the input.	*Electronic Process*
Sensitivity	The minimum change in input signal to which an instrument can respond.	*Electrical*
Sensitivity (of a diagnostic test)	The proportion of truly diseased persons, as measured by the gold standard, who are identified as diseased by the test under study.	*Analysis*
Sensitivity analysis	An analysis used to determine how sensitive the results of a study or systematic review are to changes in how it was done. Sensitivity analyses are used to assess how robust the results are to uncertain decisions or assumptions about the data and the methods that were used.	*Quality Engineering*
Sensitivity Shift	A change in slope of the calibration curve due to a change in sensitivity.	*Electrical*
Sensitivity, analytical sensitivity	The ability of an analytical method to detect small quantities of the measured component. It has no numerical value. See detection limit.	*Quality*
Sensor	A device that measures, receives, or generates data, for example, an INS, a FLIR, a map. See Also: Data Source Object.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sensor	A device that is used to detect the value (or the change of value) of a physical quantity or parameter and then converts that value into a signal for an indicating or recording instrument.	*Reliability Engineering*
Sensor Fusion/Correlation (SFC)	Measure of convergence of sensor data.	*Aeronautical Engineering*
Sentinel well	a groundwater monitoring well situated between a sensitive receptor downgradient and the source of a contaminant plume upgradient. Contamination should be first detected in the sentinel well which serves as a warning that contamination may be moving closer to the receptor. The sentinel well should be located far enough upgradient of the receptor to allow enough time before the contamination arrives at the receptor to initiate other measures to prevent contamination from reaching the receptor, or in the case of a supply well, provide for an alternative water source.	*Chemical*
Separate metering	Measurement of electricity or natural gas consumption in a building using a separate meter for each of several tenants or establishments in the building.	*Energy*
Separative work unit (SWU)	The standard measure of enrichment services. The effort expended in separating a mass F of feed of assay xf into a mass P of product assay x_p and waste of mass W and assay x_w is expressed in terms of the number of separative work units needed, given by the expression $SWU = WV(x_w) + PV(x_p) - FV(x_f)$, where V(x) is the "value function," defined as $V(x) = (1 - 2x)\ 1n((1 - x)/x)$.	*Energy*
Separator	A Steam separator, also known as a moisture separator, is a device for separating water droplets from steam. A separator is necessary as wet steam reduces thermal efficiency, and water droplets in high velocity steam can cause erosion within the system.	*Industrial*
Separator	A special tank used to separate gas from oil in some crude oil gathering systems.	*Mechanical*
Separator, Absorbent	A separator that retains certain soluble and insoluble contaminants by molecular adhesion.	*Mechanical, Process, and Operations*
Separator, Centrifugal	A separator that removes nonmiscible fluid and solid contaminants that have a different specific gravity than the fluid being purified by accelerating the fluid in a circular path and using the radial acceleration component to isolate these contaminants.	*Mechanical, Process, and Operations*
Separator, Coalescing	A separator that divides a mixture or emulsion of two nonmiscible fluids using the interfacial tension between the two liquids and the difference in wetting of the liquids on a particular porous medium.	*Mechanical, Process, and Operations*
Separator, Magnetic	A separator that uses a magnetic field to attract and hold ferromagnetic particles.	*Mechanical, Process, and Operations*
Separator, Vacuum	A separator that utilizes subatmospheric pressure to remove certain gases and liquids from another liquid because of their difference in vapor pressure.	*Mechanical, Process, and Operations*
Septa fitting	a special fitting used to seal vials (a liner for a threaded cap) or gas chromatographs (GCs) to provide closure. Septas can be manufactured in single, double, or triple layers of silicone rubber and other plastic materials. A syringe with a measured quantity of contaminant can be injected through a septa closure and into a GC column for separation analysis.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	Industry
Septic tank	A tank in which the solid matter of continuously flowing sewage is disintegrated by bacteria.	*Energy*
Sequence	1. The order of a series of operations or movements. 2. To divert flow to accomplish a subsequent operation or movement.	*Mechanical, Process, and Operations*
Sequence iiig test	A standardized engine test for measurement of the high temperature performance of engine oils.	*Mechanical, Process, and Operations*
Sequence Valve	A valve whose primary function is to direct flow in a predetermined sequence.	*Mechanical, Process, and Operations*
Sequence valve	A pressure operated valve which, at its setting, diverts flow to a secondary line while holding a predetermined minimum pressure in the primary line.	*Mechanical, Process, and Operations*
Sequence vid test	A standardized engine test under development for measurement of the fuel efficiency effects of engine oils.	*Mechanical, Process, and Operations*
Sequential Access	An access mode in which records are retrieved in the same order in which they were written. Each successive access to the file refers to the next record in the file.	*Electrical*
Sequential testing	A testing methodology in which test units are tested consecutively instead of simultaneously.	*Reliability Engineering*
Sequential trial	A randomized trial in which the data are analyzed after each participant's results become available, and the trial continues until a clear benefit is seen in favor of one of the comparison groups, or it is unlikely that any difference will emerge. The main advantage of sequential trials is that they are usually shorter than fixed size trials when there is a large difference in the effectiveness of the interventions being compared. Their use is restricted to conditions where the outcome of interest is known relatively quickly. In a group sequential trial, a limited number of interim analyses of the data are carried out at pre-specified times during recruitment and follow up, say 3–6 times in all. See also: Stopping rule	*Quality Engineering*
Sequester	to undergo sequestration.	*Chemical*
Sequestration	the inhibition or stoppage of normal ion behavior by combination with added materials, especially the prevention of metallic ion precipitation from solution by formation of a coordination complex with a phosphate.	*Chemical*
Serial Transmission	Sending one bit at a time on a single transmission line. Compare with Parallel Transmission.	*Electrical*
Series	See Flange Series	*Petroleum Engineering*
Series	Electrical components that are connected in an unbranched line are said to be "in series," as opposed to "in parallel" or "in shunt." If any one of the components in a series circuit was to fail, the circuit would be broken and no electricity would flow. (See also Parallel.)	*Electrical*
Series capacitor	See FACTS.	*Electrical*
Series Circuit	A circuit in which current has only one path to follow.	*Electrical Engineering*
Series connection	A way of joining photovoltaic cells by connecting positive leads to negative leads; such a configuration increases the voltage.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Series resistance	Parasitic resistance to current flow in a cell due to mechanisms such as resistance from the bulk of the semiconductor material, metallic contacts, and interconnections.	*Energy*
Serpentine	A greenish, metamorphic mineral consisting of magnesium silicate.	*Mining*
Serve	gas, which issued regularly from a fault or break was said to 'serve'. (N. East).	*Mining*
Serve	Any helical wrapping applied over a wire or cable core. It may consist of wires, fibers, yarns or tapes.	*Electrical*
Served Wire Shield	A barrier to the passage of interference formed by a helical wrapping of wires over a cable core. It is also called spiral shield.	*Electrical*
Service	Used to denote the suitability of equipment for use in a particular environment Example:- High Temperature, service.	*Petroleum Engineering*
Service Agreement	an agreement entered into by the transmission customer and transmission provider.	*Energy*
Service Area	The territory a utility system is required or has the right to supply electric service to ultimate customers.	*Energy*
Service Drop	The lines running to a customer's house. Usually a service drop is made up of two 120 volt lines and a neutral line, from which the customer can obtain either 120 or 240 volts of power. When these lines are insulated and twisted together, the installation is called triplex cable.	*Energy*
Service Fitting	A street ell or street tee having a male thread at one end.	*Maintenance and Repair*
Service Life	The length of time a piece of equipment can be expected to perform at its full capacity.	*Energy*
Service Obligation	Refers to the duties a regulated public utility must perform for its customers. Service obligation includes the duty to serve all prospective customers, to provide adequate, reliable service and to render safe, efficient and nondiscriminatory service.	*Energy*
Service Pressure 10M	10,000 psi (pounds per square inch) Maximum Service Pressure.	*Petroleum Engineering*
Service Pressure 15M	Indicates a maximum service pressure of 15,000 pounds per square inch (psi).	*Petroleum Engineering*
Service Pressure 20M	20,000 psi (pounds per square inch) Maximum Service Pressure.	*Petroleum Engineering*
Service Pressure 30M	30,000 psi (pounds per square inch) Maximum Service Pressure.	*Petroleum Engineering*
Service pressure 3M	3,000 psi (pounds per square inch) Maximum Service Pressure.	*Petroleum Engineering*
Service Pressure 5M	Indicates a maximum service pressure of 5,000 pounds per square inch (psi).	*Petroleum Engineering*
Service provider	See Energy service provider	*Energy*
Service Territory	This is the state, area or region served exclusively by a single electric utility.	*Energy*
Service well	A well drilled, completed, or converted for the purpose of supporting production in an existing field. Wells of this class also are drilled or converted for the following specific purposes: gas injection (natural gas, propane, butane or fuel-gas); water injection; steam injection; air injection; salt water disposal; water supply for injection; observation; and injection for in-situ combustion.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Service-life	anticipated length of time zinc will protect steel; the amount of time until enough of the galvanized coating is consumed and 5% of the substrate steel surface area shows signs of rust	*Materials Process*
Servo	When a controller changes a process variable to move the process variable in response to a setpoint change, it is called a servo.	*Process Control*
Servo mechanism (Servo)	A mechanism subjected to the action of a con trolling device which will operate as if it were directly actuated by the controlling device, but capable of supplying power output many times that of the controlling device, this power being derived from an external and independent source.	*Mechanical, Process, and Operations*
Servo valve/Servovalve	1. A valve which modulates output as a function of an input command. 2. A follow valve.	*Mechanical, Process, and Operations*
Servovalve	A valve which modulates output as a function of an input command.	*Lubrication*
Servovalve, Electrohydraulic	A servovalve which is capable of continuously controlling hydraulic output as a function of an electrical input.	*Mechanical, Process, and Operations*
Servovalve, Null	The condition where the servovalve supplies zero control flow at zero load pressure drop.	*Mechanical, Process, and Operations*
Servovalve, Overlap	The lap condition which results in a decreased slope of the normal flow curve in the null region.	*Mechanical, Process, and Operations*
Servovalve, Underlap	The lap condition which results in an increased slope of the normal flow curve in the null region.	*Mechanical, Process, and Operations*
SES	abbreviation for Stoner Engineering Software.	*Petroleum Drilling*
SES.MDE	the SES run-time file. To run SES, double-click this file (or a Windows Shortcut thereto), or open it from within Microsoft Access. You may download SES by clicking here.	*Petroleum Drilling*
SESOIL	a one-dimensional model for estimating pollutant distribution in an unsaturated soil column. SESOIL results are commonly used to estimate the source term for groundwater transport modeling of the saturated zone.	*Chemical*
SESSILE	Attached or fastened; incapable of moving from place to place.[1] Fin.	*Forestry*
Set	a number or group of tubs on their way to the shaft. -see also Journey or Rake; or a group of colliers on a longwall face; or a column of pumps in a pumping shaft; or to fill a tub unfairly – see Set-out. The large coals were built up around the side of the tub leaving a hollow in the middle this was then covered over. Also to get the sides off and trim up a heading (S. Staffs.); or to erect a prop; or the natural giving way of an unsupported roof. (N. East). If set square to the dip a prop is said to be 'fully on the set' (N. Staffs.).	*Mining*
Set coal	coal from nearby old workings, which had a hard dead nature. (Leics.).	*Mining*
Set High	Vertical spacing which allows the rollers to be mounted above the frame rails.	*Manufacturing*
Set Low	Vertical spacing which allows the roller to be mounted below the top of the frame rails.	*Manufacturing*
Set Point	The temperature at which a controller is set to control a system.	*Electrical*
Set up	To harden, as in polymerizing or curing.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
SETA (plural = setae)	Slender, hairlike or bristly projections arising from the epidermal layer on any part of the body of an insect.	*Forestry*
Set-out	tubs or corves of coal deficient in weight or measure. (N. East).	*Mining*
Setpoint	The desired value at which a process variable is to be controlled.	*Electrical Engineering*
Set-point	A desired level for a process variable. The systems seeks to correct the variable when it deviates from this standard.	*Control Engineering*
Setpoint (Command)	An input variable which sets the desired value of the controlled variable.	*Process Control*
Sett	a column of pumps in a pumping shaft; or an area of mines worked by a colliery company; or a length along the face of a stall, usually from 6 to 10ft; or setting up a dial to take a bearing or sight; or a sales yard for coal. In some areas several collieries would share the same sett.	*Mining*
Setters	large pieces of coal. They were set or piled around the sides of the landsale cart and built up. The centre was then filled with the smaller coals. (N. East).	*Mining*
Setting timber	to erect supports to control the roof, traditionally timber props, later steel and hydraulic props.	*Mining*
Settle boards or Saddle boards	the portion of the heapstead at the top of the shaft, and between it and the screens, covered with iron or metal sheets.	*Mining*
Settling Tank	A tank in which liquid is stored until particles suspended in the liquid sink to the bottom.	*Lubrication*
Settling Time	The time taken for the display to settle within one digit final value when a step is applied to the meter input.	*Electronic Process*
Setup	There are a huge number of variable adjustments to the suspension, tires, gears, engine, wings, brakes and virtually every other piece of the car that can be moved or electronically altered. The idea is to improve the handling and performance by making a car conform to a particular track, temperature and even weather condition. The driver with the best setup is in a good position to win. A driver with a less-than-perfect setup can sometimes "hustle the car" and compensate for the deficiency, but most drivers perform at their utmost only when the car is comfortable.	*NASCAR*
Setup Time	Term used within SKF defining the time that is needed for resetting the channel (production line) from one product type to another. It is measured as the lost production between the start of the reset and running normal production rate for the new type. It is expressed in % of manned hours.	*Maintenance*
Seven Wastes	Taken from the Toyota Production System, these are non-value-added activities that should be reduced and/or eliminated. The seven wastes are: overproduction, unnecessary transportation, inventory, motion, defects, over-processing and waiting.	*Reliability Engineering*
Severance	The separation of a mineral interest from other interests in the land by grant or reservation. A mineral dead or grant of the land reserving a mineral interest, by the landowner before leasing, accomplishes a severance as does his execution of a mineral lease.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Severance Tax	A tax on the removal of minerals from the ground. The tax can be levied either as a tax on volume or a tax on value. In Louisiana oil is taxed at 12.5 percent of value. Natural gas is taxed at 7 cents per MCF with the rate adjusted annually to reflect the changes in the spot market price of gas sold in Louisiana.	*Petroleum Drilling*
Severe Sliding	Large ferrous particles which are produced by sliding contacts. Trend is important to determine whether abnormal wear is taking place.	*Lubrication*
Sexual stage	Reproductive stage of the life cycle of an organism.	*Forestry*
SF6	See Sulfur hexafluoride	*Energy*
SFC	Sequence Function Chart. An IEC1131-1 programming/configuration language.	*Control Engineering*
Shab or Top shab	a thin layer of dirty coal lying immediately above the coal seam. The shab would usually come down with the coal.	*Mining*
Shackle	a system used before rope capping. The shackle was a machined bar of iron. The long, flattened and shaped ends were riveted or collared onto the end of the winding rope. This was then turned back and the swelled end of the rope formed an eye by which it was then attached to the cage chains, or a short steel or wrought iron chain for coupling mine cars together.	*Mining*
Shade or Shead	see 'Floor' (N. Staffs.).	*Mining*
Shade-intolerant trees	Trees that cannot thrive in the shade of larger trees.	*Forestry*
Shaft	A bar, usually of steel and usually round, to support rotating parts or to transmit power.	*Equipment*
Shaft	A vertical or inclined excavation for purpose of prospecting or working mines.	*Mining*
Shaft bottom	see Pit bottom.	*Mining*
Shaft guides	see guides.	*Mining*
Shaft mine	A mine that reaches the coal bed by means of a vertical shaft.	*Energy*
Shaft pillar	an area of coal left unworked around the shaft to protect the shaft and the buildings on the surface from the effects of subsidence.	*Mining*
Shaft tunnels	levels or cruts driven from the shaft across the coal measures to intersect rearer seams (N. Staffs.).	*Mining*
Shaftsman	a man employed to work within the shaft on inspection and maintenance. –see Pit fettlers.	*Mining*
Shaker conveyor	see Jigger.	*Mining*
Shaker screen	This screen filters out impurities in milling of gold.	*Mining*
Shaker Table	Like a giant gold pan, an engine drives a belt that vibrates a huge bucket.	*Mining*
Shakes/shingles	Flat pieces of weather proof material laid with others in a series of overlapping rows as covering for roofs and sometimes the sides of buildings. Shakes are similar to wood shingles, but instead of having a cut and smoothly planed surface, shakes have textured grooves and a rough or "split" appearance to give a rustic feeling.	*Energy*
Shale	A rock formed by consolidation of clay, mud, or silt, having a laminated structure and composed of minerals essentially unaltered since deposition.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Shale basin	An underground deposit of shale (pdf link), often in a layer that extends along a plane at a certain depth under the surface. There are many different types of shale, each with certain defining characteristics. Shale gas: Natural gas trapped in a shale formation.	*Petroleum Drilling*
Shale cuttings	Small pieces of rock that break away during the drilling process. Cuttings are screened out of the liquid mud by using shale shakers, or screens that allow the liquid to pass through but filter out the bits of rock.	*Petroleum Drilling*
Shale Gas	Natural gas produced from wells that are open to shale formations. Shale is a fine-grained, sedimentary rock composed of mud from flakes of clay minerals and tiny fragments (silt-sized particles) of other materials. The shale acts as both the source and the reservoir for the natural gas. See natural gas.	*Energy*
Shallow pitting	Testing a potential mineral deposit by systematically sinking small shafts into the earth and analyzing the material recovered.	*Energy*
Shank	a pit shaft. (Scot.); or to sink, as in a shaft (Scot.); or a shallow shaft underground. - see Staple.	*Mining*
Shanker	another term for a shaft sinker. (Scot.).	*Mining*
Shareholder-Owned Electric Utilities	U.S. public utilities owned by shareholders, organized as corporations, and regulated by Federal Energy Regulatory Commission and state public utilities commissions. About three-quarters of all Americans receive electric service from shareholder-owned electric utilities.	*Energy*
Sharkskin	A surface irregularity of a blow molded container of film during extrusion. See Melt Fracture.	*Engineering Physics*
Sharp	Gas was said to be 'sharp' when it was at its most explosive.	*Mining*
Sharp Practice	Indirect misrepresentation, unscrupulous shrewdness, deceit or trickery, just short of actual fraud. Such actions are usually designed for short-term gain, but typically act to the detriment of good long-term supplier relations based on honesty, truth, and respect.	*Procurement*
Sharp stone	fine grained sandstone breaking into angular fragments.	*Mining*
Shave	The process of pushing a forging through a cuffing die to form or size some dimension more accurately.	*Metallurgy*
Shear	the act of cutting hair or wool	*Agriculture*
Shear	Shear is the product of shear rate and resistance time. It is often used to describe the degree of mixing experienced by a material.	*Engineering Physics*
Shear Heating	Heat generated within the plastic melt as the polymer is sheared. It is caused by viscous dissipation of work.	*Engineering Physics*
Shear modulus	The ratio of shear stress divided by the corresponding shear strain in a linear elastic material.	*Engineering Physics*
Shear modulus	Elastic modulus under pure shear loading.	*Material Process*
Shear or shearing	The deformation of rocks by lateral movement along innumerable parallel planes, generally resulting from pressure and producing such metamorphic structures as cleavage and schistosity.	*Mining*
Shear or shearing stress	A force which operates in a plane of an area or in a parallel plane, and tends to cause the plane of the area to slide on the adjacent planes.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Shear Rate	The rate of slip within a flowing substance. See ASTM D-1092.	*Lubrication*
Shear Rate	Rate of change of velocity across the flow channel.	*Engineering Physics*
Shear Stability	The resistance of a grease to changes in consistency (hardness) during mechanical working.	*Lubrication*
Shear Stability Index (SSI)	The measure of a viscosity modifier's contribution to an oil's percentage kinematic viscosity loss, when the oil is subjected to engine operation or special test conditions.	*Lubrication*
Shear strain	Strain measuring the intensity of racking in the material. Shear strain is measured as the change in angle of the corners of a small square of material.	*Engineering Physics*
Shear stress	Stress acting parallel to an imaginary plane cut through an object.	*Engineering Physics*
Shear Stress	Stress developed in a polymer melt where a material is sheared.	*Engineering Physics*
Shear zone	A zone in which shearing has occurred on a large scale.	*Mining*
Shearer	A mining machine for longwall faces that uses a rotating action to "shear" the material from the face as it progresses along the face.	*Mining*
Shearer or Shearer loader	modern coal cutting and loading machine with rotating drum (or drums) fitted with picks that break the coal, and vanes that throw the coal on to the conveyor on which it travels along the face. A modern machine used to cut and load the coal on a longwall face.	*Mining*
Shearing	Relative slipping or sliding between one part of a substance and an adjacent part. Shearing in a solid involves cutting or breaking of the crystal structure; in a fluid or plastic, shearing does not necessarily destroy the continuous nature of the substance.	*Lubrication*
Shearing Strain	A measure of angular distortion also directly measurable, but not as easily as axial strain.	*Electronic Process*
Sheath	Lower part of a monocot leaf. Usually it wraps around the stem.	*Agriculture*
Sheath	The material, usually an extruded plastic or elastomer, applied outermost to a wire or cable. Very often referred to as a jacket, or an impervious metal covering usually lead.	*Electrical*
Sheath Thermocouple	A thermocouple made out of mineral-insulated thermocouple cable which has an outer metal sheath.	*General*
Sheave	A wheel with a grooved rim used with ropes, cables, belts, etc.	*Equipment*
Sheave wheel	A large, grooved wheel in the top of a headframe over which the hoisting rope passes.	*Mining*
Shed	a thin, smooth parting in the strata with both sides polished (a shear plane or slip), or a very thin layer of coal.	*Mining*
Sheep breeds	sheep breeds:	*Agriculture*
Sheet	Wide, flat-rolled steel. It is generally accepted that steel less than 3 mm thick is sheet and more than 3 mm (1/8 inch) thick is plate (See Plate).	*Metallurgy*
Sheeter lines	Parallel scratches or projecting ridges distributed over a considerable area of a plastic sheet, such as might be produced during a slicing operation. Also called relief lines.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sheeting	Sheets are distinguished from films in the plastics and packaging industry only according to the thickness. A web under 10 mils (0.010 inch) thick is usually called a film, whereas a web 10 mils and over in thickness is usually called a sheet. Sheeting is most commonly made by extrusion, casting and calendering.	*Engineering Physics*
Shelf Life	The length of time over which a product will remain fit for use during storage under specific conditions.	*Engineering Physics*
Shell diameter	Diameter of the shell in a natural draft tower at the top of the curb, measured from inside of cross struts to inside of cross struts.	*Facility Engineering*
Shell door	a temporary door, usually constructed from brattice cloth.	*Mining*
Shell height	Dimension from top of curb to top of the hyperbolic shell in a natural draft tower.	*Facility Engineering*
Shell storage capacity	The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.	*Energy*
Shellac	An animal resins, produced by insects parasitic on certain trees in India and southern Asia. It is used for varnishes and molding powders and as a modifier for synthetic resins.	*Material Process*
Shelterwood cut	Removing trees on the harvest area in a series of two or more cuttings so new seedlings can grow from the seed of older trees.	*Forestry*
Shem	the main fissure or slip-line of a fault (N. Staffs.).	*Mining*
Shet	the roof of the mine when it has collapsed (S. Staffs.).	*Mining*
Sheth	to course the air to ventilate the workings (N. East).	*Mining*
Sheth door	a ventilation door (N. East).	*Mining*
Shetland Pony	An ancient breed of small horse. A pony that looks very much like the modern Shetland existed at least 2,000 years ago on the Shetland islands. Hair from Shetland ponies provided the raw materials for fishing nets and lines. Fishing was the basis of the main diet for most islanders. The breed has been used as pack and saddle animals for most of their history. About the middle of the 19th century, the Shetland was introduced as a draft animal in England's mines.	*Agriculture*
Sheugh	a drainage channel cut in the floor of a roadway. Pronounced 'shuch'; or a shaft of a coal pit. (Scot.).	*Mining*
Shield	Any barrier to the passage of interference : causing electrostatic or electromagnetic fields, formed by a conductive layer surrounding a cable core. It is usually fabricated from a metallic braid, foil or wire serving.	*Electrical*
Shield Coverage	The amount of cable core surface area which is covered by a shield. It is expressed as a percentage of the cable core's total surface area. It is also called braid coverage when applied to a braided shield.	*Electrical*
Shielded Metal Arc Welding (SMAW)	An arc welding process in which coalescence is produced by heating with an electric arc between a covered metal electrode and the work. Shielding is obtained from decomposition of the electrode covering. Pressure is not used, and filler metal is obtained from the electrode.	*Maintenance and Repair*
Shielded Sensor	A sensor which "senses" only to the front of its face and ignores metals to its side. The presence of such side metal, however, may cause a slight shift in operating characteristics.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Shielding	The practice of confining the electrical field around a conductor to the primary insulation of the cable by putting a conducting layer over and/or under the insulation. (External shielding is a conducting layer on the outside of the insulation. Strand or internal shielding is a conducting layer over the conductor itself).	*Electrical*
Shift	a fault; or a period of work.	*Mining*
Shift	The number of hours or the part of any day worked.	*Mining*
Shifter	a man who repaired and kept open the roadways, or an underground laborer on shift work, (N. East); or another name for the 'bottomer' or 'runner on', -see Wasteman.	*Mining*
Shifting-up	moving the trackway for the tubs closer to the face after a strip of coal has been removed (N. Staffs.).	*Mining*
Shim (shimming)	a wedge or strip of metal used to fill in or bring one part level with another.	*Petroleum Drilling*
Shingley coal	very small coals, free from dust (N. East).	*Mining*
Ship-to-shore connection	see HVSC	*Electrical*
Shirt it	to stop work at the end of the shift. (Mids.).	*Mining*
Shivery	easily broken up.	*Mining*
Shoat	a young hog, usually less than a year old.	*Agriculture*
Shock	a pile of grain that is set up like a cone	*Agriculture*
Shock Chlorination	Adding a large amount of chlorine to water in a well and pumping it through the system. The chlorinated water is left in the system long enough to ensure complete disinfection.	*Petroleum Engineering*
Shock machine	Or shock test machine, a device for subjecting a system to controlled and reproducible mechanical shock pulses.	*Reliability Engineering*
Shock pulse	An event that transmits kinetic energy into a system in a relatively short interval compared with the system's greatest natural period. A natural decay of oscillatory motion follows. The event is usually displayed as a time history, as on an oscilloscope.	*Reliability Engineering*
Shock pulse, classical	Classical shock pulses (mechanical shock machine). Unless the procedure requires the use of a classical shock pulse, the use of such a pulse is not acceptable unless it can be demonstrated that measured data is within the tolerances of the classical shock pulses. Only two classical shock pulses are defined for testing in the method – the terminal peak sawtooth pulse, and the trapezoidal pulse. The terminal peak sawtooth pulse along with its parameters and tolerances are provided on Figure 516.6-10, and is an alternative for testing in Procedure I - Functional Shock and Procedure V - Crash Hazard Shock Test.	*Reliability Engineering*
Shock pulse, haversine	A practical variation on the obsolete half-sine pulse, whose abrupt transitions at beginning and end cannot be achieved in test labs. Practical testing requires some rounding, and the result in called a haversine pulse. Another definition: an inverted cosine offset by half its amplitude. A continuous haversine resembles a sine wave.	*Reliability Engineering*
Shock response spectrum (or SRS)	A plot of maximum responses of imagined SDoF systems vs. their natural frequencies, as they respond to an applied shock.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Shock wave	A pressure wave front which moves at a sonic velocity.	*Mechanical, Process, and Operations*
Shock, Mechanical	A short pulse of acceleration, usually lasting only a few milliseconds. A typical shock test pulse is a half: sine acceleration wave having 100g peak and .007 second duration.	*Electrical Engineering*
Shoot	A concentration of mineral values; that part of a vein or zone carrying values of ore grade.	*Mining*
Shooting fast	blowing down coal with gunpowder without nicking the sides of the working place.	*Mining*
Shooting the gob	working out the pillars by blasting in the steep rearer seams (N. Staffs.).	*Mining*
Shop-floor data collection	Automated collection of data on factory-production activities, including units produced, labor hours per unit or customer order, time and date of specific production activities, and maintenance and quality data.	*Quality*
Shore scleroscope hardness	The height of rebound (proportional to the hardness) of a diamond pointed hammer falling by its own weight and under standardized conditions on the object to be tested for hardness.	*Material Process*
Shorn	to cut with a pick.	*Mining*
Short	Incompletely filled out condition in a molding which may be quite obvious, or only evident through absence of surface film in tiny or larger areas, or as lighter, infused particles of material showing through a covering surface film, accompanied possibly by peculiar thin skinned blisters. With Thermosetting materials, it is important to note whether the short occurs only after a period of prewarming the mold charge, or a delay in closing the mold.	*Material Process*
Short circuit	An electric current taking a shorter or different path than intended.	*Energy*
Short circuit	An electric contact between parts of an electric circuit, which causes a very high current, increases in temperature and potentially fire, if the circuit is not properly protected. This can occur if two live wires come into contact with each other, perhaps because of worn insulation. The term is also used when defining the safe operating conditions for electrical devices. If a device is said to have a short-circuit resilience of 400 amps (A), that means that it can be subjected to up to 400 A before it will shut itself down.	*Electrical*
Short circuit current	The current flowing freely through an external circuit that has no load or resistance; the maximum current possible.	*Energy*
Short circuiting	the entry of ambient air into an extraction well (used for SVE and bioventing) without first passing through the contaminated zone. Short circuiting may occur through utility trenches, incoherent well or surface seals, or layers of high permeability geologic materials.	*Chemical*
Short finish	A dull surface finish on a plastic.	*Material Process*
Short gate	A gate valve whose seat rings contact the gate only in the closed position. Such valves are not through conduit, as the gate is completely withdrawn from the flow area in the open position.	*Mechanical*
Short pattern valve	A valve whose face-to-face dimension is less than the API-6D standard.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Short purchases	A single shipment of fuel or volumes of fuel purchased for delivery within 1 year. Spot purchases are often made by a user to fulfill a certain portion of energy requirements, to meet unanticipated energy needs, or to take advantage of low-fuel prices.	*Energy*
Short range order	Local building block structure of a glass, comparable to the structural unit in a crystal of the same composition.	*Material Process*
Short Repairs	Repairs that a preventive maintenance or route person can complete in less than 30 minutes with the tools and materials that he/she carries.	*Maintenance*
Short selling	The borrowing of stock from a broker in order to sell it in the hope that it may be purchased at a lower price later on.	*Mining*
Short Shot	In injection molding, failure to fill the mold completely. It results in voids in the article, unfused particles showing through a surface covering, or possibly thin-skinned blisters.	*Engineering Physics*
Short term sales	Any short-term purchase covering a time period of 2 years or less. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are classified as short-term sales, regardless of the stated contract term.	*Energy*
Short ton	2000 pounds. For many agricultural commodities, this is the standard measure for domestic trade. However, international trade usually is reported in long tons (2240 pounds).	*Agriculture*
Short ton (st)	A unit of weight equal to 2,000 pounds.	*Energy*
Shorthorn	A breed of cattle, raised in the United States primarily for beef. However, there are milking shorthorns. Shorthorns originated in England about 1600 and spread to Scotland and then to America in 1783. When first brought to Virginia, it was called the Durham. Shorthorns were popular with America's early settlers who valued its meat and milk. In addition, Shorthorns provided willing power for the wagon and plow. Many pioneer wagons were pulled by teams of Shorthorns. The breed's use for meat production was stimulated when Midwestern farmers began importing them directly from Scotland in 1854. Polled Shorthorns were developed from mutations, beginning around 1881 in Minnesota. Both horned and polled Shorthorns are known for adaptability, mothering ability, reproductive performance, good disposition, feed conversion and longevity. At least 45 different breeds of cattle include Shorthorn genetics. Both horned and polled Shorthorns are registered in the same breed book, maintained by the American Shorthorn Association.	*Agriculture*
Short-term debt or borrowings	Debt securities or borrowings having a maturity of less than one year.	*Energy*
Short-term purchase	A purchase contract under which all deliveries of materials are scheduled to be completed by the end of the first calendar year following the contract-signing year. Deliveries can be made during the contract year, but deliveries are not scheduled to occur beyond the first calendar year thereafter.	*Energy*
Shortwall	An underground mining method in which small areas are worked (15 to 150 feet) by a continuous miner in conjunction with the use of hydraulic roof supports.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Shortwall mining	system generally refers to the room-and-pillar mining in which the working face is wider than usual but smaller (less than 150 feet) than that in longwall mining.	*Energy*
Shortwall mining machine	generally is a continuous-mining machine used with a powered, self-advancing roof support system. It shears coal from a short coal face (up to about 150 feet long). The broken coal is hauled by shuttle cars to a conveyor belt.	*Energy*
Shot	The yield from one complete injection molding cycle.	*Engineering Physics*
Shot Blasting	Mechanical removal of surface oxides and scale on the pipe inner and outer surfaces by the abrasive impingement of small steel pellets.	*Maintenance and Repair*
Shot fast	a section of coal that contains an unfired or fast shot.	*Mining*
Shot Peening	The bombardment of a component surface with steel or ceramic shot. Produces a residual compressive stress in the surface and improves fatigue and stress corrosion performance.	*Paint and Coatings*
Shot-blasting	abrasive blasting steel with metal shot, usually to remove deposits or mill scale more rapidly or more effectively than can be done by sand-blasting or chemical cleaning	*Materials Process*
Shotfirer, or shotlighter	a man qualified and appointed by the manager to use explosives underground.	*Mining*
Shotholes	Small holes in a leaf caused by feeding activity and giving the appearance of injury via a shotgun.[1]	*Forestry*
Shotstick or Shotfiring pole	thin wooden pole used to ram explosives and clay into drill holes. Also called a 'rammer'.	*Mining*
Shoulder Screws	A threaded fastener with a plain, precision machined, shank that is used for location purposes. They are typically used for pulleys and linkages.	*Maintenance*
Shoulders	slices of coal taken off during the working of coal pillars in 'rearers' working (N. Staffs.).	*Mining*
Show	the pale blue "top," or flame that appears above the ordinary flame of a candle when it is burning in an atmosphere mixed with fire-damp.	*Mining*
shp	Shaft horsepower	*General*
Shrink Film	A term sometimes used for prestretched or oriented film used in shrink packaging.	*Engineering Physics*
Shrink Packaging	An item or group of items packaged by wrapping in a film or bag which, when heated, fits tightly around the contained article.	*Engineering Physics*
Shrinkage	The volume of natural gas that is transformed into liquid products during processing, primarily at natural gas liquids processing plants.	*Energy*
Shrinkage	The decrease in dimension of a molded part through cooling or getting out of a pool or the ocean.	*Engineering Physics*
Shrinkage stoping	A stoping method which uses part of the broken ore as a working platform and as support for the walls of the stope.	*Mining*
Shrinkage Stress	The residual stress in a coating caused by shrinkage during processing or being seen unclad after leaving cold water.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Shrinkage	The loss of product as it moves through the market system. Losses may be due to damage during shipment, product trimming, theft or moisture loss.	*Agriculture*
Shrinking Allowance	The dimensional allowance which must be made in molds to compensate for shrinkage of the plastics compound on cooling. Also the acceptance of just coming out of the pool or ocean.	*Engineering Physics*
Shropshire	A breed of sheep that originated in the counties of Shropshire and Staffordshire in central western England. The breed became known by its present name beginning in 1848. First imported into the United States in about 1855.	*Agriculture*
Shroud	A gaseous and/or mechanical or physical barrier placed around the spraying process designed to reduce the ingress of air into the system and so reduce oxidation of the of the materials being sprayed.	*Paint and Coatings*
Shunt	see Parallel.	*Electrical*
Shunt back	a table or platform incorporated in the tub or mine car track with a hinge at one end and a power cylinder at the other. The tub or mine car runs onto the platform, the power cylinder raises one end and the tub runs off in the opposite direction.	*Mining*
Shut in	Closed temporarily; wells and mines capable of production may be shut in for repair, cleaning, in accessibility to a market, etc.	*Energy*
Shut In	To close down a producing well temporarily for repairs, cleaning out, building up reservoir pressure, lack of market, etc.	*Petroleum Drilling*
Shut In Well	A well which is capable, but not presently producing.	*Petroleum Drilling*
Shut In Well	A well which is capable of producing but is not presently producing. Reasons for a well being shut in may be lack of equipment, market or other.	*Petroleum Drilling*
Shut or Shutt	the crushed and broken roof above a seam of coal; or another term for old workings (S. Staffs.).	*Mining*
Shutdown	To cease normal operations.	*Aeronautical Engineering*
Shutdown	A production hiatus during which the platform ceases to produce while essential maintenance work is undertaken.	*Petroleum Drilling*
Shutdown date	Month and year of shutdown for fuel discharge and refueling. The date should be the point at which the reactor became subcritical.	*Energy*
Shutdown Maintenance	Maintenance that is only performed while equipment is shutdown.	*Maintenance*
Shut-in royalty	A royalty paid by a lessee as compensation for a lessor's loss of income because the lessee has deferred production from a property that is known to be capable of producing minerals. Shut in may be caused by a lack of a ready market, by a lack of transportation facilities, or by other reasons. A shut-in royalty may or may not be recoverable out of future production.	*Energy*
Shutoff Valve	A valve which operates fully open or fully closed.	*Mechanical, Process, and Operations*
Shut-off valve	A valve designed only for on/off service. Not a throttling valve. Sometimes referred to as a "block valve."	*Mechanical*
Shuts	another name for the keps. (Scot.).	*Mining*

Term	Definition	*Industry*
Shuttle car	a rubber-tired haulage vehicle that is unloaded by a built-in conveyor.	*Energy*
Shuttle car	A self-discharging truck, generally with rubber tires or caterpillar-type treads, used for receiving coal from the loading or mining machine and transferring it to an underground loading point, mine railway or belt conveyor system.	*Mining*
Shuttle Valve	A connective valve which selects one of two or more circuits because flow or pressure changes between the circuits.	*Mechanical, Process, and Operations*
Shuttles	natural cracks running at right angles to the dip in the strata; or cleavages (or cleats) in the coal. (Lancs.).	*Mining*
SI	System Internationale. The name given to the standard metric system of units.	*Electrical*
SI/TA	Shut In/Temporarily Abandoned	*Petroleum Drilling*
SI/TA	Shut In/Temporarily Abandoned	*Petroleum Drilling*
SIB	sulfurized isobutylene	*Petro-Chemical Abbreviations*
SIC	See Standard Industrial Classification	*Energy*
Siddle	the inclination of a coal seam. (N. East).	*Mining*
Side abutment	see Abutment.	*Mining*
Side bars	Loose pieces used to carry one or more molding plus, and operated from outside the mold.	*Material Process*
Side basset	where the dip of the seam crosses a roadway (S. Staffs.).	*Mining*
Side Channels	Members which support the rollers on the side of the conveyor.	*Manufacturing*
Side draw pins	Projections used to core a hole in a direction other than the line of closing a mold, and which must be withdrawn before the part is ejected.	*Material Process*
Side effect	Any unintended effect of an intervention. Side effects are most commonly associated with pharmaceutical products, in which case they are related to the pharmacological properties of the drug at doses normally used for therapeutic purposes in humans. See also: Adverse effect	*Quality Engineering*
Side laning	in 'square work', widening of a drivage by taking slices of coal off the solid, i.e., 'breasting forward the rib' (S. Staffs.).	*Mining*
Side Lines	The lines which bound the sides of a claim.	*Mining*
Side Mounted Drive	A drive assembly mounted to the side of the conveyor, normally used when minimum elevations are required.	*Manufacturing*
Side of work	a panel or working area of coal in 'Square Work' (S. Staffs.).	*Mining*
Side roll	A type of sprinkler system in which long sections of pipe are supported on wheels, which allow it to be rolled sideways from setting to setting. They usually are powered by a gasoline engine in the center, which can roll the entire unit at one time.	*Agriculture*
Side Tables	Steel tables attached to either side of conveyor bed to provide working surface close to conveyor.	*Manufacturing*
Side wavers	the loose sides of a drift or roadway that would, if unsupported, soon fall. They generally occur when a crush is taking place.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Side-over	short roadway driven at right angles to, and bisecting a 'jenkin' in bord and pillar working. (N. East).	*Mining*
Siderite	Iron carbonate, which when pure, contains 48.2% iron; must be roasted to drive off carbon dioxide before it can be used in a blast furnace. Roasted product is called sinter.	*Mining*
Sidetrack	A wellbore segment extending from a wellbore intersection along a wellbore path to a different wellbore bottomhole from any previously existing wellbore bottomholes.	*Petroleum Drilling*
Sidetrack	A wellbore segment extending from a wellbore intersection along a wellbore path to a different wellbore bottomhole from any previously existing wellbore bottomholes.	*Petroleum Drilling*
Sidetrack drilling	This is a remedial operation that results in the creation of a new section of well bore for the purpose of (1) detouring around junk, (2) redrilling lost holes, or (3) straightening key seats and crooked holes. Directional "side-track" wells do not include footage in the common bore that is reported as footage for the original well.	*Energy*
Sidetracking	The well activity of drilling a new wellbore segment from a wellbore intersection to a new wellbore bottomhole or target.	*Petroleum Drilling*
Sidetracking	The well activity of drilling a new wellbore segment from a wellbore intersection to a new wellbore bottomhole or target.	*Petroleum Drilling*
SIDI	spark ignition direct injection	*Petro-Chemical Abbreviations*
Siding	An exterior wall covering material made of wood, plastic (including vinyl), or metal. Siding is generally produced in the shape of boards and is applied to the outside of a building in overlapping rows.	*Energy*
Sieve Analysis	Determination of the particle-size distribution of a soil, sediment, or rock by measuring the percentage of particles that will pass through standard sieves of various sizes.	*Petroleum Engineering*
Sieve Classification	That portion of a powder sample which passes through a standard sieve of specified number and is retained by some finer sieve of specified number.	*Paint and Coatings*
SIGMA	Society of Independent Gasoline Marketers of America	*Petro-Chemical Abbreviations*
Sigma metric	A numeric value that characterize method performance in terms of the number of standard deviations or sigmas that fit within the tolerance limit or quality requirement of a test. For analytic processes, calculated as Sigma = [(%TEa – %bias)/%CV], where TEa is the allowable total error or CLIA PT criterion for acceptable performance, %bias represents the observed inaccuracy or systematic error of the method, and %CV represents the observed imprecision or random error of the method.	*Quality*
Sign	The actual presence of the causal organism in association with the disease symptoms.[1]	*Forestry*
Signal	Part of received data that is desired; Compare: noise, offset.	*Aeronautical Engineering*
Signal	Part of received data that is desired; Compare - noise, offset.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Signal Conditioner	A circuit module which offsets, attenuates, amplifies, linearizes and/or filters the signal for input to the A/D converter. The typical output signal conditioner is +2 V dc.	*Electrical*
Signal Conditioning	To process the form or mode of a signal so as to make it intelligible to, or compatible with, a given device, including such manipulation as pulse shaping, pulse clipping, compensating, digitizing, and linearizing.	*Electrical*
Signal Data Converter (SDC)	A device that converts unique signals to a standard protocol, usually MIL-STD-1553B; Synonyms: Remote Terminal Unit.	*Aeronautical Engineering*
Signal Output	A signal delivered by a device, element or system.	*Process Control*
Signal Ratio	1) broadly, the comparison of light seen by a photosensor when the beam is blocked to the light seen when the beam is not blocked; 2) More specifically, the comparison of photocell resistance when sensor is dark to when it is illuminated. Proper control application involves establishing a large dark: to: light ratio.	*Electrical Engineering*
Signal to Noise Ratio	Ratio of signal amplitude to noise amplitude.	*Process Control*
Signal Transducer (Signal Converter)	A transducer, which converts one standardized transmission signal to another.	*Process Control*
Signal, Error	In a closed loop, the signal resulting from subtracting a particular return signal from its corresponding input signal.	*Process Control*
Signal, Feedback	That return signal which results from a measurement of the directly controlled variable.	*Process Control*
Signal, Input	A signal applied to a device, element or system.	*Process Control*
Signal, Measured	The electrical, mechanical, pneumatic, or other variable applied to the input of a device. It is the analog of the measured variable produced by a transducer (when such is used).	*Process Control*
Signal, Reference-Input	One external to a control loop which serves as the standard of comparison for the directly controlled variable.	*Process Control*
Signal, Return	In a closed loop, the signal resulting from a particular input signal, and transmitted by the loop and to be subtracted from the input signal.	*Process Control*
Signal-to-noise ratio (SNR,S/N)	A ratio of magnitude of a desired signal to the magnitude of the noise received with it; Typical Units: dB.	*Aeronautical Engineering*
SIL (Safety integrity level)	The safety integration level (SIL rating) of a system indicates the level of risk associated with it. It is a measure of its ability to perform safely and, in the event of failure, to fail safely. There are four SIL levels, with level 4 indicating the highest performance.	*Electrical*
Silage	Livestock feed produced by acid-producing fermentation of feed stuffs. Corn silage is a common feed for dairy cattle in the United States. When made from grass or alfalfa, it often is called haylage.	*Agriculture*
Silencer	A device used to reduce noise generated by flowing gases.	*Industrial Engineering*
Silencer	A device for reducing gas flow noise. Noise is decreased by tuned resonant control of gas expansion.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Silica	Silicon dioxide, or silica anhydride, SiO2, occurring naturally in crystalline form as quartz.	*Material Process*
Silica	Naturally occurring silica occurs in the deposits which are 99 percent silicon dioxide. The hardness provides both mechanical strength and abrasion resistance. Silicas are an economical extender-filler, which is thermally stable, pure, low in ionic impurities, and hard. They are often used as antiblocking agents in polyolefins.	*Engineering Physics*
Silicate	Ceramic compound with SiO2 as a major constituent.	*Material Process*
Silicate glass	Noncrystalline solid with SiO2 as a major constituent.	*Material Process*
Siliceous	A rock containing an abundance of quartz.	*Mining*
Silicon	A semiconductor material made from silica, purified for photovoltaic applications.	*Energy*
Silicon	Element 14 and an important semiconductor.	*Material Process*
Silicon-killed steel	steel treated with silicon as an oxidizing agent in order to reduce the oxygen content to such a level that no reaction occurs between carbon and oxygen during solidification	*Materials Process*
Silk Screen Printing	A printing process widely used on plastic bottles and other articles, which employs a taut woven fabric secured in a frame as a stencil. The fabric is coated in selected areas with a masking material, which is not affected by the ink being used. The stencil fabric is commonly called a silk screen.	*Engineering Physics*
Sill	An intrusive sheet of igneous rock of roughly uniform thickness that has been forced between the bedding planes of existing rock.	*Mining*
Silt	Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton. Synonymous with culm.	*Energy*
Silt	Contaminant particles 5 ¦m and less in size.	*Lubrication*
Silt	Muddy deposits of fine sediment usually found on the bottoms of lakes.	*Mining*
Silt, culm, refuse bank, or slurry dam mining	A mining operation producing coal from these sources of coal.	*Energy*
Silting	A failure generally associated with a valve which movements are restricted due to small particles that have wedged in between critical clearances (e.g., the spool and bore.)	*Oil Analysis*
Siltstone	a rock intermediate between a shale and a sandstone, also known as 'stone-bind', 'rock-bind', or 'clift-cwar'.	*Mining*
Silver Plating	The electro-deposition of silver for electrical, decorative or anti-fretting properties.	*Paint and Coatings*
Silviculture	The art, science, and practice of establishing, tending, and reproducing forest stands of desired characteristics.	*Forestry*
Simetric system	A modernized and internationally standardized version of the metric system based on the meter, second, kilogram, ampere, degree Kelvin, and candela.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Simmental	The Simmental is among the oldest and most widely distributed of all breeds in the world, but a relative newcomer to the United States. This red and white breed originated in Switzerland's Simme Valley. Apparently the first Simmental arrived in the United States before 1900, perhaps as early as 1887. The breed died out, however, and was re-introduced with semen imported from France in 1967. The breed also is known as "Fleckvieh" in Germany, "PieRouge", "Montbeliard", and "Abondance" in France; and "Peseta Rosa" in Italy. Registry is with the American Simmental Association.	*Agriculture*
Simon-strings	septarian cracks in ironstone concretions.	*Mining*
Simple harmonic motion	Periodic vibration that is a sinusoidal function of time.	*Reliability Engineering*
Simulation	Simulation is operation on the model or its parts.	*Material Process*
Simultaneous decking	see Decking.	*Mining*
Singing coal	a seam of coal, which makes a hissing sound as it gives off gas.	*Mining*
Singing lamp	a type of early safety lamp which when there was gas present in the atmosphere made a sound or note which rose in pitch the greater the amount of gas present.	*Mining*
Single acting cylinder	A cylinder in which hydraulic energy can produce thrust or motion in only one direction. (May be mechanically or gravity returned.)	*Mechanical, Process, and Operations*
Single blind	(Also called single masked.) See also: Blinding	*Quality Engineering*
Single crystal silicon	An extremely pure form of crystalline silicon produced by dipping a single crystal seed into a pool of molten silicon under high vacuum conditions and slowly withdrawing a solidifying single crystal boule (rod) of silicon. The boule is sawed into thin silicon wafers and fabricated into single-crystal photovoltaic cells.	*Energy*
Single crystal silicon (Czochralsky)	Silicon cells with a well-ordered crystalline structure consisting of one crystal (usually obtained by means of the Czochralsky growth technique and involving ingot slicing), composing a module. Ribbon silicon is excluded.	*Energy*
Single Minute Exchange of Dies (SMED)	A lean tool whose procedures aim to reduce changeover time.	*Reliability Engineering*
Single mode fiber	Optical fiber with a narrow core in which light travels largely parallel to the fiber axis.	*Material Process*
Single Phase Line	This carriers electrical loads capable of serving the needs of residential customers, small commercial customers, and streetlights. It carrier a relatively light load as compared to heavy duty three phrase constructs.	*Energy*
Single Precision	The degree of numeric accuracy that requires the use of one computer word. In single precision, seven digits are stored, and up to seven digits are printed. Contrast with Double Precision.	*Electrical*
Single purpose project	A hydroelectric project constructed only to generate electricity.	*Energy*
Single Rod Cylinder	A cylinder with a piston rod extending from one end.	*Mechanical, Process, and Operations*
Single Sourcing	The practice of using one source, among others in a competitive marketplace which, for justifiable reason, is found to be most advantageous for the purpose of fulfilling a given purchasing need.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Single stage process	A process for making product in one step, for example, resin commonly applied to phenolics.	*Material Process*
Single stall	a semi-longwall method of working coal where short faces, 10-15 yards in length are developed on advance, to a predetermined boundary, leaving ribs or thin pillars of coal for support between adjacent faces. On reaching the boundary a drivage is made through the rib, which is extracted on retreat. A haulage road is carried on one side only with an airway on the other side of the face. On retreating, the men from a given face work out the adjacent rib. –see also Double stall.	*Mining*
Single Studded Adaptor	A flange with a bore and a ring groove on each side, with a drilled 'through bolt' circle the same as an Open Face Flange on its larger side and a drilled and tapped bolt end studs circle on its smaller side.	*Petroleum Engineering*
Single unit	term applied to a longwall face having one conveyor along the face that delivers the coal at the gate end at one end of the face, as opposed to a 'double unit' that has two conveyors carrying the coal in opposite directions and delivering it to a loader or conveyor gate end at or near the middle of the unit. This gate usually served as the intake airway.	*Mining*
Single Window	Single window refers to the ability to provide multiple displays via a single terminal.	*Control Engineering*
Single-circuit line	A transmission line with one electric circuit. For three-phase supply, a single circuit requires at least three conductors, one per phase.	*Energy*
Single-Ended Input	A signal-input circuit where SIG LO (or sometimes SIG HI) is tied to METER GND. Ground loops are normally not a problem in AC-powered meters, since METER GND is transformer-isolated from AC GND.	*Electrical*
Single-family housing unit	See housing structure/housing unit, specifically under Residential Sector heading.	*Energy*
Single-flow water-cooling tower	A crossflow tower having a fill section on one side of the plenum chamber only.	*Facility Engineering*
Single-pass test	Filter performance tests in which contaminant which passes through a test filter is not allowed to recirculate back to the test filter.	*Oil Analysis*
Single-Plane (Static) Balancing Machine	A single plane balancing machine is a gravitational or centrifugal balancing machine that provides information for accomplishing single plane balancing.	*General*
Single-Pole Double-Throw (SPDT)	The switch which may either make or break a circuit, depending on how it is wired.	*Electrical Engineering*
Single-Pole Single-Throw (SPST)	A switch with only one moving and one stationary contact. Available either normally open (N.O.) or normally closed (N.C.).	*Electrical Engineering*
Singles	a small size grade of coal, generally around 1 inch in dimensions.	*Mining*
Single-Welded Butt Joint	A butt joint welded from one side only.	*Maintenance and Repair*
Singulation Mode	Mode where packages are automatically separated while traveling down the conveyor.	*Equipment*
Sink	To cut an impression in a die.	*Metallurgy*
Sink Mark	A shallow depression or dimple on the surface of an injection molded article caused by local internal shrinkage after the gate seals or by a short shot.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sinkers	the men employed in sinking shafts.	*Mining*
Sinkhole	A depression in the earth's surface caused by dissolving underground limestone, salt, or gypsum.	*Petroleum Engineering*
Sinking	The process by which a shaft is driven.	*Mining*
Sinking bucket	see Hoppit, Kibble and Bowk.	*Mining*
Sinking drum	cast iron tubbing used in sandy or water bearing ground as a type of shield. The ground is mucked out inside the tubbing, which is allowed then to sink under its own weight. Earlier, square wooden frames were used, afterwards replaced by round masonry drums, then thin sheet iron cylinders.	*Mining*
Sink-mark	Dimple like depression in the surface of a molding where it has retracted from the mold, and which has well rounded edges, and in which there is no absence of surface film.	*Material Process*
Sinks	depressions at the surface due to subsidence.	*Mining*
Sinter	A chemical sedimentary rock deposited by precipitation from mineral waters, especially siliceous sinter and calcareous sinter.	*Energy*
Sinter	Fine particles of iron ore that have been treated by heat to produce blast furnace feed.	*Mining*
Sintered	A metallic or non-metallic filter medium processed to cause diffusion bonds at all contacting points.	*Mechanical, Process, and Operations*
Sintered Medium	A metallic or nonmetallic filter medium processed to cause diffusion bonds at all contacting points.	*Lubrication*
Sintering	Bonding of powder particles by solid-state diffusion.	*Material Process*
Sip system	A combination of families of crystallographic planes and directions corresponding to dislocation motion.	*Material Process*
SIP(s)	State Implementation Plan(s)	*Petro-Chemical Abbreviations*
Sisal	A long vegetable fiber being used considerably with phenolic and urea resins for molding forms which have long drafts.	*Material Process*
Sit	the collapse of pillars, coal, or roof supports after the coal has been undercut, or the collapse of pillars due to the action of crush; or a depression in the ground on the surface due to subsidence. (Scot.). -see also Sinks; or a coalface or buttock, which fails to fall or break up when the spraggs are knocked clear but merely cracks off and hangs until it is pulled over. (Mids.).	*Mining*
Site characterization	An onsite investigation at a known or suspected contaminated waste or release site to determine the extent and type(s) of contamination.	*Energy*
Site energy	The Btu value of energy at the point it enters the home, sometimes referred to as "delivered" energy. The site value of energy is used for all fuels, including electricity.	*Energy*
Site energy consumption	The Btu value of energy at the point it enters the home, building, or establishment, sometimes referred to as "delivered" energy.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Site index	A relative measure of forest site quality based on the height (in feet) of the dominant trees at a specific age (usually 25 or 50 years, depending on rotation length).	*Forestry*
Site preparation	Preparing an area of land for planting, direct seeding, or natural reproduction by burning, chemical vegetation control, or by mechanical operations.	*Forestry*
Site-specific information DSM program assistance	ADSM (demand-side management) assistance program that provides guidance on energy efficiency and load management options tailored to a particular customer's facility; it often involves an on-site inspection of the customer facility to identify cost-effective DSM actions that could be taken. They include audits, engineering design calculations on information provided about the building, and technical assistance to architects and engineers who design new facilities.	*Energy*
Situational awareness	Situational awareness provides the pilots with information relative to the current surroundings, such as other aircraft or threats in the immediate area.	*Aeronautical Engineering*
Six Sigma	A program that originated at Motorola where the objective is customer satisfaction through continuous improvement in quality. Six Sigma means products and processes will experience only 3.4 defects per million opportunities or 99.99966% good.	*Quality*
Six Sigma	A business management strategy and measure of quality that strives for near perfection. It employs a data-driven methodology for identifying and eliminating defects in products and processes. Achievement of Six Sigma generally denotes a failure rate of 3.4 parts per million opportunities, or 99.9997% perfection. The philosophy was originally implemented by Motorola.	*Reliability Engineering*
Six Sigma Quality Program	Introduced by Motorola in 1988, six sigma stands for an extensive quality improvement program, with the goal to improve customer satisfaction through reducing and eliminating defects. The six sigma target is a 3.4 part per million defect rate, which is perceived as world class performance. As comparison, three sigma stand for 66.8 defects per million.	*Quality*
Size	A liquid coating composition, usually transparent, for sealing a porous surface preparatory to application of finishing coats.	*Material Process*
Size of Weld	For a groove weld, the joint penetration, which is the depth of chamfering plus the root penetration.	*Maintenance and Repair*
Size Analysis	Analysis of the size of the particles being deposited by spraying processes.	*Paint and Coatings*
Size Distribution	The distribution of sizes within a size analysis. The distribution may be normal or skewed in some way due to the powder manufacturing process.	*Paint and Coatings*
Skarn	Name for the metamorphic rocks surrounding an igneous intrusive where it comes in contact with a limestone or dolostone formation.	*Mining*
Skatewheel Conveyor	A type of wheel conveyor making use of series of skatewheels mounted on common shafts or axles, or mounted on parallel spaced bars on individual axles.	*Manufacturing*
Skate-wheel Conveyor	A type of wheel conveyor making use of series of skate-wheels mounted on common shafts or axles, or mounted on parallel spaced bars on individual axles.	*Equipment*
Skeleton Braid	A braid of widely separated wires or fibers, used to reinforce a jacket, bind a cable core, or prevent the passage of electrostatic or electromagnetic fields.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Skeletonizer(S)	Insects which consume leaf tissue, often from the lower side of the leaf, leaving the upper epidermis and vascular tissues intact.[1]	*Forestry*
Skelp	A piece of plate prepared by forming and bending, ready for welding into pipe. Flat plates when used for butt-welded pipe are called skelp.	*Maintenance and Repair*
Skep	a coal tram or box (S. Staffs.). -see also Skip.	*Mining*
Skerry	thin bed, or group of thin beds, of compact, fine-grained sandstone interstratified with red marls (Keuper, Triassic).	*Mining*
Skid	A track-mounted vehicle used to hold trips or cars from running out of control. Also it is a flat-bottom personnel or equipment carrier used in low coal.	*Mining*
Skid plates	plates and pans for channeling coal down a steep coalface. The coal travelled under gravity.	*Mining*
Skidmore Bolt Tension Calibrator	The Skidmore-Wilhelm bolt tension calibrator is a hydraulic load cell used to determine the tension in a bolt or other threaded fastener. The tension in the bolt compresses fluid in a hydraulic cylinder, a pressure gauge connected to the cylinder is then calibrated to read in terms of force rather than pressure.	*Maintenance*
Skilled Labor	Labor with a high level of skill or human capital.	*Reliability Engineering*
Skim	Streaks of dense seeds or pits appearing on a plastics surface.	*Material Process*
Skimmings (ash)	galvanizing byproduct comprised mainly of zinc oxides; skimmings are recyclable	*Materials Process*
Skin Packaging	A variation of the thermoforming process in which the article to be packaged serves as the mold. The article is usually placed on a printed card prepared with an adhesive coating or mechanical surface treatment to seal the plastic film to the card.	*Engineering Physics*
Skip	A car being hoisted from a slope or shaft.	*Mining*
Skip	A self-dumping type of bucket used in a shaft for hoisting ore or rock.	*Mining*
Skip-welding	alternating the weld so that it is not continuous or complete	*Materials Process*
Skirting	a working place formed by taking a slice (lift) off a pillar alongside a 'wall'.	*Mining*
Skirting Jenkin	the first slice taken from the side of a pillar of coal, also known as the 'first judd' or 'first lift'.	*Mining*
Skirtings or skutches	small roadways re-driven through roof falls along the sides of pillars to re-establish ventilation.	*Mining*
Skitter	small pieces of dirt or coal falling from the roof, often giving warning of an imminent fall. (Scot.).	*Mining*
Skutch	a scotch for slowing down tubs. (Mids.).	*Mining*
Slab	A semi-finished, hot-rolled section of flat-rolled steel, prepared for rolling down to plate or sheet. It is generally more than 1 ½ inches thick and more than twice as wide as it is thick.	*Metallurgy*
Slab gate	A gate having flat, finely finished, parallel faces – as opposed to a wedge gate. Such a closure element slides across the seats and does not depend on stem force to achieve tight shut off.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Slab posts	barriers, formed from posts and cross pieces, erected on the waste side in steep seam working to the dip to protect the face men from coal falling debris from inside the waste (N. Staffs.).	*Mining*
Slab-bar	a plank of timber used as a temporary support when holing in the top of a seam with a weak roof. (N.Staffs.).	*Mining*
Slabs	see Lagging and Runners (N.Staffs.).	*Mining*
Slack	Small coal; the finest-sized soft coal, usually less than one inch in diameter.	*Mining*
Slack coal	usually refers to bituminous coal one-half inch or smaller in size.	*Energy*
Slack or Sleck	very small pieces of coal, or coal almost in a powder or coal-dust state, having small pieces of coal mixed with it. Size is generally less than 1 inch down to dust.	*Mining*
Sladder	an iron or wooden lined chute, often used in inclined workings (N. Staffs.).	*Mining*
Slag	a) The non-metallic material forming a molten layer on top of the molten steel in a steel furnace. It is made by charging suitable materials and plays an important role in the refining of the steel. b) Loosely applied to any waste material drawn off in molten form.	*Metallurgy*
Slag Inclusion	Nonmetallic solid material entrapped in weld metal or between weld metal.	*Maintenance and Repair*
Slam retarder	A device designed to prevent the clapper of a check valve from slamming as it closes upon flow reversal. Hydraulic damping cylinders, rotary vanes, and torsional springs are all used for this purpose.	*Mechanical*
Slamming	Switching a customer's electric provider without authorization.	*Energy*
Slant	a roadway following the dip or an inclined roadway.	*Mining*
Slant or Slaunt	the main haulage road. (Lancs.).	*Mining*
Slant range	Direct line distance, not along the ground.	*Aeronautical Engineering*
Slap	small coal or slack. (Som.).	*Mining*
Slar	to slide or slip (N. Staffs.).	*Mining*
Slash	Tree tops, branches, bark, or other residue left on the ground after logging or other forestry operations.	*Forestry*
Slat and Slatting	the coal that is removed at the front of the holing to make room for the shoulders of the holer and thus permit him to deepen the holing (N. Staffs.).	*Mining*
Slat Conveyor	A conveyor which uses steel or wooden slats mounted on roller chain to transport the product.	*Manufacturing*
Slate	A miner's term for any shale or slate accompanying coal. Geologically, it is a dense, fine-textured, metamorphic rock, which has excellent parallel cleavage so that it breaks into thin plates or pencil-like shapes.	*Mining*
Slate	A metamorphic rock; the metamorphic equivalent of shale.	*Mining*
Slate bar	The proper long-handled tool used to pry down loose and hazardous material from roof, face, and ribs.	*Mining*
Slate coal	a hard, dull variety of coal similar to cannel but without the shine. –see also Lignite.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Slate flour	A grayish, amorphous powder, sp. gr. 2.6 to 3.3 used as a filler.	*Material Process*
Slats	A control surface on fixed-wing aircraft, usually mounted to the aft edge of the wings, that extends the wing to provide added lift at low speeds; Compare: flaps; Symbols: delta sub S; Typical Units: rad, deg.	*Aeronautical Engineering*
Slaty blaes	firm and fissile shale and mudstone. (Scot.).	*Mining*
Slaty stone	cross-bedded flags or stone bind, breaking up into thin laminae.	*Mining*
Slatyband	a fissile ironstone consisting of alternating clayband and blackband laminae. (Scot.).	*Mining*
Slaughterhouse	a place where animals marketed for meat are killed humanely	*Agriculture*
Slave Drive	A conveyor drive powered from another conveyor instead of having its own prime power source.	*Manufacturing*
Slave Modules	Slave modules are distributed modules that report back to a central Master. Despite the name, they have their own processing ability. Another name for them is "child" modules.	*Control Engineering*
SLC	Soft Logic Control.	*Control Engineering*
Sleck	see Slack (N. Staffs.).	*Mining*
Sledge	flat wooden vehicle for carrying coal, the first used; prior to this coal was carried on peoples' backs.	*Mining*
Sleeper hole	a depression in the roadway, sometimes deep and filled with water, between the sleepers of the rail track.	*Mining*
Sleeve Bearing	A journal bearing, usually a full journal bearing.	*Lubrication*
Slew	a basin or natural swillie in a coal seam (Derbys.); or a bend in the coalface.	*Mining*
Slew rate	The maximum rate at which an instrument's output can change by some stated amount.	*Reliability Engineering*
Slickenside	A smooth, striated, polished surface produced on rock by friction.	*Mining*
Slicks	smooth partings in the strata.	*Mining*
Slicks	A racing tire with no tread. There is a misconception that the tread pattern of a tire provides traction. This is true in dirt, snow or on wet pavement, but on dry pavement the maximum amount of "contact patch" is desirable.	*NASCAR*
Slide	a fault.	*Mining*
Slide-By	The condition whereby the target approaches the sensing face of the proximity sensor in such a direction that its center will cross the axis of the sensing face at right angles.	*Electrical Engineering*
Slider Bed	A stationary surface on which the carrying run of a belt conveyor slides.	*Equipment*
Slides	upright rails of wood or metal fixed in a shaft for the purpose of guiding the cages. –see also Guides.	*Mining*
Sliding deals or Striking deals	deals placed diagonally from the balk placed across the top of a sinking pit to guide the tubs on to the pit top.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Slime	A deposit build-up directly related to the excessive growth of microorganisms that secrete or form thick, sticky material. These slimes cause tube pluggage, reduce heat transfer, entrap migratory suspended solids and can result in underdeposit corrosion.	*Chemical Engineering*
Slimes	The finest of the crushed ore and gangue from mills.	*Mining*
Slines, Slymes or Slynes	smooth partings, slips or joints in the coal, or potholes in the roof. (Mids.).	*Mining*
Sling, Braided	A flexible sling, the body of which is made up of two or more WIRE ROPES braided together. See SLINGS.	*Wire Rope & Cable*
Sling, Wire Rope	An assembly fabricated from WIRE ROPE which connects the load to the lifting device.	*Wire Rope & Cable*
Slip	A fault. A smooth joint or crack where the strata have moved on each other.	*Mining*
Slip Agent	Provides surface lubrication following the processing of plastics. Compounded into the plastic, the additive gradually migrates to the surface where it reduces the coefficient of friction.	*Engineering Physics*
Slip bedding	another term meaning slumped bedding.	*Mining*
Slip casting	Processing method for ceramics in which a powder-water mixture (slip) is poured into a porous mold.	*Material Process*
Slip Dyke	see Fault.	*Mining*
Slip plane	Plane within a transparent plastic, visible in reflected light, because of poor welding and shrinkage on cooling.	*Material Process*
Slipper or Slipper-lock	a lock fitted under the wheels of a tub. (Lancs.).	*Mining*
Slippers	metal shoes fastened on to the cage that run along the cage guides fixed in the shaft.	*Mining*
Slippy	a term applied to partings in coal or roof meaning the same as 'easy'.	*Mining*
Slippy backs	vertical planes of cleavage, occurring every four or five inches in a coal seam. (N. East).	*Mining*
Slips	joints or laminations in the strata; the term is also used to denote very inferior, dirty coal (N. Staffs.).	*Mining*
Slipstream	See Drafting.	*NASCAR*
Slit	a short heading connecting two main headings.	*Mining*
Slitter	a pick. Also called a 'Pike' or 'Mandril'.	*Mining*
Slitting	The conversion of a given width of plastic film, tube, or sheeting to several various widths by means of knives.	*Engineering Physics*
Slobbin	board supports used behind timber or rings (N. Staffs.)—see Slobs	*Mining*
Slobs	planks of wood used to line arch girders. (S. Staffs.).	*Mining*
Sloom or Sloome	wetted fireclay. i.e. soft seatearth.	*Mining*
Slope	Primary inclined opening, connection the surface with the underground workings.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Slope (Electrode Sensitivity, Span)	See Nernst factor.	*General Engineering*
Slope brae	a brae without a haulage system down which the hutches had to be man-handled. (Scot.).	*Mining*
Slope dook	a dook driven at less than right angles to the main level rather than following the full dip of the coal seam. (Scot.).	*Mining*
Slope heading	a heading driven at an angle rather than following the full rise of the coal seam. (Scots.).	*Mining*
Slope mine	A mine that reaches the coal bed by means of an inclined opening.	*Energy*
Slope mine	An underground mine with an opening that slopes upward or downward to the coal seam.	*Mining*
Slope, b	"The relationship between the change in y and the change in x between any two points along a line." [NCCLS] Used here to refer to a statistic that is calculated as part of linear regression analysis. Commonly calculated for the data from a comparison of methods experiment in a method validation study. The ideal value for the slope is 1.000. Deviations from this value are taken as estimates of proportional systematic error. For example, a slope of 0.950 would indicate a proportional error of 5.0%.	*Quality*
Slot	A physical position in a rack in a storage pool that is intended to be occupied by an intact assembly or equivalent (that is, a canister or an assembly skeleton).	*Energy*
Slotters	cannel like shale in the Aldwalton Stone Seam, (Yorks.).	*Mining*
Slotting	see Nicking.	*Mining*
Slotting coal	the lowest division of the Barnsley Seam in which undercutting was often done. (Yorks.).	*Mining*
Slottings	coal produced while under-cutting. (Yorks.).	*Mining*
Sloughing	The slow crumbling and falling away of material from roof, rib, and face.	*Mining*
Sloughing off	The release of contaminant from the upstream side of a filter element to the upstream side of the filter enclosure.	*Mechanical, Process, and Operations*
Sludge	A dense, slushy, liquid-to-semifluid product that accumulates as an end result of an industrial or technological process designed to purify a substance. Industrial sludges are produced from the processing of energy-related raw materials, chemical products, water, mined ores, sewerage, and other natural and man-made products. Sludges can also form from natural processes, such as the run off produced by rain fall, and accumulate on the bottom of bogs, streams, lakes, and tidelands.	*Energy*
Sludge	Particulate contaminant or a mixture of particulate and liquid contaminant separated from a fluid in an unconsolidated state.	*Mechanical, Process, and Operations*
Sludgers	a cylindrical boring tool with a clack near the bottom, used when a borehole is so wet that the borings would, unless retained by a clack or some such device, be washed out of the cylinder in being drawn to the surface. The sludger was also useful in boring through a seam of coal, in bringing up samples of coal when cut by the chisel.	*Mining*
Slug	The blank, cut from wrought material, from which a forging is made, see "BILLET."	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Slug Mode	Allows all packages to be released simultaneously.	*Manufacturing*
Sluice Box	Boxes or troughs through which gold-bearing gravel is washed. It was the most commonly used tool in mining other than the pan and shovel.	*Mining*
Sluice Claims	A claim worked with sluices.	*Mining*
Slum, Slums or Slumbs	a black slippy indurated clay (N. Staffs.); or a soft clayey or shaley seam of coal (N. Staffs.).	*Mining*
Slumpability	(see Feedability)	*Lubrication*
Slurry	A viscous liquid with a high solids content.	*Energy*
Slurry dam	A repository for the silt or culm from a preparation plant.	*Energy*
Slurry service	An application involving a flow medium consisting of small solid particles suspended in a liquid. Coal slurry consisting of about equal parts of coal and water, is transported by pipeline from coal mines to power plants where the coal is de-watered and burned.	*Mechanical*
Slurry wall	non-structural barriers that are constructed underground to impede groundwater flow	*Petroleum Drilling*
Slush molding	A process for molding hollow castings with a accelerated thermoplastic phenolic resins or other casting liquids, in which the liquid is poured into the mold, allowed to set where it touches the mold, and then poured out, leaving a solidified shell.	*Material Process*
Slusher	a scraper-type bucket used for filling the waste with dirt, a scraper loader.	*Mining*
Slyne	another word for 'cleat' or the main cleat. –see Cleat.	*Mining*
Slype	a sled used for drawing coal from the workings to the haulage road. The slype was still in use after the introduction of the hutch for drawing coal in steep inclined coal seams. (Scots.).	*Mining*
Small Business Enterprise (SBE)	An independently owned and operated concern certified, or certifiable, as a small business by the Federal Small Business Administration (SBA). (A general rule of thumb is that a concern with not more than 500 employees may be considered a small business. Size standards by Standard Industrial Classification codes may be found in the Federal Acquisition Regulations, Section 19.102. The University may rely on written representation by the vendors regarding their status.)	*Procurement*
Small grain	barley, oats, rye, triticale and wheat.	*Agriculture*
Small mines	another name for Licensed Mines.	*Mining*
Small pickup truck	A pickup truck weighing under 4,500 lbs GVW.	*Energy*
Small Power Producer	Refers to a producer that generates at least 75% of its energy from renewable sources.	*Energy*
Small power producer (SPP)	Under the Public Utility Regulatory Policies Act (PURPA), a small power production facility (or small power producer) generates electricity using waste, renewable (biomass, conventional hydroelectric, wind and solar, and geothermal) energy as a primary energy source. Fossil fuels can be used, but renewable resource must provide at least 75 percent of the total energy input. (See Code of Federal Regulations, Title 18, Part 292.)	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Smallest Bending Radius	The smallest radius that a strain gage can withstand in one direction, without special treatment, without suffering visible damage.	*General*
Smallman clip	a haulage clip used for clipping tubs to the rope haulage, 'Smallman' was the trade name of the manufacturer.	*Mining*
Smalls or Washed smalls	small coal, gravel size or smaller, (12.5mm to zero).	*Mining*
Smart	Refers to the intelligence of a digital positioner that is capable of assessing the health of the control valve it is controlling and providing diagnostic information to the end-user.	*Mechanical*
Smart Device	A device with intelligence, i.e. capable of monitoring itself.	*Control Engineering*
Smart fire	a severe but small explosion. (N. East).	*Mining*
Smart grid	Smart grids are modern power transmission and distribution systems, capable of accepting power of any quality from any source and delivering it to consumers of all kinds via a bidirectional supply system. They are an evolutionary development of traditional grids, which are based mainly on centralized generating plants, supplying power via long-established, unidirectional transmission and distribution systems whenever consumers request it. Smart grids are being developed in response to rising demand for power and the increasing need to incorporate renewable or distributed, less predictable generation into the grid. ABB's smart grid concept is of an observable and controllable system, based on industry-wide standards, providing a stable, secure, efficient and environmentally sustainable network. The system will cross national and international borders. It must be able to detect and react automatically to disturbances and changes in supply and demand, re-establishing balance and maintaining the stability demanded by both end-users and government legislation. This is achieved by an automation and information technologies infrastructure integrating the whole supply chain from production to consumption, based on an infrastructure of enabling smart grid components. Thus smart grids also accommodate customer response management systems that allow utilities to optimize the performance of the grid and to integrate consumption into balancing load and generation. Many of the technologies and standards needed to establish smart grids on a large scale have been the subject of research and development at ABB for some years and many are already in use.	*Electrical*
Smart material	An engineered material with the ability to perform both sensing and responding function.	*Material Process*
Smart-money	sums paid to those unable to work as a result of a colliery accident. (N. East).	*Mining*
SMD	See Standardized mean difference	*Quality Engineering*
Smears	Blotches of surface haze in a plastics surface.	*Material Process*
Smelter	Facility is used to extract metal concentrates found inside mined ore. The ore will often contain more than one kind of metal concentrate and this facility also separates them.	*Metallurgy*
Smelting	Reducing the ores in furnaces to metals.	*Mining*
Smiddy coal	small coals that gave off little smoke and were of a low sulfur content, used by the smith in the forge.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Smift	a primitive fuse made from a sliver of paper or wood, the wick of a candle or cotton which had been dipped in melted sulfur. The smift would be attached to the end of a train of gunpowder by using a piece of clay or candle grease. This gave the collier time to retire before the main charge exploded.	*Mining*
Smithems or Smythems	fine slack, or clay or shale forming a parting in a coal seam, also called 'smudge'. (Mids.).	*Mining*
Smits	worthless earthy coal. (Yorks.).	*Mining*
Smokey pit	an upcast shaft where furnace ventilation was in use. (Mids.).	*Mining*
Smooth heads	the polished surface of a fault. (Yorks.).	*Mining*
Smoothed	Data that is the result of conditioning a signal with a simple filter; Compare: derived, estimated, filtered, measured, raw, selected; smoothing is usually less sophisticated than filtering.	*Aeronautical Engineering*
Smooth-Faced Drum	Drum with a plain, ungrooved surface. See DRUM.	*Wire Rope & Cable*
Smoothing filter	A filter to reduce quick changes of a signal by attenuating high frequencies; See Also: first-order filter, second-order filter, wash-out filter.	*Aeronautical Engineering*
Smooths	more or less vertical planes of cleavage in the coal (S. Wales).	*Mining*
SMR	Svenska Mekanisters Riksforenig	*Petro-Chemical Abbreviations*
Smush	inferior coal met with at faults : also those thin layers, so common in coal seams, of black, soft, silky or fibrous material resembling charcoal and often called 'mother of coal' or 'mineral charcoal' (N. Staffs.).	*Mining*
Smut	dark earth, the result of coal weathering, often the only trace of a coal seam at outcrop. Also found where coal has been stacked and exposed to the weather; or soft powdery or friable coal or highly carbonaceous shale. (Lancs.).	*Mining*
Smuth	a very inferior coal.	*Mining*
S-N Diagram	This is a plot of stress (S) against the number of cycles (N) required to cause a failure of similar specimen in a fatigue test. Data for each curve on an S-N diagram are obtained by determining fatigue life of a number of specimen subjected to various amounts of fluctuating stress. The stress axis can represent stress amplitude, maximum or minimum stress.	*Quality*
Snab	the brow of a steep road. A short and steep section on an incline. (Scots.).	*Mining*
Snake	to move an armored flexible conveyor (AFC) forward, section by section, without dismantling, by the use of power operated rams.	*Mining*
Snap Action	In strict terms, snap action is a property of a switch such that the moving contact accelerates without added travel of the plunger beyond that travel which was required to separate the contacts. National Electrical Manufacturers Association defines snap action as "a rapid motion of the contacts from one position to another position, or their return. This action is relatively independent of the rate of travel of the actuator." The word "relatively" is important. In actual fact, the acceleration of the moving contact is partially dependent upon the velocity of the plunger. The important point is that, once the plunger reaches the operating or release point, the movable contact immediately transfers to its opposite position without further travel of the plunger. A non: snap acting switch lacks this feature.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Snap clip	a clamp used to connect tubs to an endless haulage rope.	*Mining*
Snap or Snapping	a meal taken underground by the miner. -see Bait; or a small pointed pick used on the screens for chipping brasses, stone or band from large coal. (N. East).	*Mining*
Snap tin	the container for a person's snap.	*Mining*
Snap-In Tube Loading	A feature of Acro pinch valves that allows tubing to be installed in the valve without requiring a free end; the middle of the tubing "snaps in" the body.	*Mechanical*
Snaps	a type of haulage clip. (Mids.).	*Mining*
Snap-time or Snapping time	the name given to the break for food underground.	*Mining*
Snatch	a small chimney about 6 to 8ft high used to ventilate a small mine by means of a single shaft (S. Staffs.).	*Mining*
Sneak circuit analysis	An analytical procedure for identifying latent paths that cause occurrence of unwanted functions or inhibit desired functions, assuming all components are operating properly.	*Reliability Engineering*
Sneck	a junction between two lengths of rails underground (Lancs.); or points at the crossings of a hutch road. (Scot.); or another name for the keps. (Scot.); or an air-way along the side of the gob between the solid coal and a pack wall. (Yorks.).	*Mining*
SNG	See Synthetic Natural Gas	*Energy*
Snibble	a bar of wood or iron pushed through the spokes of a hutch or wagon to act as a break. (Scot.).	*Mining*
Snicket	see Snigget.	*Mining*
Snig	to man-handle materials along a roadway (N. Staffs.).	*Mining*
Snigget or snicket	a short connecting roadway.	*Mining*
SNPRM	supplemental notice of proposed rule making (EPA)	*Petro-Chemical Abbreviations*
SNR	Signal-to-Noise Ratio. The ratio of the amplitude of the desired signal to the amplitude of noise signals at a given point in time. The larger the number the better.	*Reliability Engineering*
Snub Idler	Any rollers used to increase the arc of contact between a belt and drive pulley.	*Manufacturing*
Snubbing	Used to describe the process of installing pipe into a pressurized well bore, using specialized equipment such as 'Blowout Preventers'.	*Petroleum Engineering*
Snug Torque	The torque required to pull plates together so that direct contact occurs; often used in angle control tightening. The snug torque ensures that metal to metal contact occurs at all the interfaces within the joint. It is only at this point that the required angle of rotation start in order that the bolt is tightened sufficiently. The snug torque is usually determined experimentally on the actual joint.	*Maintenance*
Snugging	The process of pulling parts of a joint together, most of the input turn during this process is absorbed in the joint with little tension being given to the bolt.	*Maintenance*
Snut	one hour overtime (S. Staffs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
SNV	Schweizeische Normenvereiniung	*Petro-Chemical Abbreviations*
SO2	See Sulfur Dioxide.	*Energy*
Soames or Soams	the straps or harness used by drawers, often women and children, when drawing tubs, generally a pair of cords about 3 feet in length used by foals and half marrows for pulling the trams. (N. East).	*Mining*
Soap	(See Thickener, Complex Soap, Saponification)	*Lubrication*
Soap	A natural cleaning agent produced by the reaction of a fat or oil and an alkali.	*Chemistry*
Soapstone	fine unlaminated shale (claystone), smooth to the touch. (Lancs.).	*Mining*
Soapy blaes	smooth fine grained bind.	*Mining*
Socket	Generic name for a type of wire rope fitting.	*Wire Rope & Cable*
Socket end	An end connection in which a pipe or tube is inserted into a counterbored hole and then brazed or fillet welded.	*Mechanical*
Socket Head Cap Screw	A screw with a round head, usually with a hexagon indentation in the head for tightening purposes. Used on machine parts and is typically made from high strength steel (grade 12.9 in metric).	*Maintenance*
Socket Weld	Fillet-type seal weld used to join pipe to valves and fittings or to other sections of pipe. Generally used for piping whose nominal diameter is NPS 2 (DN 50) or smaller.	*Maintenance and Repair*
Socket Weld	A connection made by entering a pipe into a matching socket in the end of a valve fitting, and welding the two together.	*Industrial Engineering*
Socket weld end (SWE)	The end connection of a valve suitably prepared for socket welding to a connecting pipe.	*Mechanical*
Socketweld end (SW)	The end connection of a valve suitably prepared for Socket welding to a connecting pipe.	*General Mechanical*
Soda Ash	Sodium carbonate in a powdery white form used to increase the pH level of hard water, thus making it easier to mix bentonite and polymers into the drill fluid.	*Petroleum Engineering*
Soda-lime-silica-glass	Noncrystalline solid composed of sodium, calcium, and silicon oxides. The majority of windows and glass containers are in this category.	*Material Process*
Sodium acetate (NaC2H3O2)	White powder A salt used as a condensation catalyst for phenolics and ureas.	*Material Process*
Sodium carbonate (Na2CO3)	White hygroscopic powder. A salt used as a catalyst for phenolic resins and others.	*Material Process*
Sodium chloride	Simple compound crystal structure.	*Material Process*
Sodium cyanide	A chemical used in the milling of gold ores to dissolve gold and silver.	*Mining*
Sodium formate (NaCHO2)	Monoclinic colorless deliquescent crystals. A salt used as a catalyst.	*Material Process*
Sodium hydroxide (NaOH)	White deliquescent solid. A basic catalyst and useful regent.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	Industry
Sodium Hypochlorite	Bleaching and disinfecting agent.	*Chemistry*
Sodium lights	A type of high intensity discharge light that has the most lumens per watt of any light source.	*Energy*
Sodium peroxide (Na2O2)	Yellow powder, an oxidizing catalyst.	*Material Process*
Sodium silicate	A grey-white powder soluble in alkali and water, insoluble in alcohol and acid. Used to fireproof textiles, in petroleum refining and corrugated paperboard manufacture, and as an egg preservative. Also referred to as liquid gas, silicate of soda, sodium metasilicate, soluble glass, and water glass.	*Energy*
Sodium tripolyphosphate	A white powder used for water softening and as a food additive and texturizer.	*Energy*
Sods	the clay beneath a coal seam. (Leics.).	*Mining*
SOF	soluble organic fraction	*Petro-Chemical Abbreviations*
Soffitt	The underside of the lintel beam in a natural draft tower forming the bottom part of the hyperbolic shell. Generally it is thick at the base and is the first portion of the shell above the diagonals or columns, which carry the shell.	*Facility Engineering*
Soft air	When the ventilation current was almost at a standstill it was said to be 'soft air'. (Scot.).	*Mining*
Soft Carbonate	Silver-bearing mineral so soft that it can be readily taken out with a pick and shovel. It is usually sand impregnated with mineral, the mineral having been carbonated or oxidized.	*Mining*
Soft coal	coal full of slips and joints which was friable and easily worked.	*Mining*
Soft Failure	A system under test ceases to operate correctly, but resumes correct operation when the stressing environment is eased. This is also known as intermittent failure.	*Reliability Engineering*
Soft Foot	A condition in which one of the machine feet does not sit flat on the base. The foot or the base may have been damaged, worn or warped. When you tighten the bolt on the foot, the machinery will distort.	*Maintenance*
Soft Joint	A joint in which the plates and material between the nut and bolt bearing surfaces have a low stiffness when subjected to compression by the bolt load. In such a joint, the bolt (or nut) typically has to be tightened by two or more complete turns, after it has been torqued to the snug condition, before the full tightening torque is achieved. Often the placement of a gasket in a joint results in a soft joint.	*Maintenance*
Soft Logic	A PC operating system used for soft control. It allows a PC to replace a PLC.	*Control Engineering*
Soft magnet	Magnet with relatively mobile domain walls.	*Material Process*
Soft Seated	A term used to describe a valve trim with an elastomeric or plastic material used either in the value plug or seat ring to provide tight shutoff with a minimal amount of actuator force. A soft-seated valve will usually provide CLASS VI seat leakage capability.	*Industrial Engineering*
Soft sphere	Atomic or ionic model that acknowledges that the outer orbital electron density does not terminate at a fixed radius.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Soft Torque	An alternative name, used by some manufacturers, for snug torque.	*Maintenance*
Soft Wire	Wire that has been drawn or rolled to final size and then heated to remove the effects of cold working.	*Electrical*
Softener	A material added to a plastics mix to produce a soft, pliable end-product. A softener may or may not be a plasticizer.	*Material Process*
Softening point	Temperature at which a glass has a viscosity of 107.6 P, corresponding to the lower end of the working range. The temperature at which a plastic becomes readily distorted, for a given material the value reported will depend upon the method of test.	*Material Process*
Softs	coal which is easily worked. (Mids.).	*Mining*
Software	Generally, programs loaded into a computer from external mass storage but also extended to include operating systems and documentation.	*Electrical*
Software	Computer's program, routine, subroutine, package, module, simulator, expert system or other programming products.	*Material Process*
Software Shell	Simulates keyboard entry of bar code signals.	*Gears*
Softwood	Relatively low-strength wood from evergreen trees.	*Material Process*
Softwood (conifer)	Trees that are usually evergreen, bear cones, and have needles or scale-like leaves such as pine, spruce, fir, and cedar.	*Forestry*
Soil Conservation	careful preservation or protection of soil	*Agriculture*
soil moisture	the water contained in the pore spaces in the unsaturated zone.	*Chemical*
Soil texture	The feel or composition of the soil (sand, silt, or clay) as determined by the size of the soil particles.	*Forestry*
Soil type	Soils that are alike in all characteristics, including texture of the topsoil.	*Forestry*
Soil Vacuum	Also referred to as Soil Vapor Extraction, or Soil Venting. Extraction wells used to deliver a vacuum in the subsurface, pulling toxic vapors to the surface, then treated by an incineration, catalytic, or an absorptive process.	*Petroleum Engineering*
Soil Vapor Extraction	See *Soil Vacuum*.	*Petroleum Engineering*
Soil Venting	See *Soil Vacuum*.	*Petroleum Engineering*
Sol	A general term for liquid colloidal dispersions, as distinguished from true solutions.	*Material Process*
Solar cell	See Photovoltaic cell	*Energy*
Solar collectors	Solar collectors convert the short-wave radiation from the sun into long-wave thermal radiation. A special heat transfer liquid in the collector absorber is heated by the captured sunlight and transported to the solar storage tank, where the transfer liquid releases its heat and is returned to the collector.	*Thermal Management*
Solar constant	The average amount of solar radiation that reaches the earth's upper atmosphere on a surface perpendicular to the sun's rays; equal to 1353 Watts per square meter or 492 Btu per square foot.	*Energy*

Term	Definition	*Industry*
Solar cooling	The use of solar thermal energy or solar electricity to power a cooling appliance. There are five basic types of solar cooling technologies absorption cooling, which can use solar thermal energy to vaporize the refrigerant; desiccant cooling, which can use solar thermal energy to regenerate (dry) the desiccant; vapor compression cooling, which can use solar thermal energy to operate a Rankine-cycle heat engine; and evaporative coolers ("swamp" coolers), and heat-pumps and air conditioners that can be powered by solar photovoltaic systems.	*Energy*
Solar declination	The apparent angle of the sun north or south of the earth's equatorial plane. The earth's rotation on its axis causes a daily change in the declination.	*Energy*
Solar dish	See Parabolic dish	*Energy*
Solar energy	The radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.	*Energy*
Solar inverters or Photovoltaic (PV) inverters	convert the variable DC output of the modules into a utility frequency AC current that can be fed into the commercial electrical grid (see Inverter). Solar inverters are categorized into off-grid and grid feeding inverters. Grid feeding inverters are categorized into central inverters, multi-string inverters and string inverters.	*Electrical*
Solar pond	A body of water that contains brackish (highly saline) water that forms layers of differing salinity (stratifies) that absorb and trap solar energy. Solar ponds can be used to provide heat for industrial or agricultural processes, building heating and cooling, and to generate electricity.	*Energy*
Solar power (photovoltaic)	Photovoltaic solar power is generated when the sun's radiation is "harvested" by specially designed panels, which absorb the radiation and emit electrons. Unlike thermal solar plants, photovoltaic power plants generate direct current. This means that before it can be fed into the local grid, photovoltaic power must be converted into alternating current using an inverter. (See also Inverter).	*Electrical*
Solar power (thermal or concentrating solar power)	Solar power is electricity generated using sunlight as its primary energy source. In the case of thermal solar power, the sun's heat is used to heat water, either directly or via a heat-conducting fluid, and generate steam. The steam is then used to generate electricity in the same way as it is used in conventional thermal power stations. Thermal solar power is suitable for large-scale generating plants (e.g., Desertec) and can be used in combination with conventional generation (e.g., gas-fired).	*Electrical*
Solar power tower	A solar energy conversion system that uses a large field of independently adjustable mirrors (heliostats) to focus solar rays on a near single point atop a fixed tower (receiver). The concentrated energy may be used to directly heat the working fluid of a Rankine cycle engine or to heat an intermediary thermal storage medium (such as a molten salt).	*Energy*
Solar radiation	A general term for the visible and near visible (ultraviolet and near-infrared) electromagnetic radiation that is emitted by the sun. It has a spectral, or wavelength, distribution that corresponds to different energy levels; short wavelength radiation has a higher energy than long-wavelength radiation.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Solar spectrum	The total distribution of electromagnetic radiation emanating from the sun. The different regions of the solar spectrum are described by their wavelength range. The visible region extends from about 390 to 780 nanometers (a nanometer is one billionth of one meter). About 99 percent of solar radiation is contained in a wavelength region from 300 nm (ultraviolet) to 3,000 nm(near-infrared). The combined radiation in the wavelength region from280 nm to 4,000 nm is called the broadband, or total, solar radiation.	*Energy*
Solar storage tanks	Bivalent hot water storage tanks, combination storage tanks and buffer storage tanks are used, depending on the purpose to which the generated heat is to be put. Bivalent hot water storage tanks are normally used for solar heating of the domestic water, while buffer storage tanks are used as solar support for the heating system. The combination storage tanks are used for combined heating of the domestic water and support of the heating system.	*Thermal Management*
Solar string inverters	are devices for converting DC to AC power that are designed for high voltage DC inputs. Using a string inverter, the solar panel array with panels typically rated at 12V, 24V or 48V are wired in series, rather than in parallel, i.e., the panels are arrayed in a "string" to produce the same amount of total power, but at higher voltages (typically 200-800V). This means a lower current flows allowing a lighter weight inverter construction [Volts (V) x Amps (A) = Watts (W) or power].	*Electrical*
Solar thermal collector	A device designed to receive solar radiation and convert it to thermal energy. Normally, a solar thermal collector includes a frame, glazing, and an absorber, together with appropriate insulation. The heat collected by the solar collector may be used immediately or stored for later use. Solar collectors are used for space heating; domestic hot water heating; and heating swimming pools, hot tubs, or spas.	*Energy*
Solar thermal collector, high temperature	A collector that generally operates at temperatures above 180 degrees Fahrenheit.	*Energy*
Solar thermal collector, low-temperature	A collector that generally operates at temperatures below 110 degrees Fahrenheit. Typically, it has no glazing or insulation and is made of plastic or rubber, although some are made of metal.	*Energy*
Solar thermal collector, medium-temperature	A collector that generally operates at temperatures of 140 degrees F to 180 degrees Fahrenheit, but can also operate at temperatures as low as 110 degrees Fahrenheit. Typically, it has one or two glazings, a metal frame, a metal absorption panel with integral flow channels or attached tubing (liquid collector) or with integral ducting (air collector) and insulation on the sides and back of the panel.	*Energy*
Solar thermal collector, special	An evacuated tube collector or a concentrating (focusing) collector. Special collectors operate in the temperature range from just above ambient temperature (low concentration for pool heating) to several hundred degrees Fahrenheit (high concentration for air conditioning and specialized industrial processes).	*Energy*
Solar Thermal Electric	A process that generates electricity by converting incoming solar radiation to thermal energy.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Solar thermal panels	A system that actively concentrates thermal energy from the sun by means of solar collector panels. The panels typically consist of fat, sun-oriented boxes with transparent covers, containing water tubes of air baffles under a blackened heat absorbent panel. The energy is usually used for space heating, for water heating, and for heating swimming pools.	*Energy*
Solar thermal parabolic dishes	A solar thermal technology that uses a modular mirror system that approximates a parabola and incorporates two-axis tracking to focus the sunlight onto receivers located at the focal point of each dish. The mirror system typically is made from a number of mirror facets, either glass or polymer mirror, or can consist of a single stretched membrane using a polymer mirror. The concentrated sunlight may be used directly by a Stirling, Rankine, or Brayton cycle heat engine at the focal point of the receiver or to heat a working fluid that is piped to a central engine. The primary applications include remote electrification, water pumping, and grid-connected generation.	*Energy*
Solar thermal systems	Solar thermal systems convert solar energy into useful thermal energy for heating the domestic water and to support the heating system. see Solar collectors see Solar accumulators	*Thermal Management*
Solar trough or solar parabolic trough	See Parabolic trough	*Energy*
Soldering	A metal-joining process in which coalescence is produced by heating to a suitable temperature and by using a nonferrous alloy fusible at temperatures below that of the base metals being joined. The filler metal is distributed between closely fitted surfaces of the joint by capillary action.	*Maintenance and Repair*
Soldering coal	caking coal; coal which on being heated has the property of fusing together (N. Staffs.).	*Mining*
Sole	see Seatearth. (Derbys.).	*Mining*
Sole Sourcing	The only supplier capable of meeting University requirements within the time available, including emergency and other situations which preclude conventional planning and processing.	*Procurement*
Solecism	A violation of etiquette in manner of grammar	*Breakroom*
Solenoid	An electro-magnetic device which positions a hydraulic valve.	*Mechanical, Process, and Operations*
Solenoid Controller (Pulse and Hold)	A programmable device designed to be part of the control circuit in a fluid control system. This device is capable of enhancing solenoid performance; including long on times, high cycle rates, power and heat reduction.	*General Mechanical*
Solenoid Controller (Pulse and Hold)	A programmable device designed to be part of the control circuit in a fluid control system. This device is capable of enhancing solenoid performance; including long on times, high cycle rates, power and heat reduction.	*Mechanical*
Solenoid Pinch Valves	A type of pinch valve that employs electrical energy and a solenoid to actuate the plunger.	*Mechanical*
Solenoid valve	A small electrically operated valve used in the control piping of powered by hydraulic or pneumatic cylinder operators.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Soles	pieces of timber placed under props to prevent them from sinking into the soft floor when they come under pressure. Also called 'sole pieces'.	*Mining*
Sol-gel processing	Method for forming ceramics and glasses of high density at a relatively low temperature by means of an organometallic solution.	*Material Process*
Solicitation	The document requesting potential suppliers to make offers or submittals to the buyer. Solicitations are also referred to as bid requests or submittal requests. Solicitations at UC Berkeley are generally formatted as a request for information (RFI), request for proposal (RFP) or a request for quotation (RFQ).	*Procurement*
Solid	Mineral that has not been undermined, sheared out, or otherwise prepared for blasting.	*Mining*
Solid Phase Forming	Technique in which a sheet or block of plastic is reshaped under heat and pressure. Forming temperature is below the melt temperature of the plastic.	*Engineering Physics*
Solid solution	Atomic scale intermixing of more than one atomic species in the solid state.	*Material Process*
Solid tubbing or Curbs	circular solid wood tubbing made up of segments of wood 6-8 inched square of oak or elm with joints lined with endways-slit deal.	*Mining*
Solid working	see First working.	*Mining*
Solid-state sensor	One which has no moving parts.	*Reliability Engineering*
Solidus	In a phase diagram, the line below which only a solid phase (s) is (are) present.	*Material Process*
Sollade	a term used by the Somerset miner to mean 'gently'.	*Mining*
Solubility	the amount of mass of a compound that will dissolve in a unit volume of solution.	*Chemical*
Soluble	susceptible of being dissolved in a fluid; capable of solution; as, some substances are soluble in alcohol which are not soluble in water	*Materials Process*
Solute	Species dissolving in a solvent to form a solution.	*Material Process*
Solute Transport	Net flux (amount flowing through a unit area per unit time) of solute through a hydrogeologic unit, controlled	*Petroleum Engineering*
Solute Transport Model	Mathematical model used to predict the movement of solutes in an aquifer through time.	*Petroleum Engineering*
Solution	Uniformly dispersed mixture of the solvent and the solute. The solvent can be water or any other fluid and solute is the dissolved substance.	*Chemical*
Solution gas	For the purposes of BC Oil and Gas Commission guidelines, solution gas is all gas that is separated from oil production.	*Petroleum Engineering*
Solution hardening	Mechanical strengthening of a material associated with the restriction of plastic deformation due to solid solution formation.	*Material Process*
Solution Heat Treatment	Heating an alloy to a suitable temperature, holding at that temperature long enough to allow one or more constituents to enter into solid solution, and then cooling rapidly enough to hold the constituents in solution.	*Maintenance and Repair*
Solution treatment	Heating of a two phase microstructure to a single phase region.	*Material Process*
Solutions	Liquid mixtures that are uniform throughout.	*Chemical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Solvation	Ions in solution are normally combined with at least one molecule of solvent. This phenomenon is termed solvation.	*Electronic Process*
Solvency	Ability of a fluid to dissolve inorganic materials and polymers, which is a function of aromaticity.	*Oil Analysis*
Solvent	A solvent is a liquid that has the ability to dissolve, suspend or extract other materials, without chemical change to the material or solvent. Solvents make it possible to process, apply, clean or separate materials. Water is an inorganic solvent. Organic solvents include hydrocarbon solvents, oxygenated solvents and chlorinated solvents.	*Chemical*
Solvent	A material with a strong capability to dissolve a given substance. The most common petroleum solvents are mineral spirits, xylene, toluene, hexane, heptane, and naphthas. Aromatic-type solvents have the highest solvency for organic chemical materials, followed by naphthenes and paraffins. In most applications, the solvent disappears, usually by evaporation, after it has served its purpose. The evaporation rate of a solvent is very important in manufacture.	*Lubrication*
Solvent Cement Joint	A joint made in thermoplastic piping by the use of a solvent or solvent cement which forms a continuous bond between the mating surfaces.	*Maintenance and Repair*
Solvent extraction	The separation of materials of different chemical types and solubilities by selective solvent action.	*Petroleum Engineering*
Solvent Extraction	A refining process used to separate components (unsaturated hydrocarbons) from lube distillates in order to improve the oil's oxidation stability, viscosity index, and response to additives. The oil and the solvent extraction media are mixed in an extraction tower, resulting in the formation of two phases: a heavy phase consisting of the undesirable unsaturates dissolved in the solvent. And a lighter phase consisting of a high quality oil with some solvent dissolved in it. The phases are separated and the solvent recovered from each by distillation.	*Lubrication*
Solvent extraction-electrowinning (SX-EW)	A metallurgical technique, so far applied only to copper ores, in which metal is dissolved from the rock by organic solvents and recovered from solution by electrolysis.	*Mining*
Solvent Refined Coal (SRC)	A tar-like fuel produced from coal when it is crushed and mixed with a hydrocarbon solvent at high temperature and pressure.	*Energy*
Solvent Refining	A process for extracting lubricant base stocks from stripped heavy gas oil or other heavy, stripped crude stream using selective solvents such as furfural or phenol.	*Lubrication*
SOM	State Operations Manual	*Quality*
Sonde	Electronic device that fits inside the drill head and transmits a signal. Also referred to as a *Transmitter* or *Probe*.	*Petroleum Engineering*
Sone	A unit of loudness.	*Reliability Engineering*
Sonic Velocity	The local speed of sound in the fluid.	*Industrial Engineering*
Soof	see Sough.	*Mining*
Soot	see Smut. (Lancs.).	*Mining*
Sooty coal	dull, danty, soft coal often found near a fault.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
SOP	Standard operation procedure.	*Material Process*
Sorbent canisters	gas-tight canisters typically filled with activated carbon (charcoal) for collection and transport of vapor samples. In the laboratory the vapors are desorbed and analyzed to identify the organic compounds and quantify their concentration.	*Chemical*
Sorbent tubes	glass tubes filled with a sorbent material that reacts chemically with specific organic compounds. Based on the nature of the sorbent and the extent of the chemical reaction, organic compounds can be identified and their concentration quantified.	*Chemical*
Sorbitol (C5H14O6 ½ H2O)	Colorless needles, a polyhydric alcohol used in alkyd resins and phenol-aldehyde resins.	*Material Process*
Sorption	The process to remove solutes from the fluid phase and concentrate them on the solid phase of a medium; used to encompass absorption and adsorption.	*Petroleum Engineering*
Sorption	a general term used to encompass the processes of absorption, adsorption, ion exchange, and chemisorption.	*Chemical*
Sortation Conveyor	Conveyor which is able to sort different packages or products to specific take-away lines.	*Equipment*
Sos	to sink into the floor under great pressure from weight (S. Staffs.).	*Mining*
Sough or Soof	pronounced 'suff'; a water level for draining a mine. (Lancs.); or a wooden trough or channel used for draining water. -see also Adit.	*Mining*
Sound	(1.) An oscillation in pressure, capable of evoking the sensation of hearing. (2.) The sensation of hearing	*Reliability Engineering*
Sound intensity	In a specified direction, the average rate of sound energy flow through a unit area perpendicular to that direction.	*Reliability Engineering*
Sound level	The quantity in dB measured by a standardized Sound Level Meter. The reading is 20 $\log_{10}$ of the ratio between a given sound pressure and 20 micropascals.	*Reliability Engineering*
Sounding	Knocking on a roof to see whether it is sound and safe to work under.	*Mining*
Sour	Natural gas or Crude oil contaminated with sulfur, especially hydrogen sulfide (H2S).	*Petroleum Engineering*
Sour gas	Natural gas containing significant amounts of hydrogen sulfide (H2S). Requires special material treatments to avoid valve failures from sulfide corrosion cracking.	*General Mechanical*
Source	Region in a field-effect transistor that provides charge carriers.	*Material Process*
Source Code	A non-executable program written in a high-level language. A compiler or assembler must translate the source code into object code (machine language) that the computer can understand and process.	*Electrical*
Source Energy	All the energy used in delivering energy to a site, including power generation and transmission and distribution losses, to perform a specific function, such as space conditioning, lighting, or water heating. Approximately three watts (or 10.239 Btus) of energy is consumed to deliver one watt of usable electricity.	*Energy*
Source follower	A device for converting a high impedance electrical signal to low impedance. Also referred to as an "impedance converter." Generally has a voltage gain of unity.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Source Impedance	The combination of resistance and reactance that a source presents to the input terminals of a measuring instrument.	*Reliability Engineering*
Source material	The term "source material" means (1) uranium, thorium, or any other material that is determined by the Atomic Energy Commission pursuant to the provisions of section 61 of the Atomic Energy Act of 1954, as amended, to be source material; or (2) ores containing one or more of the foregoing materials, in such concentration as the Commission may by regulation determine from time to time.	*Energy*
Source Nipple	A short length of heavy-walled pipe between high-pressure mains and the first valve of bypass, drain, or instrument connections.	*Maintenance and Repair*
Source Rock	Sedimentary rock, such as shale, which has a high TOC (Total Organic Content) is believed to be the "mother rock" or source of hydrocarbons found in most of the world's major oilfields. The Eagle Ford Shale is believed to be the "source rock" for much of the oil found in South and Eastern Texas.	*Petroleum Drilling*
Source water	Operators may withdraw water from surface or ground water sources themselves or may purchase it from suppliers.	*Petroleum Drilling*
Sourdough	A highly experienced miner who has prospected for many years.	*Mining*
South	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.	*Energy*
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia;	*Energy*
South Devon	were brought to the United States in 1969. South Devons are available both horned and polled.	*Agriculture*
South Devon	A distinct breed of beef cattle in England dating to the 16th century. The first	*Agriculture*
South Region	South Atlantic division, East South Central division and West South Central division	*Energy*
Southdown	A breed of sheep developed in Sussex, England during the late 1700 and early 1800s'. First imported to the United States (Pennsylvania) in 1824.	*Agriculture*
Southern	Mobile, AL, Savannah, GA, Miami, FL, Tampa, FL, New Orleans, LA, Wilmington, NC, San Juan, PR, Charleston, SC, Dallas-Fort Worth, TX, El Paso, TX, Houston-Galveston, TX, Laredo, TX, Virgin Islands.	*Energy*
Southern Appalachian Region	Consists of Alabama, and the Tennessee counties of: Bledsoe, Coffee, Franklin, Grundy, Hamilton, Marion, Rhea, Sequatchie, Van Buren, Warren, and White.	*Energy*
Sow	Adult female swine.	*Agriculture*
Sow back	a ridge in the roof or the floor of a mine. (Scot.).	*Mining*
Soybeans	Seeds of bean plants, originally Asiatic, is used as a source of a semidrying oil and a meal of high protein content.	*Material Process*
sp gr	Specific gravity	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Space heating	The use of energy to generate heat for warmth in housing units using space-heating equipment. The equipment could be the main space-heating equipment or secondary space-heating equipment. It does not include the use of energy to operate appliances (such as lights, televisions, and refrigerators) that give off heat as a byproduct.	*Energy*
Spacer Spool	Pressure control equipment having end connections and an extended body, used to raise or space apart blowout preventers or even wellheads and choke manifolds.	*Petroleum Engineering*
Spad	A spad is a flat spike hammered into a wooden plug anchored in a hole drilled into the mine ceiling from which is threaded a plumbline. The spad is an underground survey station similar to the use of stakes in marking survey points on the surface. A pointer spad, or sight spad, is a station that allows a mine foreman to visually align entries or breaks from the main spad.	*Mining*
Spall	A flake or chip of metal; removed from one of the races of a rolling-element bearing. That bearing is nearing the end of its useful life.	*Reliability Engineering*
Spalling	Severe damage characterized by large pits, cavities and related cracks; related to overload and fatigue.	*Lubrication*
Spalling (concrete)	the complete failure of concrete due to the expansive forces caused by the formation of corrosion products on unprotected reinforcement bars	*Materials Process*
Span	The difference between the upper and lower limits of a range expressed in the same units as the range.	*Electrical*
Span	The algebraic difference between limits of the pressure range.	*Electrical Engineering*
Span Adjustment	The ability to adjust the gain of a process or strain meter so that a specified display span in engineering units corresponds to a specified signal span. For instance, a display span of 200°F may correspond to the 16 mA span of a 4–20 mA transmitter signal.	*Electrical*
Span Adjustment	The ability to adjust the gain of a process or strain meter so that a specified display span in engineering units corresponds to a specified signal span. For instance, a display span of 200°F may correspond to the 16 mA span of a 4-20 mA transmitter signal.	*Electronic Process*
Span beam	a long wooden beam that supported the top axle pivot of a gin drum.	*Mining*
Spangle	the characteristic crystalline form exhibited by the solidified, hot-dipped zinc coating	*Materials Process*
Spare	A connector point reserved for options, specials, or other configurations. The point is identified by an (E#) for location on the electrical schematic.	*General Engineering*
Spare face	a face kept in reserve in case of production shortfalls in other parts of the colliery.	*Mining*
Spare Part	Any component or equipment intended to restore a corresponding one in order to restore the original required function of the component or equipment.	*Maintenance*
Spare Part Management	See Inventory Management.	*Maintenance*
Spares	wooden wedges driven up behind the backing deals, to produce side pressure and tighten the whole shaft support structure. -see also Baff-ends.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spares provisioning	The stocking of spare units or components based on the anticipated number of failures for a given mission or length of operation.	*Reliability Engineering*
Sparge	injection of air below the water table to strip dissolved volatile organic compounds and/or oxygenate the groundwater to facilitate aerobic biodegradation of organic compounds.	*Chemical*
Spark spread	A measurement of the difference between the price that a generator can obtain from selling one megawatt hour (MWh) of electricity and the cost of the natural gas needed to generate the MWh of electricity. Spark spread is a measure of potential profit for generating electricity on a particular day.	*Energy*
Spark Test	A test designed to locate pin-holes in an insulated wire by application of an electrical potential across the material for a very short period of time while the wire is drawn through an electrode field.	*Electrical*
Sparky	a large electric hand lamp introduced into the mines about 1910. The lamp was heavy and cumbersome and was replaced by the electric cap lamp. (Scots.).	*Mining*
Spatter	In arc and gas welding, the metal particles expelled during welding that do not form part of the weld.	*Maintenance and Repair*
Spatter Loss	Difference in weight between the amount of electrode consumed and the amount of electrode deposited.	*Maintenance and Repair*
Spavin	clunch or the under-clay beneath the coal seam. (Yorks.).	*Mining*
SPC	Statistical Process Control.	*Control Engineering*
SPDT	Single-Pole, Double-Throw - See definition of SPST.	*Mechanical*
Spear wedges	long vertical tapered wedges, usually of pitch pine, driven down between the rock and the back of tubbing at the joints and centers of the segments to assist in centralizing.	*Mining*
Spears or Sliding spears	the ridged guide rails for the cage. (Leics.), (N. East); or wooden rods used to suspend pumps in the shaft during sinking. A Spear is also a wooden pumping rod.	*Mining*
Special Class	A term applied to a Class designated threaded or weld end valve, where the body and cover have been subjected to non-destructive examination (NDE) and any defects removed. This allows the valve to have a higher pressure capacity than a standard class valve.	*Industrial Engineering*
Special contract rate schedule	An electric rate schedule for an electric service agreement between a utility and another party in addition to, or independent of, any standard rate schedule.	*Energy*
Special naphthas	All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.	*Energy*
Special nuclear material	The term "special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material that the Atomic Energy Commission, pursuant to the provisions of section 51 of the Atomic Energy Act of 1954, as amended, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Special purpose rate schedule	An electric rate schedule limited in its application to some particular purpose or process within one, or more than one, type of industry or business.	*Energy*
Specialized register	In The Cochrane Collaboration this is a database of bibliographic references to studies relevant to a Cochrane Review Group or Field, that is maintained at the editorial base. Software such as ProCite, or Reference Manager is used to manage the database. Once a relevant report of a study is identified, it is coded and entered onto the register. Wherever possible, relevant study reports are downloaded directly into the register from an electronic database such as MEDLINE. Information about unpublished and ongoing studies is also included in these registers. When specialized registers only contain reports of controlled trials (such as randomized controlled trials, or controlled clinical trials), they are sometimes referred to as trials registers. Also called: Register of controlled trials, Trials register	*Quality Engineering*
Specialty Steel	Steels such as electrical, alloy or stainless steels. These generally are produced in smaller volumes to meet the specific needs of customers.	*Metallurgy*
Species	a group of living things that share common biological characteristics	*Agriculture*
Species	A group of related organisms having common characteristics.	*Forestry*
Specific Capacity	Rate of water discharge from the well divided by the drawdown within the well.	*Petroleum Engineering*
Specific Dielectric Strength	The dielectric strength per millimeter of thickness of an insulating material.	*Electrical*
Specific Discharge	Volume of water flowing through a cross-sectional area of an aquifer	*Petroleum Engineering*
Specific Drawdown	Drawdown within a well, divided by the discharge rate of water from the well (inverse of specific capacity).	*Petroleum Engineering*
Specific gravity	the dimensionless ratio of the density of a substance with respect to the density of water. The specific gravity of water is equal to 1.0 by definition. Most petroleum products have a specific gravity less than 1.0, generally between 0.6 and 0.9. As such, they will float on water--these are also referred to as LNAPLs, or light non-aqueous phase liquids. Substances with a specific gravity greater than 1.0 will sink through water--these are referred to as DNAPLs, or dense non-aqueous phase liquids.	*Chemical*
Specific gravity	The weight of a substance compared with the weight of an equal volume of pure water at 4 degrees Celsius.	*Mining*
Specific Gravity	The ratio of the weight of a given volume of a substance to that of an equal volume of water at the same temperature. The temperature selected varies among industries, 15°C (60°F) being the usual standard.	*Engineering Physics*
Specific gravity (liquid)	The ratio of the weight of a given volume of liquid to the weight of an equal volume of water. Specific Gravity = Centistokes	*Oil Analysis*
Specific gravity, Liquid	The ratio of the weight of a given volume of liquid to the weight of an equal volume of water.	*Mechanical, Process, and Operations*
Specific Heat	The ratio of thermal energy required to raise the temperature of a body 1° to the thermal energy required to raise an equal mass of water 1°.	*General*
Specific Heat	The amount of heat required to raise a specified mass by one unit of a specified temperature, usually expressed as Btu/lb/°F. or cla/g/°C.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Specific Inductance Capacitance	That property of a dielectric material which determines how much electrostatic energy can be stored per unit volume when unit voltage is applied.	*Electrical*
Specific or Unique Rating	The design pressure and temperature conditions of a piping system do not fall within the pressure-temperature ratings of above-described rating systems, the designer may assign a specific rating to the piping system. Examples of such applications include main steam or hot reheat piping of a power plant, whose design pressure and design temperature may exceed the pressure-temperature rating of ASME B16.5 Class 2500 flanges. It is normal to assign a specific rating to the piping. This rating must be equal to or higher than the design conditions. The rating of all pressure-containing components in the piping system must meet or exceed the specific rating assigned by the designer.	*Maintenance and Repair*
Specific Resistance	The resistance of a unit conductor having a length of one foot and a cross-sectional area of one circular mil.	*Electrical*
Specific Retention	The ratio of the volume of water a particular body of rock or soil will hold, against the pull of gravity to the volume of the body itself; usually expressed as a percentage.	*Petroleum Engineering*
Specific Storage	Amount of water released from or taken into storage, per unit volume of a porous medium per unit change in head.	*Petroleum Engineering*
Specific strength	Strength per unit density.	*Material Process*
Specific surface area	Internal surface area of a porous structure given in area per unit volume, which yields the unit one over unit length. Often used to characterize the structure of porous catalysts.	*Chemical*
Specific Volume	The volume of a unit mass of a fluid is its specific volume, and it is measured in cubic feet per pound mass (ft3 /lbm).	*Maintenance and Repair*
Specific Yield	Volume of water that a saturated rock or soil will yield by gravity (synonym for effective porosity or storage coefficient of unconfined aquifers).	*Petroleum Engineering*
Specification	A document that defines the requirements that a finished product must conform to - may include chemical and mechanical properties, tolerances, marking, shipping, etc.	*Mechanical*
Specifications	Documents (the USA military service once had as many as 28,000 specifications) that describe products or services, for the purpose of procurement. Differs from standards.	*Reliability Engineering*
Specificity	1. [In screening/diagnostic tests:] A measure of a test's ability to correctly identify people who do not have the disease. It is the proportion of people without the target disease who are correctly identified by the test. It is the complement of the false positive rate (FPR=1-specificity). It is calculated as follows: Specificity = Number without disease who have a negative test/Number without disease. 2. [In trial searching:] There is no equivalent concept in trial searching, as we do not know the total number of irrelevant articles in existence. The concept of precision is usually used instead.	*Quality Engineering*
Specificity (of a diagnostic test)	The proportion of truly nondiseased persons, as measured by the gold standard, who are so identified by the diagnostic test under study.	*Analysis*
Specimen	"Material available for analysis." [IFCC]	*Quality*
Spectral Filter	A filter which allows only a specific band width of the electromagnetic spectrum to pass, i.e., 4 to 8 micron infrared radiation.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spectral map	A three-dimensional plot of amplitude (Z axis) vs. time (or shaft speed) (Y axis) vs. frequency (X axis)	*Reliability Engineering*
Spectral width	A range of wave lengths.	*Material Process*
Spectrographic analysis	Determines the concentration of elements represented in the entrained fluid contaminant.	*Oil Analysis*
Spectrographic Oil Analysis Program (SOAP)	Procedures for extracting fluid samples from operating systems and analyzing them spectrographically for the presence of key elements.	*Oil Analysis*
Spectrum	The resolving of overall vibration into amplitude components as a function of frequency.	*General*
Spectrum Analysis	Utilizing frequency components of a vibration signal to determine the source and cause of vibration.	*General*
Spectrum analyzer	An instrument which displays the frequency spectrum of an input signal, usually amplitude vertical vs. frequency horizontal.	*Reliability Engineering*
Specular reflection	Light reflection relative to the average surface.	*Material Process*
Specular reflectors	Specular reflectors have mirror like characteristics (the word "specular" is derived from the Greek word meaning mirror). The most common materials used for ballasts, the devices that turn on and operate Fluorescent tubes, are aluminum and silver. Silver has the highest reflectivity; aluminum has the lowest cost. The materials and shape of the reflector are designed to reduce absorption of light within the fixture while delivering light in the desired angular pattern. Adding (or retrofitting) specular reflectors to an existing light fixture is frequently implemented as a conservation measure.	*Energy*
Specular Scan	A reflective scan technique in which reflection from a shiny surface illuminates the photosensor, which must be precisely positioned to receive the reflected light. The angle of incidence equals the angle of reflection.	*Electrical Engineering*
Speculative resources (coal)	Undiscovered coal in beds that may occur either in known types of deposits in a favorable geologic setting where no discoveries have been made, or in deposits that remain to be recognized. Exploration that confirms their existence and better defines their quantity and quality would permit their reclassification as identified resources.	*Energy*
Speculative resources (SR)	Uranium in addition to **EAR** that is thought to exist, mostly on the basis of indirect evidence and geological extrapolations, in deposits discoverable with existing exploration techniques. The location of deposits in this category can generally be specified only as being somewhere within given regions or geological trends. The estimates in this category are less reliable than estimates of **RAR** and **EAR**. *Note*: **SR** corresponds to the combination of DOE's possible potential resources and speculative potential resources categories.	*Energy*
Speculative resources (uranium)	Uranium in addition to Estimated Additional Resources (EAR) that is thought to exist, mostly on the basis of indirect evidence and geological extrapolations, in deposits discoverable with existing exploration techniques. The locations of deposits in this category can generally be specified only as being somewhere within given regions or geological trends. The existence and size of such deposits are speculative. The estimates in this category are less reliable than estimates of EAR. SR corresponds to DOE's Possible Potential Resources plus Speculative Potential Resources categories.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Speed	Scalar velocity.	*Aeronautical Engineering*
Speed cue	Flight director cue to control speed; in fixed-wing aircraft, a throttle cue; in rotary-wing aircraft, a longitudinal cyclic cue.	*Aeronautical Engineering*
Speed error	A basic output from guidance to flight director, indicating the difference between actual speed and desired speed; Symbols: DELTA V; Typical Units: ft/s, kt; Dimensions: Length/Time.	*Aeronautical Engineering*
Speed For Printers	How many labels it prints per seconds. May be measured by how many centimeters the printer prints per second.	*Gears*
Speed of a Synchronous Machine	The rate at which its shaft rotates, is dictated by the frequency of electricity in the grid to which it is connected. The speed of a synchronous machine is accurately predictable. This means that it maintains its speed irrespective of the load placed on it. Because synchronous motors can maintain a particular speed with extreme accuracy, they are used in performance-critical applications such as mechanical clocks and DVD drives. Synchronous generators are commonly used in power plants, where their predictable, consistent performance helps to maintain the quality and reliability of power supplies. The speed of an asynchronous machine is slightly slower than the frequency of the electricity it consumes or generates. Asynchronous motors slow down as their load increases and asynchronous generators change speed with the torque (rotational force) that is applied to their rotors. A synchronous machines are also referred to as induction motors/generators.	*Electrical*
Speed Reducer	A power transmission mechanism designed to provide a speed for the driven equipment less than that of the prime mover. Speed reducers may have either constant speed or adjustable speed. They are generally totally enclosed to retain lubricant	*Equipment*
Spelter	The zinc of commerce, more or less impure, cast from molten metal into slabs or ingots.	*Mining*
Spent fuel	Irradiated fuel that is permanently discharged from a reactor. Except for possible reprocessing, this fuel must eventually be removed from its temporary storage location at the reactor site and placed in a permanent repository. Spent fuel is typically measured either in metric tons of heavy metal (i.e., only the heavy metal content of the spent fuel is considered) or in metric tons of initial heavy metal (essentially, the initial mass of the fuel before irradiation). The difference between these two quantities is the weight of the fission products.	*Energy*
Spent fuel disassembly hardware	The skeleton of a fuel assembly after the fuel rods have been removed. Generally, SFD hardware for PWR assemblies includes guide tubes; instrument tubes, top and bottom nozzles; grid spacers; hold-down springs; and attachment components, such as nuts and locking caps. For BWR fuel assemblies, SFD hardware includes the top and bottom tie plates, compression springs for individual fuel rods, grid spacers, and water rods.	*Energy*
Spent liquor	The liquid residue left after an industrial process; can be a component of waste materials used as fuel.	*Energy*
Sperm or Spurn	a knob of coal left in under the holing (N. Staffs.).	*Mining*
Sphalerite	A zinc sulfide mineral; the most common ore mineral of zinc.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spherical error probability (SEP)	A probability that a percentage of three-dimension measurements will lie within a sphere of given radius, with the sphere centered at truth or mean of the measurements; SEP specifies test cases for measurement errors of sensors of three dimensions, such as velocity east, north, and vertical. Compare: circular error probability, radial error probability.	*Aeronautical Engineering*
Spherulites	A rounded aggregate of radiating crystal lamella. Spherulites are present in most semicrystalline plastics. They originate from a nucleus such as particle of contaminant, catalyst residue, or a chance fluctuation in density. They may grow through stages: first needles, then bundles and sheaflike aggregates, and finally the spherulites. Spherulites may range in diameter from a few tenths of a micron to several millimeters.	*Engineering Physics*
Spider	1. In a molding press, that part of an ejector mechanism, which operates the ejector pins. 2. In extrusion, term used to denote the arms supporting a mandrel within the head and die assembly. 3. In rotational molding, the gridwork of metallic members supporting cavities in a multi-cavity mold.	*Engineering Physics*
Spider Lines	In blow molding or film extrusion, vertical marks on the parison molded part of film caused by improper welding of several melt flow fronts formed by the legs with which the torpedo is fixed in the extruder head.	*Engineering Physics*
Spiles	see Piles. Spile wedges are half wedges driven into the packing behind a wedging crib after it has received as many full-sized wedges as can be driven in.	*Mining*
Spill plates	metal plates on the side of face conveyors to stop coal spillage.	*Mining*
Spillway	A passage for surplus water to flow over or around a dam.	*Energy*
Spin	a theoretical concept that enable individual electrons within sublevels to be distinguished from each other	*Physics*
Spin Resistant	An abandoned term referring to a ROTATION-RESISTANT rope of the 8 x 19 classification.	*Wire Rope & Cable*
Spindle oil	A light-bodied oil used principally for lubricating textile spindles and for light, high-speed machinery.	*Oil Analysis*
Spinel	Compound crystal structure.	*Material Process*
Spinneret	A metal plate with holes through which plastics material passes into a solidifying medium, to form filaments or fibers.	*Material Process*
Spinning Reserve	Reserve generating capacity running at zero load.	*Energy*
Spin-on Filter	A throw-away type bowl and element assembly that mates with a permanently installed head.	*Lubrication*
Spiral drum	see Scroll drum.	*Mining*
Spiral Flow Test	A method for determining the flow properties of a thermoplastic or thermosetting resin based on the distance it will flow under controlled conditions of pressure and temperature along a spiral runner of constant cross section. The test is usually performed with a test mold, which the material is fed at the center of the spiral cavity.	*Engineering Physics*
Spiral Groove	A continuous helical groove that follows a path on and around a drum face, similar to a screw thread. See DRUM.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spiral Mold Cooling	A method of cooling injection molds or similar molds wherein the cooling medium flows through a spiral cavity in the body of a mold. In injection molds, the cooling medium is introduced at the center of the spiral, near the sprue section, as more heat is localized in this section.	*Engineering Physics*
Spiral Wound Gasket	A type of gasket that is made by winding V-section metal strip and a softer filler material together. Support or retaining rings, inside and/or outside the spiral, improve the gasket's handling and fitting. The filler material used is typically graphite or PTFE. The metal strip and retaining rings being typically made from stainless steel.	*Maintenance*
Spiral Wrap	A term given to describe the helical wrap of a tape or thread over a core.	*Electrical*
Spiral-Riveted	A method of manufacturing pipe by coiling a plate into a helix and riveting together the overlapped edges.	*Maintenance and Repair*
Spiral-Welded	A method of manufacturing pipe by coiling a plate into a helix and fusion-welding the overlapped or abutted edges.	*Maintenance and Repair*
Spiral-Welded Pipe	Pipe made by the electric-fusion-welded process with a butt joint, a lap joint, or a lock-seam joint.	*Maintenance and Repair*
Spires	a dull, hard, slaty coal that was hard to work, breaking into vertical columns or spires.(Leics.).	*Mining*
Spirey coal	dull, finely banded coal, sometimes breaking into vertical columns. (Yorks.).	*Mining*
S-plane	Continuous complex frequency plane; S-plane is used in control systems engineering in the design of control laws See Also: Laplace transform.	*Aeronautical Engineering*
Splash bar	Horizontal component of a fill deck, which constitutes the principal splash surface.	*Facility Engineering*
Splash line	straight line painted or chalked on the roof of a roadway or the face to aid in aligning machinery.	*Mining*
Splash lubrication	A system of lubrication in which parts of a mechanism dip into and splash the lubricant onto themselves and/or other parts of the mechanism.	*Lubrication*
Splash Seals	Internal plunger seal and external mounting seal guard against spills and debris, prevent contaminants from entering valve, and allow for cleaning without disassembly.	*Mechanical*
Splasher or Splash plate	Used in a gravity distribution system to receive water from a down spout and effect uniform spreading of the water over the wetted area of the tower.	*Facility Engineering*
Splice	A joint used for connecting two lengths of conductor or cable with good mechanical strength as well as good conductivity.	*Electrical*
Splint coal	hard gray coal with a slatey structure and uneven cross-fracture that burns away to a powdery ash without caking, similar to cannel. Sometimes called 'splent' coal. Suitable for blast furnaces. (Scot.); and utilized in steam engines. (N. East).	*Mining*
Split	The shareholder-approved division of a company's outstanding common shares into a larger number of new common shares.	*Mining*
Split	Any division or branch of the ventilating current. Also, the workings ventilated by one branch. Also, to divide a pillar by driving one or more roads through it.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Split bar	see Half bar.	*Mining*
Split Body	A valve whose body is split. This design allows for easy plug and seat removal. Split-bodied valves are made in both the straight-through and angle versions.	*Industrial Engineering*
Split Cavity Mold	A mold cavity designed with sections.	*Engineering Physics*
Split chase mold or split ring mold	A mold in which the chase contains an assembly of two or more parts to form undercuts in a molded piece. These parts are removed from the chase with the piece and then separated from the piece.	*Material Process*
Split die	A type of die construction where the two pieces are split vertically to make possible the forging of shapes with cavities or undercut details.	*Metallurgy*
Split ring mold	A mold in which a split cavity block is assembled in a chase to permit the forming of undercuts in a molded piece.	*Material Process*
Split Ring Mold	A mold in which a split cavity block is assembled in a chase to permit the forming of undercuts in a molded piece. These parts are ejected from the mold and then separated from the piece.	*Engineering Physics*
Split system	When applied to electric air-conditioning equipment, it means a two-part system--an indoor unit and an outdoor unit. The indoor unit is an evaporator coil mounted in the indoor circulating air system, and the outdoor unit is an air-cooled condensing unit containing an electric motor-driven compressor, a condenser fan, and a fan motor.	*Energy*
Split tails	Use of one tails assay for transaction of enrichment services and a different tails assay for operation of the enrichment plant. This mode of operations typically increases the use of uranium, which is relatively inexpensive, while decreasing the use of separative work, which is expensive.	*Energy*
Split-Ranging	Action in which two or more final control elements are actuated by a single controller output. For example, in a heating circuit, 0-50% of the controller output operates a primary heat source and the 50-100% portion of the controller output operates a secondary heat source.	*Electrical Engineering*
Split-the-savings	The basis for settling economy-energy transactions between utilities. The added cost of the supplier are subtracted from the avoided costs of the buyer, and the difference is evenly divided.	*Energy*
Spoil	stone, shale, bad coal, dirt and any other rubbish sent out of the mine; or a stratum of mixed coal and dirt.	*Mining*
Spoil heap or Spoil bank	the colliery waste tip. Also called a 'tip', 'waste tip', 'waste heap', dirt tip', 'dirt heap', 'pit heap', 'pit tip', 'spoil heap' or a 'bing' in Scotland.	*Mining*
Spoiler	A control surface on fixed-wing aircraft, usually mounted to the wings, that provides roll control and lift; Symbols: delta sub S; Typical Units: rad, deg.	*Aeronautical Engineering*
Spoiler	A control surface on fixed-wing aircraft, usually mounted to the wings, that provides roll control and lift; Symbols - delta sub S; Typical Units - rad, deg.	*Aeronautical Engineering*
Spongiosis	also known as graphitization is a form of corrosion found only in gray cast iron.	*Material Process*
Spontaneous polarization	Spontaneous polarization A sharp rise in polarization in a ferroelectric material, due to a modest field application.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spontaneous Combustion or Spon Com	see Heatings, Also known as 'breeding fire' in South Staffordshire.	*Mining*
Spontaneous combustion, or self-heating, of coal	A naturally occurring process caused by the oxidation of coal. It is most common in low-rank coals and is a potential problem in storing and transporting coal for extended periods. Factors involved in spontaneous combustion include the size of the coal (the smaller sizes are more susceptible), the moisture content, and the sulfur content. Heat buildup in stored coal can degrade the quality of coal, cause it to smolder, and lead to a fire.	*Energy*
Spool	A term loosely applied to almost any moving cylindrically shaped part of a hydraulic component which moves to direct now through the component.	*Mechanical, Process, and Operations*
Spool – Blast	(Blast Spool) A term applied to Choke Manifolds, a specially manufactured spool attached directly to the outlet connection of a Drilling Choke to provide protection from the effects of high velocity fluid erosion.	*Petroleum Engineering*
Spool Conveyor	A conveyor where power to the rollers is accomplished by o-rings driven by spools on a rotating shaft. (138-SP, 190-SP, 2514-SP)	*Manufacturing*
Spool Directional Valve	A valve designed as a spool which slides in a bore, opening and closing passages.	*Mechanical, Process, and Operations*
Spool piece	See "Adapter Spool"	*Mechanical*
Spore	A special hard, shell-like cell structure of a rod-shaped bacteria which has an inactive form, and is the most resistant of all living things to heat, chemicals and drying. Can only be destroyed by sterilization.	*Chemistry*
Spore	A specialized structure consisting of one or few cells and serving any or all of the following three functions: (i) reproduction, (ii) dissemination. (iii) survival.	*Forestry*
Spores	Reproductive cell.	*Agriculture*
Sporophore	A spore-producing or supporting structure.	*Forestry*
Spot Market	Short-term purchases of electricity from surpluses available for a short time.	*Energy*
Spot market (natural gas)	A market in which natural gas is bought and sold for immediate or very near-term delivery, usually for a period of 30 days or less. The transaction does not imply a continuing arrangement between the buyer and the seller. A spot market is more likely to develop at a location with numerous pipeline interconnections, thus allowing for a large number of buyers and sellers. The Henry Hub in southern Louisiana is the best known spot market for natural gas.	*Energy*
Spot market (uranium)	Buying and selling of uranium for immediate or very near-term delivery. It typically involves transactions for delivery of up to 500,000 pounds U_3O_8 within a year of contract execution.	*Energy*
Spot material	Metal or finished products available for prompt delivery.	*Metallurgy*
Spot price	The price for a one-time open market transaction for near-term delivery of a specific quantity of product at a specific location where the commodity is purchased at current market rates. See also spot market terms associated with specific energy types.	*Energy*
Spot price	Current delivery price of a commodity traded in the spot market.	*Mining*
Spot Purchases	Single shipment of fuel purchased for delivery within 1 year.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spot Size	The diameter of the circle formed by the cross section of the field of view of an optical instrument at a given distance. Spurious Error: Random or erratic malfunction.	*Electrical*
Spot-market price	See spot price.	*Energy*
Spotter	A carpet stain remover.	*Chemistry*
Spotters	Teams on an oval track will usually have crew members on top of the grandstand where they can see the entire track and warn drivers of an accident or advise them where to go in traffic.	*NASCAR*
Spout	a short heading in the Thick Coal connecting the main road with the air road (S. Staffs.).	*Mining*
Spout road	a cundie, a roadway so steep that the coal could slide down it from the upper workings to the main haulage road to be loaded into hutches. (Scot.).	*Mining*
SPP	See Small Power Producer	*Energy*
SPR	See Strategic Petroleum Reserve.	*Energy*
Sprag	a support placed in the undercut part of a seam and in front of the coal to support it. -see Nogs; or a wedge placed under the wheel of a tub; or a short piece of wood or iron put between the spokes of the wheel of a tub to stop it from moving or to slow its progress when going down an incline. Pronounced 'spreg' in Somerset.	*Mining*
Spray Buff	An intermediate floor care procedure that cleans, removes black marks and shines the wear areas of a floor. Utilizes a sprayed solution, a floor machine and a synthetic floor pad.	*Chemistry*
Spray Chamber	A chamber in which the spraying process is carried out. It may merely be an acoustic chamber for plasma spraying or a vacuum chamber for vacuum plasma spraying.	*Paint and Coatings*
Spray Dried Powder	Powder formed by the spray drying process.	*Paint and Coatings*
Spray nozzle	Device used in a distribution system to break up the flow of the circulating water into droplets and effect uniform spreading of the water over the wetted area of the tower.	*Facility Engineering*
Spray-filled water-cooling tower	A tower, which has no fill, and water to air contact depends entirely on the break-up of the water by means of pressure spray nozzles.	*Facility Engineering*
Spray-fused Coatings	A process in which the coating material is deposited by flame spraying and then fused into the substrate by the addition of further heat. This can be applied by flame, induction heating or by laser.	*Paint and Coatings*
Sprays	the pit head baths. (Scot.); or water jets used to suppress dust when cutting coal, or stone and shale, with machines. Also used over the delivery end of a conveyor belt.	*Mining*
Spread	The amount of resin or glue applied in producing plywood or similar laminated materials. Usually expressed in pounds (dry glue basis) per thousand square feet.	*Material Process*
Spreading	Flow of filler and resin of a thermosetting plastic during curing.	*Material Process*
Spring wheat	Wheat that is planted in the spring and harvested the following summer.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Spring wheat	Wheat that is planted in the spring and harvested in late summer. (In some areas with mild winters, spring wheat may be planted in the fall, but it differs from winter wheat in not having a requirement for cold temperatures to produce seed.)	*Agriculture*
Sprocket	A wheel with suitably shaped and spaced cogs or teeth to engage with the links of a chain.	*Equipment*
SPRT	SPRT stands for sequential probability ratio test. This is a type of accept/reject sequential testing in which accept/reject boundaries are defined by the user and units are sequentially tested until either the accept boundary or the reject boundary have been reached, and a decision is made about the suitability of the units.	*Reliability Engineering*
Sprue	In an injection or transfer mold, the main feed channel that connects the mold filling orifice with the runners leading to each cavity gate. The term is also used for the piece of plastic material formed in this channel.	*Engineering Physics*
Sprue Bushing	A hardened steel insert in an injection mold, which contains the tapered sprue, hole and has a suitable seat for the nozzle of the injection cylinder. Sometimes called an adapter.	*Engineering Physics*
Sprue Gate	A passageway through which molten resin flows from the nozzle to the mold cavity.	*Engineering Physics*
Sprue Gates	runners formed of molding material during the molding operation.	*Material Process*
Sprue Puller	A pin having a Z-shaped slot undercut in its end, by means of which it serves to pull the sprue out of the sprue bushing.	*Engineering Physics*
SPST	Single-Pole, Single Throw - Refers to the function of an electrical switch often used in the control system of electric valve operators.	*Mechanical*
Spudding In	The first boring of the hole in the drilling of an oil well.	*Petroleum Drilling*
Spud-in	The operation of drilling the first part of a new well.	*Petroleum Drilling*
Spud-in	The operation of drilling the first part of a new well.	*Petroleum Drilling*
Spunney or Spunney brow	a haulage incline or 'jinney'. (Lancs.).	*Mining*
Spur	A gravity or powered conveyor section to switch unit loads to and from the main line.	*Equipment*
Spur gear	The simplest of gears - in a gear set, the pinion and ring gear are aligned on parallel shafts. Can be added to another gear operator to further increase the mechanical advantage afforded by the gear.	*General Mechanical*
Spur Gear	The simplest variation of gear. It consists of a cylinder or disk, with the teeth projecting radially. Each tooth edge is straight and aligned parallel to the axis of rotation. Such gears can be meshed together correctly only if they are fitted to parallel axles.	*Lubrication*
Spur or Spurring	a pillar of uncut coal left in place to support the coalface when holing or undercutting. The spur would be hacked out to allow the main body of coal to fall. (Scot.).	*Mining*
Spurious Error	Random or erratic malfunction.	*General*
Spurns	when kirving, cutting a groove down each side of a block of coal, the hewer would leave in place small ties, called spurns, connecting the block of coal to the main body of coal. This would insure against any sideways movement, when he began under-cutting the coal (S. Staffs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sputtering	This is a glow discharge process whereby bombardment of a cathode releases atoms from the surface which then deposit onto a nearby target surface to form a coating.	*Paint and Coatings*
sq ft	Square foot	*General*
Square operating nut	A nut, usually 2" x 2", which is attached to a valve stem or the pinion shaft of a gear operator allowing use of wrenches to quickly operate the valve.	*Mechanical*
Square set	A set of timbers used for support in underground mining, consisting of cap, girt and post.	*Mining*
Square Set	A set of timbers used for support in underground mining.	*Mining*
Square sets	straight girders used at road junctions to support the roof.	*Mining*
Square work	a system of working by cutting the district into square blocks or pillars, i.e. pillar and stall working; or an old system of working the Staffordshire Thick Coal that consists of initially driving two roads from a pair of levels in the lower portion of the seam followed by simultaneously getting down the top coal and the extraction of square areas of coal, resulting in what was called a 'side of work'.	*Mining*
Square-Groove Weld	A groove weld in which the pipe ends are not chamfered. Square-groove welds are generally used on piping and tubing of wall thickness no greater than $\frac{1}{8}$ in (3 mm).	*Maintenance and Repair*
Squat Lads	Before the advent of the safety lamp and adequate ventilation, flare ups of gas and explosions were quite common. The cry 'Squat lads!' would send the men diving to the floor in the hope that the blast and flame would pass over them.	*Mining*
Squeak	A sound resembling that of an unlubricated hinge. A sound made by PVC or other material rubbing on glass, i.e. a windshield.	*Reliability Engineering*
Squeegee	An instrument used to spread a thin film of plastic coating over an article.	*Material Process*
Squeeze	The settling, without breaking, of the roof and the gradual upheaval of the floor of a mine due to the weight of the overlying strata.	*Mining*
Squeeze Film Lubrication	The development of fluid pressure sufficient to support a load between surfaces thickly coated or flooded with lubricant and rapidly moving toward each other. Because of viscosity (or apparent viscosity), the lubricant cannot immediately flow away from the area of contact. Squeeze-film lubrication occurs between gear teeth and between wrist pins and their bushings, for example.	*Lubrication*
Squib	see Straw fuse.	*Mining*
SR	Speculative Resources (Coal)	*Energy*
SRCM®	SRCM® - Streamlined Reliability-Centered Maintenance. This enhanced version of RCM focuses on the dominant failure modes of equipment and the significant effects of those failures such as production losses, personnel safety, environmental releases, etc. A key benefit of an SRCM program is developing the understanding of plant personnel on the value of a modern-based maintenance strategy. As such, SRCM is particularly appropriate where a major change in the maintenance culture within the enterprise needs to be made, which also makes it a good option for new builds.	*Maintenance*
SRX	A RX Ring Gasket drilled with a vent hole for subsea use.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
SS Flanges	API Spec 17D specifies these for up to 11″ flanges in 5,000 psi working pressure with BX ring grooves, in either full stainless steel or inlayed with Corrosion Resistant Material.	*Petroleum Engineering*
SSIV (SUB SEA ISOLATION VALVE)	A valve used underwater, generally in a manifold that will close and isolate a particular pipeline or process in an emergency.	*Mechanical*
SSR	Solid state relay. See Relay, Solid State	*Electrical*
SSU	Saybolt Universal Seconds (or SUS), a unit of measure used to indicate viscosity, e.g., SSU @ 100° F	*Oil Analysis*
Stability	The ability of an instrument or sensor to maintain a consistent output when a constant input is applied.	*Electrical*
Stability (electric)	The ability of an electric system to maintain a state of equilibrium during normal and abnormal conditions or disturbances. NERC definition	*Energy*
Stability coordinates	Coordinates referenced to the air mass; Compare: body coordinates, earth coordinates.	*Aeronautical Engineering*
Stability of an Operating Characteristic	The extent to which an operating characteristic such as operating point remains constant during a specified number of cycles of switch operation, under specified conditions of actuation, electrical loading and environment. Most clearly expressed as a graph of the characteristic versus cycles of switch operation.	*Electrical Engineering*
Stabilization	A process for separating the gaseous and more volatile liquid hydrocarbons from crude petroleum or gasoline and leaving a stable (less-volatile) liquid so that it can be handled or stored with less change in composition.	*Petroleum Engineering*
Stabilization lagoon	A shallow artificial pond used for the treatment of wastewater. Treatment includes removal of solid material through sedimentation, the decomposition of organic material by bacteria, and the removal of nutrients by algae.	*Energy*
Stabilizer	A control surface, usually mounted at aft end of the fuselage parallel to the wings, that provides pitch stability, some aircraft have an adjustable stabilizer; Symbols: delta sub H; Typical Units: rad, deg.	*Aeronautical Engineering*
Stabilizer	Any ingredient added to plastics to preserve their physical and chemical properties.	*Electrical*
Stable	an area forming a buttock cut in advance at each end of a longwall face to allow certain types of conveyor mounted cutting machines to enter prior to commencing their next run. Also called the 'stable hole'.	*Mining*
Stable elimination	any system of working at the end of a longwall face that obviates the need for stables.	*Mining*
Stable hole	see Stable.	*Mining*
Stable Prices	Prices that do not vary greatly over short time periods.	*Energy*
Stablemen	a team of usually four men who bored, fired and filled the coal to keep the stable hole in advance of the coalface.	*Mining*
Stack	A tall, vertical structure containing one or more flues used to discharge products of combustion to the atmosphere.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stack Mold	Two-level mold (two sets of cores and cavities stacked one above the other) for increased part production rates. Effectively doubles the parts per hour a machine can make.	*Engineering Physics*
Stack out	to dam off or close up the entrance to the waste by building a wall of stone or coal. (Mids.).	*Mining*
Stacker	a butty employed on the surface by the coal-getters to empty the boxes or tubs and grade the coal. (Leics.).	*Mining*
Stadium (plural = stadia)	The period of time between two successive molts.	*Forestry*
Staffordshire Ripping	an old term used in the Midlands for baiting or dinting.	*Mining*
Stag	short for 'Nystagmus'.	*Mining*
Stage	A hydraulic amplifier used in a servovalve. Servovalves may be single stage, two stage, three stage, etc.	*Mechanical, Process, and Operations*
Stage loader	a short chain conveyor at the end of the face, loading onto the gate conveyor.	*Mining*
Stage	One of the successive principal divisions in the life cycle of an insect, e.g., egg, nymph, larva, prepupa, pupa, adult.	*Forestry*
Staghead	Death of limbs and main branches of a tree in the upper crown, giving the appearance of antlers.	*Forestry*
Stagnation Point	A point in a groundwater flow field where the groundwater is not moving. The magnitude of vectors of hydraulic head at the point are equal but opposite in direction.	*Petroleum Engineering*
Stagnation pressure	Total pressure.	*Aeronautical Engineering*
Stainless Steel	Stainless steel is a universal name given to a number of different steels used primarily for their anti-corrosive element. Stainless steel has been developed to be resistant to extremely corrosive environments. Made using chromium, which improves the corrosion resistance by forming a chromium oxide film on the steel. This very thin layer can be self-repairing when placed under the right conditions. Stainless steel is also an earth friendly material, as it can be melted down, recycled, and made into something else. See also Galvanised.	*Industrial*
Stainless steel	Any of a number of types of iron alloy with chrome, nickel, or other elements that does not oxidize in free air.	*General Mechanical*
Stainless Steel Rope	Wire rope made up of corrosion resistant steel wires.	*Wire Rope & Cable*
Stair or Steer	highly inclined beds are said to be very 'stair' or 'steer'—see Rearers (N. Staffs.).	*Mining*
Stair pit	a pit or shaft in which there was a built-in stairway or ladders. Used as a secondary or escape pit. Also known as a ladder pit. Staker, a sprag. The name was also used for a 'bull prop'. (Mids.). Also called a 'stell prop'.	*Mining*
Stairway	Typical tread-and-riser device providing angular access to and from the top of the structure.	*Facility Engineering*
Staith	the place where coals are shipped by a spout or machine into wagons, a place where coal is loaded at the river side. (N. East).	*Mining*
Stakeholder	Stakeholders are people who may be affected by a project or who can influence it.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stall	Stall is when the operating differential pressure between the inlet and outlet of the steam trap is so disparate that condensate is not discharged from the trap, and instead tends to pool inside the heat exchanger. Stall can cause ruptured equipment, water hammer, and can prevent consistent heating.	*Industrial*
Stallage boards	a platform suspended in front of the rip to support men when drilling shot holes and setting arches. (N. East).	*Mining*
Stallion	An intact male horse; i.e., one that hasn't been castrated.	*Agriculture*
Stamen	Male reproductive structure of a flower. It is composed of a filament and an anther.	*Agriculture*
Stamp	a hole made with a pick point in the coal in which a wedge is fixed or driven with the maul.	*Mining*
Stamp or Stamp Mill	Machines for crushing ores.	*Mining*
Stamping	a general term covering almost all press operations, including blanking, shearing, hot-forming, cold-forming, drawing, bending, coining	*Materials Process*
Stanch air	a term used in Somerset for chokedamp.	*Mining*
Stanchion	a large prop used to support the roof in the Thick Coal—see also Puncheon (S. Staffs.).	*Mining*
Stand	An easily defined area of the forest that is relatively uniform in species composition or age and can be managed as a single unit.	*Forestry*
Stand – off	The distance between Made-up connections faces utilizing ring gaskets, measured near the ring groove.	*Petroleum Engineering*
Standage	a section of old, or excavated, workings on the dip side of the engine pit, built as a reservoir for mine water whenever the pumping engine was stood idle; or a place set apart for holding accumulations of water in the pit until pumped out. (N. East). –see Sump.	*Mining*
Stand-alone generator	A power source/generator that operates independently of or is not connected to an electric transmission and distribution network; used to meet a load(s) physically close to the generator.	*Energy*
Standard	see Stool.	*Mining*
Standard	A document or an object for physical comparison, for defining product characteristics, products, or processes: prepared by a consensus of a properly constituted group of those substantially affected and having the qualifications to prepare the standard for voluntary use.	*Mechanical, Process, and Operations*
Standard air	Dry air having a density of 0.075 lbs./ft.3 at 70oF and 20.92" Hg.	*Facility Engineering*
Standard bred	The world's top harness race horse. Ninety-nine percent of Standard breds are said to trace back to Hambletonian, who sired more than 1330 offspring between 1851 and 1875. The breed's name derives from the fact that while it was still young, horses were only allowed to enter the registry if they could run the mile under a certain time.	*Agriculture*
Standard contract	The agreement between the Department of Energy (DOE) and the owners or generators of spent nuclear fuel and high-level radioactive waste, under which DOE will make available nuclear waste disposal services to those owners and generators.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Standard deviation	A measure of the spread or dispersion of a set of observations, calculated as the average difference from the mean value in the sample.	*Quality Engineering*
Standard deviation index, SDI	Generally used in reports from proficiency testing (PT) survey to describe how far a PT result is from the target value (TV). An SDI of +2.0 means that the laboratory's reported result is 2 standard deviations of the group above the target value or mean of the group.	*Quality*
Standard deviation of the differences, sd, sdiff	A statistic calculated as part of paired t-test analysis. It is the standard deviation of the individual differences between pairs of values (xi, yi), after those differences have been corrected for any systematic error or bias between the methods. When applied to data from a comparison of methods experiment, its properties are similar to those of the standard deviation about the regression line, except that the presence of proportional error contributes to sdiff and invalidates its quantitative interpretation.	*Quality*
Standard deviation of the intercept, sa	Indicates the dispersion or spread of values for the estimate of the y-intercept in linear regression analysis.	*Quality*
Standard deviation of the slope, sb	Indicates the dispersion or spread of values for the estimate of the slope in linear regression analysis.	*Quality*
Standard deviation of y about the regression line, sy/x	Also known as standard error about the regression line and standard deviation of the residuals (sres). A statistic calculated as part of linear regression analysis. It is the standard deviation of the differences yi-Yi, where yi is the observed value corresponding to xi and Yi is the value calculated from the regression equations (Yi = a + bxi). This statistic measures the dispersion or spread of the data points about the regression line. In the comparison of methods experiment, its ideal value would be zero. Values greater than zero describe the random error between the methods, which is composed of the random error or imprecision from both the test and comparison methods, as well as any matrix interferences that vary from sample to sample.	*Quality*
Standard deviation, s	A statistic that describes the dispersion or spread of a set of measurements about the mean value of a gaussian or normal distribution. Calculated from the equation: where n is the number of measurements, and xi is an individual measurement.	*Quality*
Standard Dimension Ratio (SDR)	The ratio of outside pipe diameter to wall thickness of thermoplastic pipe. It is calculated by dividing the specified outside diameter of the pipe by the specified wall thickness in inches.	*Maintenance and Repair*
Standard efficiency	The standard efficiency indicates the percentage relation between the utilizable thermal energy and the energy consumed according to a standardized measuring system. The standard efficiency enables a comparison between different boiler types and between the products of different manufacturers. See Annual efficiency	*Thermal Management*
Standard Electrode Potential (E0)	The standard potential E0 of an electrode is the reversible emf between the normal hydrogen electrode and the electrode with all components at unit activity.	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Standard error	The standard deviation of the sampling distribution of a statistic. Measurements taken from a sample of the population will vary from sample to sample. The standard error is a measure of the variation in the sample statistic over all possible samples of the same size. The standard error decreases as the sample size increases. Also called: SE	*Quality Analysis*
Standard error of the mean, sx	A statistic which indicates the dispersion or spread of values for a mean of a set of measurements. Standard deviation index, SDI. Generally used in reports from proficiency testing (PT) surveys to describe how far a PT result is from the target value (TV). An SDI of +2.0 means that the laboratory's reported result is 2 standard deviations of the group above the target value or mean of the group.	*Quality*
Standard fluorescent	A light bulb made of a glass tube coated on the inside with fluorescent material, which produces light by passing electricity through mercury vapor causing the fluorescent coating to glow or fluoresce.	*Energy*
Standard Industrial Classification (SIC)	Replaced with North American Industry Classification System. See NAICS.	*Energy*
Standard Industrial Classification (SIC) code	A coding system of the U.S. government used to identify specific economic sectors. Coding for manufacturers encompasses the two-digit numbers of 20 through 39.	*Maintenance*
Standard Job	A Work Order Stored In The CMMS Which Contains All The Necessary Information Required To Perform A Maintenance Task. (See Also Model Work Order)	*Management*
Standard Job Plan	A standard job plan is a generic template for a job that will be done repetitively. Their purpose is to facilitate speedy production of job plans for specific maintenance jobs. The Standard Job Plans approach is in particular applied in the maintenance environment.	*Maintenance*
Standard laboratory atmosphere	Standard laboratory atmosphere Whenever materials are to be tested which are sensitive to variations in temperatures and/or moisture, standard laboratory atmosphere should be considered as consisting of 50% relative humidity and a temperature of 77°	*Material Process*
Standard Mechanical Variable Speed Ratios	0.250694444	*Manufacturing*
Standard Operating Procedure (SOP)	Established or prescribed methods to be followed routinely for the performance of designated operations or in designated situations. Standard Operating Procedures widely used in the production/operations environment.	*Maintenance*
Standard Rate	The basic rate customers would take service under if they were not on real-time pricing.	*Energy*
Standard Target	An object used for making comparative measurements of operating distance. A square of mild steel, 1mm thick. The length of the side of the square is equal to either: A: the diameter of the circle inscribed on the active surface of the sensitive face of the sensor, or B: three times the rated operating distance, whichever is the greater.	*Electrical Engineering*
Standard treatment	See Conventional treatment	*Quality Engineering*
Standard uncertainty	Uncertainty of the results of a measurement expressed as a standard deviation. [ISO]	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Standard units	Units commonly encountered for a particular quantity.	*Aeronautical Engineering*
Standard Weight	(STD) – A designation of ASME pipe wall thickness. Equal to schedule 40 up to 250NB (10″). Over this size schedule 40 is heavier.	*Petroleum Engineering*
Standard Work	The most efficient method to perform a task, broken down into elements which are sequenced, organized and repeatedly followed.	*Reliability Engineering*
Standardized mean difference	The difference between two estimated means divided by an estimate of the standard deviation. It is used to combine results from studies using different ways of measuring the same concept, e.g. mental health. By expressing the effects as a standardized value, the results can be combined since they have no units. Standardized mean differences are sometimes referred to as a d index. See also: Effect size, Mean difference Also called: SMD	*Quality Engineering*
Standardization	A process of equalizing electrode potentials in one standardizing solution (buffer) so that potentials developed in unknown solutions can be converted to pH values.	*General Engineering*
Standards	Documents (the USA military services had as many as 1,700 standards) that prescribe engineering disciplines, impose particular management practices, reporting and auditing requirements. Differ from specification.	*Reliability Engineering*
Standby charge	A charge for the potential use of a utility service, usually done by an agreement with another electric utility service. These services include system backup support and other running and quick-start capabilities.	*Energy*
Standby electricity generation	Involves use of generators during times of high demand on utilities to avoid extra "peak-demand" charges.	*Energy*
Standby Facility	A facility that supports a system and generally running under no load.	*Energy*
Standby heat loss	A term used to describe heat energy lost from a water heater tank.	*Energy*
Standby Redundancy	Redundancy in which some or all of the redundant items are not operating continuously but are activated only upon failure of the primary item performing the function(s).	*Reliability Engineering*
Standby service	Support service that is available as needed to supplement a customer, a utility system, or another utility if a schedule or an agreement authorizes the transaction. The service is not regularly used.	*Energy*
Standby Time	A period of time, other than non-scheduled time, when the equipment is in a condition to perform its intended function, facilities are available, but it is not operated. This includes time when no operator is available, time when no product is available (no boards or components), and waiting on upstream or downstream equipment.	*Maintenance*
Standing bobby	a shot that blew out the stemming without moving the coal or stone. Also known as a 'fast shot' or 'blow out'. (N. East).	*Mining*
Standing fire	where the solid coal has become ignited, and the only means of extinguishing it is by barring it off with air tight stoppings or dams.	*Mining*
Standing set	when sinking a shaft with pumps, when the sinking set has become of sufficient length, the top standing set is placed in a cistern which stands on a strong oak bunton or iron girder set across the pit, and pumps to the bank the water delivered into it by the sinking set continued downwards with the sinking.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Standing wave	A wave that is characterized by lack of vibration at certain points (nodes), between which are areas of maximum vibration (antinodes). Standing waves are produced at certain forcing frequencies when the resulting resonant vibratory response is confined within boundaries, as in the vibrating string of a musical instrument or the wing of an airplane or the whip antenna on your automobile. Also called "stationary wave".	*Reliability Engineering*
Standing Work Order	A Work Order That Is Left Open Either Indefinitely Or For A Pre-Determined Period Of Time For The Purpose Of Collecting Labor Hours. Costs And/Or History For Tasks For Which It Has Been Decided That Individual Work Orders Should Not Be Raised. Examples Would Include Standing Work Orders Raised To Collect Time Spent At Safety Meetings, Or In General Housekeeping Activities.	*Plant Engineering*
Standing/Blanket Work	Small and/or routine and repetitive tasks covered on standing or blanket work orders. Work orders used to cover routine tasks that typically require less than 60 minutes to complete.	*Maintenance*
Stank	a water-tight or air-tight stopping or dam. (Mids.).	*Mining*
Stanking	to stop off a gob fire by excluding air from it, usually by means of air tight stoppings or injection of cement-like materials.	*Mining*
Staple, Staple pit or Staple shaft	a shaft that does not communicate with the surface, usually sunk or bored between two seams or major horizons in the same mine. Also known as a 'blind pit' or a 'drop staple' –see also Jacky Pit.	*Mining*
STAPPA	State and Territorial Air Pollution Program Administration	*Petro-Chemical Abbreviations*
Stapping	bringing down the coal face using wedges. (Scot.).	*Mining*
Star clip	a device used to attach tubs or trams to an endless haulage system. Similar to a Smallman clip but the movement of the wedges is produced by rotating a wheel or star carrying threaded blocks. Also called a 'wheel clip'.	*Mining*
Starch (C6H10O6) x	White amorphous powder. Used as a dispersing agent in the gelation of rubber and for various plastics such as ureas and phenolics.	*Material Process*
Start And Stop Characters	Character which tells a scanner or reader when a bar code begins and ends. SUBSTITUTION ERROR RATE-The ratio of the number of incorrect characters to the total number of entered characters.	*Gears*
Startup test phase of nuclear power plant	A nuclear power plant that has been licensed by the Nuclear Regulatory Commission to operate but is still in the initial testing phase, during which the production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer and places it in commercial operation status. A request is then submitted to the appropriate utility rate commission to include the power plant in the rate base calculation.	*Energy*
Start-up time	The period of time needed to reach a steady state condition within the operating band starting from a long term off condition.	*Mechanical, Process, and Operations*
Startup/flame stabilization fuel	Any fuel used to initiate or sustain combustion or used to stabilize the height of flames once combustion is underway.	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
Starvation	A lack of oil in vital areas of a system. Often caused by plugged filters, etc. STRAINER - A coarse filter.	*Mechanical, Process, and Operations*
State	One of the 50 States, including adjacent outer continental shelf areas, or the District of Columbia.	*Energy*
State data	Data that defines aircraft parameters, such as position, velocity, attitude; Some standard terms for state data include: Groundspeed vector, wind speed vector, true airspeed vector, true bearing, true track, ground track angle, relative bearing, sideslip angle, drift angle, true heading, magnetic variation, grivation. Earth speed vector, vertical velocity, air mass flight path angle, earth-referenced flight path angle, angle of attack, pitch, radar altitude, barometric altitude, earth radius, glide slope, gravity vector, lift vector, lateral acceleration vector, bank angle.	*Aeronautical Engineering*
State Operations Manual, SOM	CMS's official document that provides guidelines for interpreting the CLIA regulations, as well as suggest probes for inspectors to use when reviewing a laboratory.	*Quality*
State permit/license/mine number	Code assigned to a mining operation by the state in which the operation is located.	*Energy*
State severance taxes	Any severance, production, or similar tax, fee, or other levy imposed on the production of crude oil, natural gas, or coal by any State, local government acting under authority of State law, or by an Indian tribe recognized as eligible for services by the Secretary of the Interior.	*Energy*
Statement Of Work	The statement of work (SOW) describes the specific requirement applicable to a particular item or service being purchased. It outlines the specific services a contractor is expected to perform, generally indicating the type, level, and quality of service, as well as the time schedule required.	*Procurement*
State-space model	A mathematical relationship of a system in time using state variables, inputs, outputs, and constants; The state-space model is composed of n state variables (x sub 1, x sub 2, ..., x sub n), m input variables (u sub 1, u sub 2, ..., u sub m), k output variables (y sub 1, y sub 2, ..., y sub k), and four constants a, b, c, and d. Alternatively, a state-space model can be expressed with matrices. Compare: continuous-time equation, difference equation, differential equation, discrete-time equation, Laplace transform, Z transform.	*Aeronautical Engineering*
State-space model	A mathematical relationship of a system in time using state variables, inputs, outputs, and constants; The state-space model is composed of n state variables (x sub 1, x sub 2, ..., x sub n), m input variables (u sub 1, u sub 2, ..., u sub m), k output variables (y sub 1, y sub 2, ..., y sub k), and four constants a, b, c, and d. Alternatively, a state-space model can be expressed with matrices. Compare - continuous-time equation, difference equation, differential equation, discrete-time equation, Laplace transform, Z transform.	*Aeronautical Engineering*
Static	Electrical discharges in the atmosphere such as lightning, corona, etc.	*Electrical*
Static Calibration	A calibration recording pressure versus output at fixed points at room temperature.	*General*
Static Calibration	A calibration recording pressure versus output at fixed points at room temperature.	*Electronic Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Static Eliminators	Mechanical devices for removing electrical static charges from plastics articles. Types of static eliminators include static bars, ionizing blowers, and air guns.	*Engineering Physics*
Static Equilibrium	Equilibrium which does not include inertial forces.	*Metallurgy*
Static Error Band	The error band applicable at room temperature.	*General Engineering*
Static fatigue	For certain ceramics and glasses, a degradation in strength that occurs without cycle loading.	*Material Process*
Static Friction	Friction at rest; a force is required to initiate relative movement between two bodies - static friction is the force that resists such relative movement. Sometimes referred to as stiction.	*Maintenance*
Static Friction	The force just sufficient to initiate relative motion between two bodies under load. The value of the static friction at the instant relative motion begins is termed break-away friction.	*Lubrication*
Static haulage chain	a stationary chain situated on a longwall face along which a power loader hauls itself.	*Mining*
Static modulus of elasticity	Modulus of elasticity for a polymer obtained from the slope of the initial, incremental load-deflection plot of an overall measurement of dynamic elastic properties.	*Material Process*
Static pressure	A measure of barometric pressure as if the sensor were not moving with respect to the air; Compare: total pressure; Symbols: p sub s; Typical Units: psi, lbf/in-squared; Dimensions: Mass / Time-squared * Length.	*Aeronautical Engineering*
Static Seal	A seal between two surfaces which have no relative motion.	*Lubrication*
Static Unbalance	Static unbalance is that condition of unbalance for which the central principal axis is displayed only parallel to the shaft axis	*General Engineering*
Static var (volt amperes reactive) compensator (SVC)	A device that provides fast-acting reactive power compensation (see Power factor and Power factor correction) in high-voltage electricity networks. Cheaper to build and maintain than rotating compensation devices, such as synchronous compensators (see also FACTS), SVC has no rotating parts (it is static). It compensates for fluctuations in the voltage and current of an electric grid, thereby allowing more power to flow through the network while maintaining safety margins, increasing network stability.	*Electrical*
Static Water Level	Level of water in a well not being affected by withdrawal of groundwater.	*Petroleum Engineering*
Statically Cast Pipe	Pipe formed by the solidification of molten metal in a sand mold.	*Maintenance and Repair*
Statically determinate	A statically determinate structure is one where there is only one distribution of internal forces and reactions which satisfies equilibrium. In a statically determinate structure, internal forces and reactions can be determined by considering nothing more than equations of equilibrium.	*Engineering Physics*
Statically equivalent	Two force systems are statically equivalent when their resultants are equal. Physically, this means that the force systems tend to impart the same motion when applied to an object; note that the distribution of resulting internal forces in the object may be different.	*Engineering Physics*
Statically indeterminate	A statically indeterminate structure is one where there is more than one distribution of internal forces and/or reactions which satisfies equilibrium.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	Industry
Station	A structure on the ground, perhaps containing VOR or TACAN.	*Aeronautical Engineering*
Station	An enlargement of a shaft made for the storage and handling of equipment and for driving drifts at that elevation.	*Mining*
Station	An enlargement of a shaft made of the level horizon used primarily for the storage and handling of equipment.	*Mining*
Station (electric)	A plant containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or nuclear energy into electric energy.	*Energy*
Station use	Energy that is used to operate an electric generating plant. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.	*Energy*
Stationarity	A property of probabilistic vibration if the PSD (or ASD) and the probability distribution remain constant.	*Reliability Engineering*
Stationary Platen	In an injection molding machine, the large front plate to which the front plate of the mold is secured. This platen does not normally move.	*Engineering Physics*
Stationary Seal	A mechanical seal in which the flexible members do not rotate with the shaft.	*Lubrication*
Statistical control limits	As used with Levey-Jennings and Westgard multirule types of QC procedures, these are the lines drawn on control charts to define the range of results expected due to the random error of the method. The limits are often obtained from a group of 20 or more measurements on a particular control material by calculating the mean and standard deviation, then using multiples such as the mean plus/minus 3s, 2s, or 1s to establish rejection limits for different control rules.	*Quality*
Statistical power	See Power	*Quality Engineering*
Statistical process control	A general term used to describe those aspects of a control system in which statistics are applied to determine whether observed measurements fall within the range expected due to the random variation of the process. Industrial process control procedures provided the basis for introduction of statistical control in healthcare laboratories, however, industrial process control procedures often use the mean and range of a group of control measurements (e.g., Shewhart mean and range charts), whereas healthcare applications tend towards the use individual measurements or individual-value control charts, such as the Levey-Jennings chart.	*Quality*
Statistical process control (SPC)	Use of variation analysis, with manual or computerized control charts, to detect non-normal variations in a process as quickly as possible. Often, SPC charts display upper and lower limits for part characteristics or process parameters and show trends over time, indicating when the limits were exceeded or approached and corrective actions were needed. In some closed-loop systems, adjustments are made automatically when readings indicate that a control limit is being approached.	*Quality*
Statistical Process Control (SPC)	The use of control charts to track and eliminate variables in repetitive manufacturing processes, in order to ensure that the product is of consistent and predictable quality. If a chart reveals only chance variations that are inherent in the system, the process is said to be in a state of "statistical control". If the chart reveals variations traceable to changes in equipment, procedures or workers, the process is said to be "out of control". Statistical process control differs from statistical quality control in that the former monitors manufacturing process parameters and the latter monitors product quality parameters.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Statistical quality control	Those aspects of quality control in which statistics are applied, in contrast to the broader scope of quality control which includes many other procedures, such as preventive maintenance, instrument function checks, and performance validation tests. Statistical QC procedures are often used to monitor routine performance of a method and to alert the laboratory when the performance of a method changes.	*Quality*
Statistically significant	A result that is unlikely to have happened by chance. The usual threshold for this judgment is that the results, or more extreme results, would occur by chance with a probability of less than 0.05 if the null hypothesis was true. Statistical tests produce a p-value used to assess this.	*Quality Engineering*
Statistically significant, statistically significant difference	A conclusion that the difference observed is larger than that expected due to chance (or the uncertainty or random error in the experimental data). The statement usually includes a probability level, such as "statistically significant at p = 0.05", which means there is only a 5 percent chance that the difference observed could be due to the uncertainty in the experimental data (or chance as it is often called).	*Quality*
Statistics	The branch of mathematics that deals with the collection, organization, analysis and interpretation of data.	*Reliability Engineering*
Status	An indicator of how well a system or subsystem is working.	*Aeronautical Engineering*
Status indicator	An binary indicator of a particular aspect of a device; status indicators are independent of each other; status indicators listed in this dictionary are derived from existing programs. See Also: off, warning, operations, communications, usability, initialization, test, maintenance, unknown.	*Aeronautical Engineering*
Status words	Data words reported by devices to indicate status; Each bit is defined on a device-by-device basis. The number of words vary from device to device. Status words are used by maintenance personnel and maintenance software. Present, past, and test status words are reported.	*Aeronautical Engineering*
Stay	an extra wooden bar placed below the roof bar, between the two posts of a support set, to counteract side pressure (N. Staffs.).	*Mining*
std	Standard	*General*
Steady Flow	A flow rate in the measuring section of a flow line that does not vary significantly with time.	*General Engineering*
Steady state diffusion	Mass transport that is unchanging with time.	*Material Process*
Steady state pressure regulation	A band indicating maximum and minimum pressure or a single curve with maximum deviation indicated in percent of operating pressure, all as a function of flow.	*Mechanical, Process, and Operations*
Steady State Vibration	That condition of vibration induced by an unchanging continuing periodic force.	*General Engineering*
Steady-State	The condition when all process properties are constant with time, transient responses having died out. Supervisory Control - A method of computer control	*Electrical Engineering*
Steam	Water in vapor form; used as the working fluid in steam turbines and heating systems. Also see District heat.	*Energy*
Steam (purchased)	Steam, purchased for use by a refinery, that was not generated from within the refinery complex.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Steam boiler	A type of furnace in which fuel is burned and the heat is used to produce steam.	*Energy*
Steam coal	refers to coal used in boilers to generate steam to produce electricity or for other purposes.	*Energy*
Steam electric power plant (conventional)	A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.	*Energy*
Steam expenses	The cost of labor, materials, fuel, and other expenses incurred in production of steam for electric generation.	*Energy*
Steam for heating/cooling	Steam produced at a combined heat and power plant for the purpose of heating and/or cooling space, such as district heating systems.	*Energy*
Steam from other sources	Steam purchased, transferred from another department of the utility, or acquired from others under a joint-facility operating agreement.	*Energy*
Steam Injection	Steam injection is when a series of steam bubbles is pumped into a cooler liquid. The steam bubbles condense and give up their heat to the surrounding liquid.	*Industrial*
Steam jet	a mode of ventilation invented by Mr. Goldsworthy Gurney, and first applied to the ventilation of collieries by Mr. T. E. Forster, in 1848, by which an air current was produced by the escape of high pressure steam through small orifices; the mode of action being similar to that of the blast pipe in a locomotive engine. (N. East).	*Mining*
Steam or hot water radiators or baseboards	A distribution system where steam or hot water circulates through cast-iron radiators or base boards. Some other types of equipment in the building may be used to produce the steam or hot water or it may enter the building already heated as part of a district hot water system. Hot water does not include domestic hot water used for cooking and cleaning.	*Energy*
Steam or hot-water system	Either of two types of a central space-heating system that supplies steam or hot water to radiators, convectors, or pipes. The more common type supplies either steam or hot water to conventional radiators, baseboard radiators, convectors, heating pipes embedded in the walls or ceilings, or heating coils or equipment that are part of a combined heating/ventilating or heating/air-conditioning system. The other type supplies radiant heat through pipes that carry hot water and are held in a concrete slab floor.	*Energy*
Steam plate	Mounting plate for molds. Usually cored for circulation of steam and water.	*Material Process*
Steam Tables	Steam tables are thermodynamic data tables for water/steam, used by engineers in design maintenance and operation of equipment where thermodynamic cycles involving steam are used.	*Industrial*
Steam Tempering	The production of a stable oxide on steel parts by treatment in steam at about 300oC. Improves corrosion performance and reduces friction.	*Paint and Coatings*
Steam transferred-credit	The expenses of producing steam are charged to others or to other utility departments under a joint operating arrangement.	*Energy*
Steam Trap	Steam traps are used to discharge condensate and non condensable gases with a negligible loss of live steam from the pipeline. If condensate is not rapidly removed from the system, it has the potential to cool down the working steam and form more condensate, hence loss of energy. Some steam traps are as basic as automatic valves, opening and closing, or modulating automatically.	*Industrial*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Steam Trap Management	Steam trap surveys are necessary in order to see which traps are operational, and which need servicing. A steam trap survey is a useful way to accurately measure the performance of a steam based system.	*Industrial*
Steam turbine	A device that converts high-pressure steam, produced in a boiler, into mechanical energy that can then be used to produce electricity by forcing blades in a cylinder to rotate and turn a generator shaft.	*Energy*
Steam Turbine	A mechanical device that extracts thermal energy from pressurized steam. The energy is converted into a rotary motion that drives a device.	*Reliability Engineering*
Steaming	The rate, usually expressed in Lbs/Hr or KG/Hr, at which a boiler produces steam.	*Industrial*
Stearamide	A slip additive used in polyolefins.	*Engineering Physics*
Stearates	Metallic salts of stearic acid, usually calcium, aluminum, or zinc, used in molding powders as die lubricants.	*Material Process*
Stearic acid (CH3(CH2)16COOH)	Colorless monoclinic leaflets. A lubricant, used either in the mold or incorporated in the plastic.	*Material Process*
Stearin pitch	Pitch obtained as a residue in the distillation of fatty acids, specific gravity sp. gr. 0.9 to 1.1 used in paints and as a plastics modifier.	*Material Process*
Stearine or glycerol tristearate ((C17H35 COO)3(CH2)16C3H5)	Colorless crystals from ether. A lubricant.	*Material Process*
Steel	A ferrous alloy with up to approximately 2.0 wt% carbon.	*Material Process*
Steel Alloy 4130	A low alloy steel containing molybdenum and chromium for strengthening. The carbon content is nominally 0.30% and with this low carbon content the alloy is excellent for weldability. The alloy can be hardened by heat treatment. Typically used for weld end components.	*Petroleum Engineering*
Steel Alloy 4140	Chromium, manganese, molybdenum low alloy steel providing toughness, good torsional strength good fatigue strength characteristics once heat treated. The carbon content of 0.40% makes this steel less suitable for welding than 4130. Typically used for integral spools, threaded and flanged components not requiring welding.	*Petroleum Engineering*
Steel Hardness 22 RC	22 RC, 99 RB, 237 HBW and 248 HV represent the most important upper hardness limit for non- austenitic steel for H2S service applications specified in NACE MR-O175 referenced in API Spec 6A.	*Petroleum Engineering*
Steel or Steel mill	a hand-held device, used before the invention of the safety lamp, for producing sparks for lighting underground, which included a revolving steel-rimmed wheel against which flint was pressed. Invented by Spedding of Whitehaven about 1730. Also known as a 'Flint mill'.	*Mining*
Steel tree	a steel prop. (Scot.).	*Mining*
Steel Yield Strength 35K	35,000 psi, minimum Yield Strength relates to carbon steel line pipe, not API6A material.	*Petroleum Engineering*
Steeply inclined	Said of deposits and coal seams with a dip of from 0.7 to 1 rad (40 degrees to 60 degrees).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Steer	a bull that has been castrated for better meat production	*Agriculture*
Steer	A castrated male bovine. Bull calves not kept for breeding are castrated while still young and raised for beef. Castration makes them easier to handle and produces better-flavored meat.	*Agriculture*
Steering Group	The board of trustees of The Cochrane Collaboration. See Cochrane Collaboration Steering Group (CCSG).	*Quality Engineering*
Stell	to underpin the roof or to set an anchor prop, a stell prop, e.g., for a conveyor belt or a coal cutting machine etc.	*Mining*
Stell, (Scot.)	Bullseye, early type of hand held electric lamp with a bulbous lens.	*Mining*
Stellite	Also called Stellite 6 or Alloy 6. A material used in a valve trim known for its hardness, wear and corrosion resistance. Stellite is available as a casting, bar-stock material and may be applied to a softer material such as 316 stainless steel by means of spray coating or welding.	*Industrial Engineering*
Stem	The rod or shaft transmitting motion from an operator (handwheel or gear operator) to the closure element of the valve.	*General Mechanical*
Stem	A rod or shaft used to transmit motion from an operator to the closure element of a valve.	*Mechanical*
Stem Guide	A guide bushing closely fitted to the valve stem and aligned with the seat. Good stem guiding is essential to minimize packing leakage.	*Industrial Engineering*
Stem indicator (VPI – Visible Position Indicator)	A position indicating rod supplied with gate valves. It extends from the top of the valve stem and serves to indicate the relative position of the gate.	*Mechanical*
Stem nut	A one or two-piece nut which engages the stem threads of a valve and transmits torque from an operator to the valve stem.	*Mechanical*
Stem nut (yoke nut)	The threaded nut that surrounds a reciprocating valve stem and causes the stem to move when the nut is rotated.	*General Mechanical*
Stemmer	an iron bar or copper rod used to ram clay into a shot hole, or to stem the hole, to make it water-tight; or a wooden rod used by the shotfirer for inserting the explosive cartridges and stemming materials in the shot holes.	*Mining*
Stemming	The noncombustible material used on top or in front of a charge or explosive.	*Mining*
Stemming or Ramming	the act of packing a shot hole behind the explosive charge; or the material used to plug a drill hole after blasting charges had been set. Material includes clay or molded plugs of sand called 'core plugs'.	*Mining*
Stenciling	the process by which lettering or a design through which a substance (ink, paint, or metallic powder) is forced onto a surface to be printed; commonly used to mark steel fabrications but generally does not remain after the galvanizing process	*Materials Process*
Stenting	a temporary ventilation crossgate between two headings. (N. East).	*Mining*
Stenton	a roadway driven between two coal headings.	*Mining*
Stenton wall	the pillar of coal between two winning headways. (N. East).	*Mining*
Step growth	Polymerization process involving individual chemical reactions between pairs of reactive monomers.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Step index fiber	Optical fiber with a sharp step down in index of refraction at core/cladding interface.	*Material Process*
Step Potential	Describes the electrical voltage differential between two points.	*Petroleum Engineering*
Step stressing	Increasing stresses in a series of preselected increments.	*Reliability Engineering*
Step-Lock Bolt (SLB)	The Step-Lock Bolt (SLB) is a thread form that has been modified to resist vibration loosening. The thread has several horizontal portions (i.e. no lead angle) whose purpose is to prevent torsion being developed in the bolt as a result of the loosening purpose. It is these horizontal portions that are known as steps. Published literature indicates that the thread form performs well when tested on a transverse vibration test machine. However manufacturing difficulties may prevent its widespread adoption.	*Maintenance*
Step-out drilling	Holes drilled to intersect a mineralization horizon or structure along strike or down dip.	*Mining*
Stepped longwall	a longwall system with each working place along the face being in advance of the next one to it. Known as 'step banks' in S. Wales and 'stepping' in the N. East.	*Mining*
Stepped sine testing	Sine shaking in a series of dwells. Frequency is incrementally increased or decreased.	*Reliability Engineering*
Steriles	see Dirt.	*Mining*
Sterilization	The process of killing all forms of microbial life, including vegetative bacteria, fungi, viruses and spores.	*Chemistry*
Sterilizing	In microbiology laboratories, and similar environments, an autoclave, which uses steam under pressure, is used for sterilizing.	*Industrial*
Sterlie	the drum or pulley on a self-acting incline. (Scot.).	*Mining*
Stewardship	an individual's responsibility to exercise care over possessions entrusted to him or her	*Agriculture*
Stewardship forest	A forest tract that exhibits integrated forest management to protect and enhance wildlife, timber, recreation, natural beauty, and soil and water quality.	*Forestry*
STEWARDSHIP INCENTIVE PROGRAM (SIP)	A cost-sharing program available to forest landowners who have a multi resource forest stewardship plan.	*Forestry*
Stey	steep, highly inclined. (Scot.).	*Mining*
Stickers	A brand new tire, with the manufacturer's sticker still on the "tread."	*NASCAR*
Sticking coal or sticky coal	the coal that remains stuck to the roof or floor after the main body of the seam had been blasted or picked away. Also called 'sticky tops'.	*Mining*
Stick-slip Motion	Erratic, noisy motion characteristic of some machine ways, due to the starting friction encountered by a machine part at each end of its back-and-form (reciprocating) movement. This undesirable effect can be overcome with a way lubricant, which reduces starting friction.	*Lubrication*
Sticky limit	the limit at which a soil loses its ability to adhere to a metal blade.	*Chemical*
Stiffener	a door for regulating the ventilation (S. Wales).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stiffness	This is a general term which may be applied to materials or structures. When a force is applied to a structure, there is a displacement in the direction of the force; stiffness is the ratio of the force divided by the displacement. High stiffness means that a large force produces a small displacement. When discussing the stiffness of a material, the concept is the same, except that stress substitutes for force, and strain substitutes for displacement; see modulus of elasticity.	*Engineering Physics*
Stiffness	The capacity of a material to resist strain where stressed.	*Engineering Physics*
Stiffnut	A term used to describe a lock nut which has a prevailing torque.	*Maintenance*
Stifle	noxious gas resulting from an underground fire, stink damp. (Scot.).	*Mining*
Still gas	Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane and ethane. May contain hydrogen and small/trace amounts of other gases. Still gas is typically consumed as refinery fuel or used as petrochemical feedstock. Still gas burned for refinery fuel may differ in composition from marketed still gas sold to other users.	*Energy*
Stilling	the walling of a shaft within the tubbing from the rockhead to the surface. (N. East).	*Mining*
Stimple	small timbers used as packing above and behind the main supporting timbers (S. Wales), or a short wooden prop. (Som.).	*Mining*
Stimulation	A variety of operations performed on a well to improve productivity.	*Petroleum Drilling*
Stinkdamp	the gaseous products of spontaneous combustion, including carbon monoxide and hydrogen sulfide. In coalmines hydrogen sulfide is produced by the bacterial decay of animal or vegetable matter containing sulfur, from pyrites (iron sulfide), from the exhausts of diesel engines or from the use of explosives containing sulfur.	*Mining*
Stinking coal	an impure type of coal that burns with a strong sulfurous smell.	*Mining*
Stint	the amount of work to be undertaken by one man in a shift, or a collier's task defined in terms of length of face to be hewed and loaded in the shift by a single filler or a filler and his assistant. Also called a 'length'.	*Mining*
Stip and thirl	an old name for the stoop and room method of connecting two workings.	*Mining*
Stipple	Pigmented spots up to a few millimeters in diameter, often on the upper surface of leaves.[1]	*Forestry*
Stitch Drilling (or Line Drilling)	stitch drilling is usually utilized when over cuts are not permitted or when a small opening in needed in a relatively thick slab or wall. A series of round holes are core drilled and the excess is then chipped away.	*Petroleum Drilling*
STLE	Society of Tribologist and Lubrication Engineers, formerly ASLE, American Society of Lubrication Engineers.	*Oil Analysis*
Stobb and feathers	a long narrow steel wedge, the stobb, was driven between two other wedges already inserted in the shot hole, the feathers. This method of bringing down the coal was usually used in fiery mines where it was dangerous to use explosives. A system used throughout the British coalfields under various other names such as 'Fox wedge', 'Stook and coil', 'Stook and feather' and 'Plug and feather'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stock change	The difference between stocks at the beginning of the reporting period and stocks at the end of the reporting period. Note: A negative number indicates a decrease (i.e., a drawdown) in stocks and a positive number indicates an increase (i.e., a buildup) in stocks during the reporting period.	*Energy*
Stock exchange	An organized market concerned with the buying and selling of common and preferred shares and warrants by stockbrokers who own seats on the exchange and meet membership requirements.	*Mining*
Stock Keeping Units	Number of storeroom line items with a planned stock level or one of more units. (See SKU)	*Procurement*
Stock pile	Broken ore accumulated in a heap on the surface, pending treatment or shipment.	*Mining*
Stocking	A description of the number of trees, basal area, or volume per acre in a forest stand compared with a desired level for balanced health and growth.	*Forestry*
Stocking dirt	stiff clay or soil that requires picks for its excavation (N. Staffs.).	*Mining*
Stocking end	the far end of a heading, a short distance from which there is a depression or lum in the seam filled with water causing the ventilation to be cut off from the back. (Lancs.); or a name given to the 'Geordie' safety lamp. (Leics.).	*Mining*
Stockpile	Broken ore heaped on surface, pending treatment or shipment.	*Mining*
Stocks	A supply of fuel accumulated for future use.	*Energy*
Stoke	The standard unit of kinematic viscosity in the CGS (centimeter-gram-second) system. It is expressed in square centimeters per second; 1 centistoke equals. 0.1 stoke.	*Mechanical, Process, and Operations*
Stoke (St)	Kinematic measurement of a fluid's resistance to flow defined by the ratio of the fluid's dynamic viscosity to its density.	*Oil Analysis*
Stoker coal	refers to coal that has been crushed to specific sizes (but not powdered) for burning on a grate in automatic firing equipment.	*Energy*
stolon	Horizontal, above ground stem.	*Agriculture*
Stomp	to set a prop or sprag with one end let into a hole cut in the floor or roof to receive it. (Mids.); or a wooden plug fixed in the roof from which the surveyors' lines are hung.	*Mining*
Stone	a general term used for any rock other than coal.	*Mining*
Stone age	The time when our human ancestors, or hominids, chipped stones to form weapons for hunting.	*Material Process*
Stone bind	sandy shale, (intermediate between 'bind' and 'rock').	*Mining*
Stone clunch or stone spavin	hard seatearth.	*Mining*
Stone coal	an early term for mineral coal as opposed to charcoal. -see Sea coal; or anthracite in S. Wales. Also other varieties of hard coal. A term applied to impure coal approaching carbonaceous shale in Yorks.	*Mining*
Stone drift	a drift in stone from seam to seam, perhaps driven through a fault. Also called a 'crut' or 'hard heading'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stone dust barriers	elevated platforms in the roof of the gate, some distance from the face, piled with stone dust (powdered limestone). In the event of an explosion on the face, these would fall, distributing a cloud of stone dust into the air preventing the propagation of a coal dust explosion.	*Mining*
Stone head	see Rockhead.	*Mining*
Stone Sawing Strand	A plurality of round or shaped wires helically laid about an axis.	*Wire Rope & Cable*
Stone spavin	a stone bind or sandstone with rootlets, (Yorks.).	*Mining*
Stone tubbing	stone walling backfilled with cement to form a waterproof lining to a shaft. –see also Tubbing.	*Mining*
Stonedust	powdered limestone used in stone dust barriers, or as a general dilutant to coal dust. Periodically roadways would be liberally dusted with stonedust (stone-dusting) to dilute the build up of coal dust and make it less of a hazard should there be an explosion.	*Mining*
Stoneman	see Drifter.	*Mining*
Stoner Engineering LLC	authors of makinhole.com, SES, and the inventors of Technical Hole Deviation Technology.	*Petroleum Drilling*
Stones	Any opaque or translucent inclusions embedded in a transparent or translucent plastic. See Hard spot.	*Material Process*
Stook	a small block or pillar of coal left to support the headways course during the taking of a jud or lift in pillar working.	*Mining*
Stool or Standard	the connecting piece between adjacent pans on a face conveyor.	*Mining*
Stoop	a pillar of coal or stone; or to extract a pillar. -see also Rance and Pillar; or a large prop or 'puncheon'. (Mids.).	*Mining*
Stoop and Room	a pillar and stall method of working, -see also Pillar and stall.	*Mining*
Stoop and Thirl	an old name used in Scotland for the stoop and room method of working.	*Mining*
Stooping	working the pillars. (Scot.).	*Mining*
Stop Bit	A signal following a character or block that prepares the receiving device to receive the next character or block.	*General Engineering*
Stop collar	The collar on a ball valve which restricts the ball to 90º of rotation from the fully open to the fully closed position. See Key Stop.	*Mechanical*
Stope	A step-like excavation formed by the removal of ore from around a mine shaft.	*Mining*
Stope	An excavation in a mine from which ore is being or has been extracted.	*Mining*
Stoping	The act of breaking down a stope and excavating it with a pick.	*Mining*
Stop-loss order	An arrangement whereby a client gives his broker instructions to sell a stock if and when its price drops to a specified figure on the market.	*Mining*
Stopper	a stopping (S. Staffs.).	*Mining*
Stopping	a solid wall built from timber, stone, bricks, blocks or puddled clay across a roadway or entrance to old workings to restrict access of air into the waste to prevent spontaneous combustion and to prevent water and/or gas entering the mine workings, or to alter the ventilation current.	*Mining*

Please see the Appendix for further illustration

Term	Definition	Industry
Stopping rule	A procedure that allows interim analyses in clinical trials at predefined times, whilst preserving the Type I error at some pre-specified level. See also: Sequential trial	*Quality Engineering*
Stopple (stop off)	A procedure used in the repair of a pipeline to isolate a section of line in the absence of a shut-off valve. After welding a flanged saddle to the pipe, the line is "hot-tapped" and an expanding resilient plug is inserted into the pipe bore. When repair is completed, the plug is withdrawn and a valve, installed on the saddle flange, is closed.	*Mechanical*
Stops	see Blocks.	*Mining*
Storage	the area where galvanized articles are staged for pick-up or delivery	*Materials Process*
Storage agreement	Any contractual arrangement between the responding company and a storage operator under which gas was stored for, or gas storage service was provided to, the responding company by the storage operator, irrespective of any responding company ownership interest in either the storage facilities or stored gas.	*Energy*
Storage capacity	The amount of energy an energy storage device or system can store.	*Energy*
Storage hydroelectric plant	A hydroelectric plant with reservoir storage capacity for power use.	*Energy*
Storage safety	Storage safety concerns about material, location and climatic conditions.	*Material Process*
Storage site	Spent nuclear fuel storage pool or dry cask storage facility, usually located at the reactor site, as licensed by (or proposed to be licensed by) the Nuclear Regulatory Commission (NRC).	*Energy*
Storage Temperature Range	The minimum and maximum specified temperature which may be applied to the pressure sensor without causing a permanent change in the output characteristics.	*Electrical Engineering*
Storativity	A dimensionless term representing the volume of water an aquifer releases from or takes into storage per unit surface area of the aquifer per unit change in head. It is equal to the product of specific storage and aquifer thickness.	*Petroleum Engineering*
Storeroom Inventory	Average value of stores stock carried on plant's book to support maintenance operations (includes capital spares maintained as safety stock). Also referred to as Stores Investment.	*Procurement*
Storeroom Inventory Fill Rate	The total number of storeroom issue requests filled 100% divided by the total number of storeroom issue requests.	*Procurement*
Storeroom Inventory Turnover	Annual value of storeroom materials used divided by the average storeroom inventory.	*Procurement*
Stores Investment	This term stands for the amount of capital invested in spares, strategic parts, and consumables used for maintenance.	*Procurement*
Stores Issue	The Issue And/Or Delivery Of Parts And Materials From The Store Or Warehouse.	*Plant Engineering*
Stores Requisition	The Prime Document Raised By User Departments Authorizing The Issue Of Specific Materials, Parts, Supplies Or Equipment From The Store Or Warehouse.	*Plant Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Storm door	A second door installed outside or inside a prime door creating an insulating air space. Included are sliding glass doors made of double glass or of insulating glass such as thermopane and sliding glass doors with glass or Plexiglas placed on either the outside or inside of the door to create an insulating airspace. Not included are doors or sliding glass doors covered by plastic sheets or doors with storm window covering on just the glass portion of the door.	*Energy*
Storm or multiple glazing	A building shell conservation feature consisting of storm windows, storm doors, or double- or triple-paned glass that are placed on the exterior of the building to reduce the rate of heat loss.	*Energy*
Storm window	A window or glazing material placed outside or inside a window creating an insulating air space. Plastic material over windows is counted as a storm window if the same plastic material can be used year after year or if the plastic is left in place year-round and is in good condition (no holes or tears). If the plastic material must be put up new each year, it is not counted as a storm window. It is counted as "plastic coverings." Glass or Plexiglas placed over windows on either the interior or exterior side is counted as storm windows.	*Energy*
STOU	super tractor oil universal	*Petro-Chemical Abbreviations*
Stow	to pack rubbish away underground rather than incur the expense of hauling it out of the pit.	*Mining*
Stow bords	roadways in which rubbish or other debris can be stored.	*Mining*
Stowces or Stowses	a small windlass, sometimes called a 'drawing stowces'.	*Mining*
Stowing	the action of stowing or packing away mine waste and rubble into the space that has been created by removing the coal. The benefits were two-fold, the pack helped to support the roadways which ran through the gob, and the saving in on-costs in not having to transport the waste out of the mine.	*Mining*
Straight	An angle that measures 180°.	*Math*
Straight coal	a room or stall excavated in the Thick Coal having solid coal on three sides (S. Staffs.).	*Mining*
Straight ends and walls	a method of working similar to board and pillar.	*Mining*
straight load	A shipment consisting of a single product; i.e., only potatoes, or only apples.	*Agriculture*
Straight Mineral Oil	Petroleum oil containing no additives. Straight mineral oils include such diverse products as low-cost once-through lubricants and thoroughly refined white oils. Most high-quality lubricants, however, contain additives.	*Lubrication*
Straight oil	A mineral oil containing no additives.	*Lubrication*
Straight Polarity	The arrangement of direct-current arc welding leads in which the work is the positive pole and the electrode is the negative pole of the welding arc; a synonym for direct-current electrode negative.	*Maintenance and Repair*
Straight-run gasoline	Gasoline produced by the primary distillation of crude oil. It contains no cracked, polymerized, alkylated, reformed, or visbroken stock.	*Petroleum Engineering*
Straights	drivages along the strike (S. Wales).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Straightwork or Strait work	terms used for narrow work.	*Mining*
Strain	The intensity of deformation at a point in an object. See normal strain and shear strain.	*Engineering Physics*
Strain	In tensile testing, the ratio of the elongation to the gauge length of the test specimen, that is, the change in length per unit of original length. The term is also used in a broader sense to denote a dimensionless number that characterizes the change in dimensions of an object during a deformation of flow process.	*Engineering Physics*
Strain Gage	A measuring element for converting force, pressure, tension, etc., into an electrical signal.	*General Engineering*
Strain Gage	A sensing device providing a change in electrical resistance proportional to the level of applied stress.	*Electrical Engineering*
Strain gauge	An instrument used to measure small or minute distortions caused by stress forces in mechanical components.	*Mechanical*
Strain hardening	The strengthening of a metal alloy by deformation (due to the increasing difficulty for dislocation motion through the increasingly dense array of dislocations).	*Material Process*
Strain-age embrittlement	the loss in ductility accompanied by an increase in hardness and strength that occurs when low-carbon steel (especially rimmed or capped steel) is aged following plastic deformation; the degree of embrittlement is a function of aging time and temperature, occurring in a matter of minutes at the galvanizing temperature but requiring a few hours to years at room temperature	*Materials Process*
Strainer	A pipe strainer is a filter device used to mechanically remove solids from steam and fluids, by means of a perforated or wire mesh straining element. A Steam Strainer is a cost effective way of protecting downstream equipment such as heat exchangers, pumps, compressors, meters, spray nozzles, turbines, steam traps, etc. from possible damages due to debris such as rust, pipe scale, sediment, and/or other solids.	*Industrial*
Strainer	A coarse filter element (pore size over approximately 40 ¦m)	*Lubrication*
Strain-gage transducer	A changing-resistance sensor whose signal depends upon sensitive element deformation. In an unbonded wire strain-gage accelerometer, inertia affects a mass supported by nichrome wires; the wires change resistance in proportion to acceleration. The term may include piezoresistive accelerometers.	*Reliability Engineering*
Strain-hardening exponent	The slope of a log-log plot of true stress versus true strain between the onset of plastic deformation of a metal alloy and the onset of necking. This parameter is an indicator of the alloy's ability to be deformed.	*Material Process*
Strait	a narrow stall, room or roadway in the solid coal.	*Mining*
Strand	Usually a 3-wire strand used in quarrying stone or slate.	*Wire Rope & Cable*
Strand	One of the wires of any stranded conductor.	*Electrical*
Strand Lay	The distance of advance of one strand of a spirally stranded conductor, in one turn, measured axially.	*Electrical*
Stranded Benefits	Special collection programs, renewable energy and demand side management programs, lifeline rates and other utility resources funded by a monopoly utility that may not be funded if the utility's competition does not have smaller costs.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stranded Commitment	Assets and contracts associated with shifting to competition which are above market prices and result in non-competitive conditions for the utility.	*Energy*
Stranded Conductor	A conductor composed of a group of wires, usually twisted, or of any combination of such groups of wires.	*Electrical*
Stranded costs	Costs incurred by a utility which may not be recoverable under market-based retail competition. Examples include undepreciated generating facilities, deferred costs, and long-term contract costs.	*Energy*
Stranded Costs/Stranded Assets	Costs incurred by a utility that may not be recoverable under market-based retail competition. Examples are undepreciated generating facilities, deferred costs, and long-term contract costs. They represent a utility's capital investments that are unrecoverable because of the transition to competition. The rationale for allowing stranded cost recovery is that utilities have made large investments in facilities under a regulatory system that allowed cost recovery of all prudent investments.	*Energy*
Stranded Investments or Stranded Costs	The difference between the book value of generation facilities under a regulated system, and what those facilities would be worth on the open market. In a traditional regulated rate of return system, electric utilities could recover the costs of building generation facilities, over time, on customers' bills.	*Energy*
Stranded Investments/ Costs	Utility investments in facilities built to serve customers under traditional regulation may become unrecoverable or "stranded" if those assets are deregulated and their cost of generation exceeds the actual price of power in a competitive market. These include prior investments allowed by regulators that are currently being recovered through regulated rates.	*Energy*
Stranded/Strandable Costs	These are costs inherent in the existing electric utility industry rendered potentially unrecoverable in a competitive market.	*Energy*
Strander	A machine that lays wires together helically to form a strand.	*Wire Rope & Cable*
Strap	a length of timber placed against the roof, supported by a prop at each end; or a length of corrugated steel used for supporting the roof, supported by two trees or held in place by roof bolts; or old iron rails put up between the coal face and the first row of props in longwall stalls to support a bad roof. (Mids.).	*Mining*
Strapdown inertial sensor	Accelerometers mounted to a platform fixed to the aircraft; Compare: gimbaled inertial sensor.	*Aeronautical Engineering*
Strapdown inertial sensor	Accelerometers mounted to a platform fixed to the aircraft; Compare - gimbaled inertial sensor.	*Aeronautical Engineering*
Strata	Layers of deposited rock, soil, etc. which are distinguishable from each other.	*Petroleum Engineering*
Strata	A series of beds of rock.	*Mining*
Strata bolts	see Roof bolts.	*Mining*
Strategic Conservation	Strategic conservation results from load reductions occurring in all or nearly all time periods. This strategy can be induced by price of electricity, energy-efficient equipment, or decreasing usage of equipment.	*Energy*
Strategic Load Growth	A form of load building designed to increase efficiency in a power system. This load shape objective can be induced by the price of electricity and by the switching of fuel technologies (from gas to electric).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Strategic Petroleum Reserve (SPR)	Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.	*Energy*
Strategic Plan	The Cochrane Collaboration's elected Steering Group (CCSG) developed a strategic plan to guide The Cochrane Collaboration's evolution. The initial plan was updated in May 2003: see the Collaboration web site.	*Quality Engineering*
Stratification	Division into groups. Stratification may also refer to a process to control for differences in confounding variables, by making separate estimates for groups of individuals who have the same values for the confounding variable.	*Analysis*
Stratified randomisation	A method used to ensure that equal numbers of participants with a characteristic thought to affect prognosis or response to the intervention will be allocated to each comparison group. For example, in a trial of women with breast cancer, it may be important to have similar numbers of pre-menopausal and post-menopausal women in each comparison group. Stratified randomisation could be used to allocate equal numbers of pre- and post-menopausal women to each treatment group. Stratified randomisation is performed by performing separate randomisation (often using random permuted blocks) for each strata. See also: Minimization	*Quality Engineering*
Stratigraphic test well	A geologically directed drilling effort to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such wells are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration.	*Energy*
Stratigraphy	Strictly, the description of bedded rock sequences; used loosely, the sequence of bedded rocks in a particular area.	*Mining*
Stratosphere	The region of the upper atmosphere extending from the tropopause (8 to 15 kilometers altitude) to about 50 kilometers. Its thermal structure, which is determined by its radiation balance, is generally very stable with low humidity.	*Energy*
Stratum	a horizontal layer of geologic material of similar composition, especially one of several parallel layers arranged one on top of another.	*Chemical*
Straw fuse	a straw filled with powder to act as a fuse for igniting a blasting charge. If paper was used it was called a 'paper squib', 'squib' or 'Germans'.	*Mining*
Streak	A diagnostic characteristic of minerals, where scratching a sample on a piece of unglazed porcelain leaves powder of a characteristic color.	*Mining*
Streak, Streek or Streatch	all terms used in Scotland for the strike of a coal seam.	*Mining*
Streaks	Narrow strips or bands of surface haze.	*Material Process*
Stream	A general term for a body of flowing water; natural water course containing water at least part of the year. In hydrology, it is generally applied to the water flowing in a natural channel as distinct from a canal.	*Petroleum Engineering*
Streamflow	The water discharge occurring in a natural channel. A more general term than runoff, streamflow may be applied to discharge whether or not it is affected by diversion or regulation.	*Petroleum Engineering*
Stream-flow	The rate at which water passes a given point in a stream, usually expressed in cubic feet per second.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Streamline flow	(See laminar flow.)	*Mechanical, Process, and Operations*
Streamline-diffusion stabilization	A numerical technique for stabilization of the numeric solution to a convection-dominated PDE by artificially adding diffusion in the direction of the streamlines.	*Chemical*
STREAMSIDE MANAGEMENT ZONE (SMZ)	An area adjacent to a stream in which vegetation is maintained or managed to protect water quality.	*Forestry*
Street certificate	A certificate representing ownership in a specified number of shares that is registered in the name of some previous owner who has endorsed the certificate so that it may be transferred to a new owner without referral to transfer agent.	*Mining*
Street ell	A 90º pipe fitting with male thread and female threaded or socket weld ends.	*Mechanical*
Street timbering	the setting of additional posts, sprags and longitudinal bars to reinforce the prop and bar supports in a roadway. Also called 'double timbering'.	*Mining*
Strength	A very general term that may be applied to a material or a structure. In a material, strength refers to a level of stress at which there is a significant change in the state of the material, e.g., yielding or rupture. In a structure, strength refers to a level of level of loading which produces a significant change in the state of the structure, e.g., inelastic deformations, buckling, or collapse.	*Engineering Physics*
Strength Grade	See PROPERTY CLASS	*Maintenance*
Strength of Inference	The likelihood that an observed difference between groups within a study represents a real difference rather than mere chance or the influence of confounding factors, based on both p values and confidence intervals. Strength of inference is weakened by various forms of bias and by small sample sizes.	*Analysis*
Strength-to-weight ratio	See Specific strength.	*Material Process*
Stress	The intensity of internal force acting at a point in an object. Stress is measured in units of force per area. See shear stress and normal stress.	*Engineering Physics*
Stress	The force producing or tending to produce deformation divided by the area over which the force is applied. As generally defined in tensile testing (engineering stress), stress is the ratio of applied load to the original cross-sectional area. True stress (instantaneous stress) is applied load per instantaneous cross-sectional area.	*General Engineering*
Stress Area	The effective cross sectional area of a thread when subjected to a tensile force. It is based upon a diameter which is the mean of the pitch (or effective) and the minor (or root) diameters of the thread. The use of this diameter stems from the work of E. M. Slaughter in the 1930's. He completed carefully controlled tests using various sizes of standard threads and compared their strength with machined bars made from the same bar of material. He found that this mean diameter gave results that agreed with the tensile test results to within about 3%. The error on the minor and pitch diameters was about 15%. Tests completed subsequent to these by other investigators have also shown that the stress diameter is a reasonable approximation to a thread's tensile strength. (Reference: 'Tests on Thread Sections Show Exact Strengthening Effect of Threads.' by E. M. Slaughter, Metal Progress, vol 23, March 1933 pp. 18-20)	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stress cell	An electrochemical cell in which corrosion can occur due to the presence of variations in the degree of mechanical stress within a metal sample.	*Material Process*
Stress Concentration	The amplification of the level of an applied stress in the region of a notch, void, or inclusion.	*Engineering Physics*
Stress Cone	A conical section built up of insulating tapes or a pennant to relieve the stress at the terminal end of the cable.	*Electrical*
Stress corrosion	Stress corrosion is the failure by cracking when a metal is under stress and exposed to a corrosive environment is called stress corrosion. Stress corrosion cracking phenomenon occurs as a result of the combined effects of the residual or applied stresses plus corrosion.	*Material Process*
Stress Corrosion Cracking	A cracking process that requires the simultaneous action of a corrodent and sustained tensile stress.	*Paint and Coatings*
Stress intensity factor	Parameter indicating the greater degree of mechanical stress at the tip of a pre-existing crack in a material under a mechanical load.	*Material Process*
Stress Relaxation	A significant problem with bolting at high temperatures is a phenomenon known as stress relaxation. Creep occurs when a material is subjected to high temperature and a constant load. Stress relaxation occurs when a high stress is present that is relieved over time; the stress is relaxed with a subsequent reduction in the bolt's preload. The only way to minimize the effects of stress relaxation is to use materials that have an adequate resistance to it at the product's operating temperature. The effect of bolt stress relaxation is to reduce the clamp force provided by the bolts; this phenomena alone will not fully loosen a joint.	*Maintenance*
Stress Relief	See 'Post Weld Heat Treatment'	*Petroleum Engineering*
Stress Relieving	Uniform heating of a structure or portion thereof to a sufficient temperature to relieve the major portion of the residual stresses, followed by uniform cooling.	*Maintenance and Repair*
Stress resultant	A system of forces which is statically equivalent to a stress distribution over an area.	*Engineering Physics*
Stress Screening	A modern electronics production tool for precipitating latent defects such as poorly-soldered connections. Utilizes random vibration + rapid temperature ramping.	*Reliability Engineering*
Stress testing	Testing units at stresses higher than what would be encountered during normal operating conditions, usually to induce failures.	*Reliability Engineering*
Stress-corrosion-cracking	A combined	*Material Process*
Stress-corrosion-cracking	A combined mechanical and chemical failure mechanism in which a noncyclic tensile stress leads to the initiation and propagation of fracture in a relatively mild chemical environment.	*Material Process*
Stress-relieving	heating to a suitable temperature, holding long enough to reduce residual stresses and then cooling slowly enough to minimize the development of new residual stresses	*Materials Process*
Stress-rupture-failure	See Creep-rupture failure.	*Material Process*
Stress-strength interference	A method by which the probability of failure of an item is calculated by superimposing the distribution of the item's strength with the distribution of the stress it will encounter during normal usage.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Stret or Stretch places	a term used for straight work (N. Staffs.); or meaning solid, close or compact, e.g., gobbed stret, packed stret (Mids.).	*Mining*
Stretch	The elongation of a wire rope under load.	*Wire Rope & Cable*
Stretcher	a prop or a sprag set in a horizontal or near horizontal position.	*Mining*
Striae Surface	internal threadlike inhomogeneities in a transparent plastic.	*Material Process*
Striations	Prominent parallel scratches left on bedrock by advancing glaciers.	*Mining*
Strike	A find; a valuable mineral development made in an unexpected manner.	*Mining*
Strike	The direction, or bearing from true north, of a vein or rock formation measure	*Mining*
Strike Alert	A warning system on all NAVIGATORs set off by contact with an electrical power source.	*Petroleum Engineering*
Strike face	a face advancing in the direction of the line of strike.	*Mining*
Striking	originally the withdrawing of timber roof supports from the waste. The name was carried on to cover the work of the men who moved forward the hydraulic roof supports on a machine loaded face; or the digging up of the floor of a roadway to make more headroom. (Som.).	*Mining*
String	A sequence of characters.	*General*
String test	In a string test, a complete drive train, comprising a frequency converter, a motor and an application, such as a pump or a compressor, are tested in a factory situation that simulates site conditions. String tests are performed prior to delivery to verify the performance and functionality of the equipment and to ensure that the units comply with specifications under the working conditions of the destination plant. String tests are time consuming and expensive but often reduce time spent on erection and commissioning on the customer's premises.	*Electrical*
String-Based Preventive Maintenance	Usually, this refers to simple preventive maintenance tasks that are strung together on several machines. Examples of string PM's include lubrication, filter change, or vibration routes.	*Maintenance*
Stringer	A narrow vein or irregular filament of a mineral or minerals traversing a rock mass.	*Mining*
Stringer Bead	A type of weld bead made by moving the electrode in a direction essentially parallel to the axis of the bead. There is no appreciable transverse oscillation of the electrode. The deposition of a number of string beads is known as string beading and is used extensively in the welding of austenitic stainless-steel materials. See also Weave Bead.	*Maintenance and Repair*
Stringing deals	see Cribs.	*Mining*
Strip	Steel rolled out into long, thin, flat strips. Steel up to about 24 inches wide is strip or narrow strip; above this, wide strip. The dividing line is sometimes said to be 18 inches, but 24 inches is more generally accepted.	*Metallurgy*
Strip mine	An open cut in which the over burden is removed from a coal bed prior to the removal of coal.	*Energy*
Strip mining	See Opencast.	*Mining*

Term	Definition	*Industry*
Strip mining (surface)	A method used on flatter rain to recover coal by mining long strips successively; the material excavated from the strip being mined is deposited in the strip previously mined.	*Energy*
Strip or stripping ratio	The amount of overburden that must be removed to gain access to a unit amount of coal. A stripping ratio may be expressed as (1) thickness of overburden to thickness of coal, (2) volume of overburden to volume coal, (3) weight of overburden to weight of coal, or (4) cubic yards of overburden to tons of coal. A stripping ratio commonly is used to express the maximum thickness, volume, or weight of overburden that can be profitably removed to obtain a unit amount of coal.	*Energy*
Strip packing	building pack walls of limited width at intervals in the waste at right angles to the face in an attempt to reduce subsidence at the surface.	*Mining*
Stripper	Specially formulated detergent that breaks the bond of floor wax and finish when used as directed, without damaging flooring material.	*Chemistry*
Stripper plate	A plate that strips a molded piece from core pins or force plugs, operated by the opening of the mold.	*Material Process*
Stripper Production	The final stage of production in the life of an oil well or oil field. This stage is characterized by low rates of production, sometimes no more than a barrel of oil per day.	*Petroleum Drilling*
Stripper well	An oil or gas well that produces at relatively low rates. For oil, stripper production is usually defined as production rates of between 5 and 15 barrels of oil per day. Stripper gas production would generally be anything less than 60 thousand cubic feet per day.	*Energy*
Stripper-Plate	A plate that strips a molded piece from core pins or force plugs. The plate is actuated by the opening of the mold.	*Engineering Physics*
Stripping	Removal of molded pieces from a die or mold, also the removal of special fractions from mixed liquids through distillation.	*Material Process*
Stripping ratio	The ratio of tons removed as waste relative to the number of tons of ore removed from an open-pit mine.	*Mining*
Stroke	See travel.	*Industrial Engineering*
Stroke	The distance the plunger translates during a change in state.	*Mechanical*
Strouhal Number	A nondimensional parameter important in vortex meter design defined as - s = Fh/V where f = frequency, V = velocity, and h = a reference length	*Electronic Process*
Structural	steel member of specific cross-sectional dimensions used in fabrication and/or construction, (e.g. H-beam, angle, I-beam, W-flange)	*Materials Process*
Structural Attachments	Brackets, clips, lugs, or other elements welded, bolted, or clamped to the pipe support structures, such as stanchions, towers, building frames, and foundation. Equipment such as vessels, exchangers, and pumps is not considered to be pipe-supporting elements.	*Maintenance and Repair*
Structural biomaterial	material designed to bear loads and provide support for a living organism, such as bones	*Physics*

Term	Definition	*Industry*
Structural Bolt	A structural bolt is a heavy hexagon head bolt having a controlled thread length intended for use in structural connections and assembly of such structures as buildings and bridges. The controlled thread length is to enable the thread to stop before the joint ply interface to improve the fastener's direct shear performance. This term is used in civil and structural engineering but is not frequently used in mechanical engineering.	*Maintenance*
Structural composite	See Honeycomb structure.	*Material Process*
Structural Failure	the loss of the load-carrying capacity of a component or member within a structure or of the structure itself. Structural failure is initiated when the material is stressed to its strength limit, thus causing fracture or excessive deformations. The ultimate failure strength of the material, component or system is its maximum load-bearing capacity. When this limit is reached, damage to the material has been done, and its load-bearing capacity is reduced permanently, significantly and quickly. In a well-designed system, a localized failure should not cause immediate or even progressive collapse of the entire structure. Ultimate failure strength is one of the limit states that must be accounted for in structural engineering and structural design.	*Metallurgy*
Structural material	Engineering material used primarily for its mechanical properties relative to a structural application.	*Material Process*
Structural model	An idealization for analysis purposes of a real or conceived structure. A structural model includes boundaries limiting the scope of the analysis. Supports occur at these boundaries, representing things which hold the structure in place.	*Engineering Physics*
Structural steel shape	piece of steel of any specific design accepted as standard by the structural branch of the steel industry	*Materials Process*
Structured Text	An IEC1131-1 programming/configuration language.	*Control Engineering*
Strum	the length of the face. (Scot.).	*Mining*
Strut	a wooden board, prop or steel tube placed between steel arched roof supports to keep them at an even distance apart and stop sideways movement.	*Mining*
Stubbin	the digging up of the floor to mine the fireclay or to make more headroom along the roadways. (Lancs.) -see also Dinting, Beating up and Pavement brushing.	*Mining*
Stubbs	see Hubbs. Stud, the last few yards of a pillar to be stripped out. (Lancs.).	*Mining*
Stud	A fastener which is threaded at both ends with an unthreaded shank in between. One end (which often has a thread tolerance which results in more thread interference) is secured into a tapped hole, the other is used with a nut. (See M. Holloway)	*Maintenance*
Stud	A bolt, threaded on both ends, often used in bolting together bodies and bonnets or bodies and closures.	*General Mechanical*
Stud	A male horse kept for breeding.	*Agriculture*
Stud Bolts	Stud bolts for Open Face Flanges that are fully threaded end to end (with no bolt head).	*Petroleum Engineering*
Student's t-test	See t test	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Stuffing box	The annular chamber provided around a valve stem in a sealing system into which deformable packing is placed. Sometimes called packing chamber.	*General Mechanical*
Stuffing box	The annular chamber provided around a valve stem in a sealing system into which deformable packing is introduced. See "Packing", "Gland".	*Mechanical*
Stugg	to break down the coal using only a pick. (Scot.).	*Mining*
Stull	Platforms of timbers between levels for strengthening the mine by supporting the walls, and for storing ore and depositing wall rock and waste material.	*Mining*
Stull Timbers	The large timbers placed across the vein or lode from one wall to another, to support the lagging upon which the ore or waste is placed.	*Mining*
Stump	Any small pillar.	*Mining*
Stumpage	Trees as they stand uncut in the woods (on the stump).	*Forestry*
Stumping	a type of pillar and stall working. (Lancs.).	*Mining*
Style Guide, Cochrane	A guide to issues of style arising in the preparation of Cochrane Reviews.	*Quality Engineering*
Stylet	A small, stiff, needlelike tube inserted into a food source to obtain liquid food. [1]	*Forestry*
Styrene	A colorless, toxic liquid with a strong aromatic aroma. Insoluble in water, soluble in alcohol and ether; polymerizes rapidly; can become explosive. Used to make polymers and copolymers, polystyrene plastics, and rubber.	*Energy*
Styrene Acrylonitrile	Styrene Acrylonitrile is typically used in housewares and in the interior trim and instrument panels of automobiles. Styrene Butadiene Latexes and Other Styrene Copolymers. Styrene Butadiene Latexes are commonly found in coatings, paints, and floor polishes. Styrene Butadiene Latexes are commonly found in coatings, paints, and floor polishes.	*Material Engineering*
Styrene or vinylbenzene (C6H5CH CH2)	Colorless liquid b. p. 290 ° F (143.33 ° C). Derived from coal or natural gas. One of the raw materials for synthetic rubber for tires. Monomer for polystyrene plastics.	*Material Process*
Styrene-Acrylonitrile Copolymer (SAN)	Copolymers of about 70 percent styrene and 30 percent acrylonitrile, with higher strength, rigidity, and chemical resistance than straight polystyrene. They may be blended with butadiene, either as terpolymer or by grafting onto the butadiene, to make ABS resins.	*Engineering Physics*
Stythe	an old term for afterdamp or chokedamp.	*Mining*
Subaward	A subaward is issued to a sub-recipient (e.g. co-proposer, junior partner) performing a portion of a University research project or program that is funded by a Sponsoring Agency. Performance and compliance requirements are akin to those under the Prime Agreement, however the award comes not from the Sponsoring Agency but from the University as a "pass-through." The University's Sponsored Projects Office has been delegated the authority to prepare and negotiate all subawards for collaborative research.	*Procurement*
Subbituminous	Coal of a rank intermediate between lignite and bituminous.	*Mining*
Subbituminous coal	A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).	
Sub-bituminous	A black coal, intermediate between lignite and bituminous.	*Mining*
Sub-cavity molds	A mold having a common loading cavity for a multiple number of pieces.	*Material Process*
Subcompact/compact passenger car	A passenger car containing less than 109 cubic feet of interior passenger and luggage volume.	*Energy*
Subcontract	A purchase contract issued to a for-profit entity under a federal prime contract or extramural grant to implement or procure research or other work necessary to perform the prime award requirements or scope of work. Subcontracts contain special terms and conditions and flowdown provisions, as required by the extramural prime award, which are unique and appropriate to the individual project.	*Procurement*
Subdivision	A prescribed portion of a given State or other geographical region.	*Energy*
Sub-division	a piece of land to be divided into smaller lots, typically for housing	*Agriculture*
Sub-group analysis	An analysis in which the intervention effect is evaluated in a defined subset of the participants in a trial, or in complementary subsets, such as by sex or in age categories. Trial sizes are generally too small for sub-group analyses to have adequate statistical power. Comparison of sub-groups should be by test of interaction rather than by comparison of p-values. Sub-group analyses are also subject to the multiple comparisons problem. See also: Interaction, Multiple comparisons, Stratification	*Quality Engineering*
Subharmonic	A sinusoidal quantity having a frequency that is an integral submultiple (′1/2, ′1/3, etc.) of a fundamental (′1) frequency.	*Reliability Engineering*
Sublevel	A level or working horizon in a mine between main working levels.	*Mining*
Sublimation	The change of state of a materiel from solid to vapor and back to solid without going through a liquid state.	*Electrical Engineering*
Submarine Gate	Gate where the opening from the runner into the mold is located below the parting line or mold surface; as opposed to conventional edge gating, where the opening is machined into the surface of the mold. With submarine gates, the item is broken from the runner system on ejection.	*Engineering Physics*
Submerged Arc Welding (SAW)	An arc welding process that produces coalescence of metals by heating them with an arc or arcs drawn between a bare metal electrode or electrodes and the base metals. The arc is shielded by a blanket of granular fusible material. Pressure is not used, and filler metal is obtained from the electrode and sometimes from a supplementary welding rod, flux, or metal granules.	*Maintenance and Repair*
Submersible Pump	Long, narrow pumps that fit into the well and sit below water level. They are connected to the surface	*Petroleum Engineering*
Submersible service	Underwater or subsea installation. Valves require special treatment to protect against corrosion and external seawater pressure.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Submetered data	End-use consumption data obtained for individual appliances when a recording device has been attached to the appliance to measure the amount of energy consumed by the appliance.	*Energy*
Submetering	Metering of individual units in multi-unit properties.	*Electrical*
Sub-plate (back plate)	An auxiliary mounting for a hydraulic component providing a means of connecting piping to the component.	*Mechanical, Process, and Operations*
Sub-plate valve mounting	The valve is mounted to a plate which provides straight through top and/or bottom ports.	*Mechanical, Process, and Operations*
Subsalt	Refers to oil prospects that lie below a salt layer.[5]	*Petroleum Drilling*
Subsea	Oilfield wellhead equipment used offshore and below the surface of the water.	*Petroleum Engineering*
Subsidence	The gradual sinking, or sometimes abrupt collapse, of the rock and soil layers into an underground mine. Structures and surface features above the subsidence area can be affected.	*Mining*
Subsidiary	An entity directly or indirectly controlled by a parent company which owns 50% or more of its voting stock.	*Energy*
Subsidiary company	A company in which the majority of shares (a controlling position) is held by another company.	*Mining*
Substation	Substations are key installations in the power grid. They house equipment for the protection and control of electrical power transmission and distribution, including power transformers, switchgear and measuring equipment. (See also Reactive power, Power factor correction, Circuit breaker and Switchgear.)	*Electrical*
Substation automation	The various technologies, methods and equipment used for the automatic operation of substations. This includes control and protection functions.	*Electrical*
Substitutional solid solution	An atomic scale combination of more than one kind of atom, with a solute atom substituting for a solvent atom at an atomic lattice site.	*Material Process*
Substrate	The parent or base material to which the coating is applied.	*Paint and Coatings*
Subsurface	Earth material (as rock) near but not exposed at the surface of the ground.	*Petroleum Drilling*
Subsychronous	Components of a vibration signal whose frequency is less than 1x shaft speed.	*Reliability Engineering*
Subsystem Criticality	A list of all the subsystems within a model, ranked according to the severity of their individual effect on the performance of the system. Each subsystem contains several events, grouped into a common system.	*Reliability Engineering*
Subtransmission	A set of transmission lines of voltages between transmission voltages and distribution voltages. Generally, lines in the voltage range of 69 kV to 138 kV.	*Energy*
Succession	The natural sequence of plant community replacement beginning with bare ground and resulting in a final, stable community in which a climax forest is reached.	*Forestry*
Succinic acid (COOH(CH2)2COOH)	Colorless needles from alcohol. Used in much the same way as succinic acid.	*Material Process*
Succinic anhydride (CH2CO)2O	Colorless needles from alcohol. Used in much the same way as succinic acid.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Suck Back	Technique used to partially clear the resin from the injection nozzle after the injection cycle by pulling the screw rearward, thus drawing the resin back into the injector.	*Engineering Physics*
Sucking insects	Insects that insert their mouthparts into plant tissues and withdraw nutrients and fluids through stylets.[1] Fin.	*Forestry*
sucrose	Glucose linked to fructose. It is the sugar that is translocated in the phloem of most plants.	*Agriculture*
Sucrose or cane sugar (C12H22O11)	Colorless monoclinic crystals, a modifier incorporated in some plastics to reduce brittleness, increase transparency, etc..	*Material Process*
Suction filter	A pump intake-line filter in which the fluid is below atmospheric pressure.	*Oil Analysis*
Suction line	The hydraulic line connecting the pump inlet port to the reservoir or sump. SUMP - A reservoir.	*Mechanical, Process, and Operations*
Sudden Failure	A failure that could not be anticipated by previous examination or monitoring.	*Reliability Engineering*
Suffolk	Suffolk	*Agriculture*
Suffolk	A breed of sheep developed by crossing Southdown rams on Norfolk Horned ewes.	*Agriculture*
Suitable Sealant	A sealant that is compatible with the quality of water found in the well.	*Petroleum Engineering*
SULEV	super ultra-low emission vehicle	*Petro-Chemical Abbreviations*
Sulfated ash	The ash content of fresh, compounded lubricating oil as determined by ASTM Method D 874. Indicates level of metallic additives in the oil.	*Oil Analysis*
Sulfate-reducing bacteria	Group of anaerobic bacteria capable of reducing sulfates to sulfides, especially hydrogen sulfide, a very corrosive gas.	*Chemical Engineering*
Sulfonamide	An amide of sulfonic acids. in combination, such as a mixture of o-toluene with p-toluene sulfonamide, used as plasticizers for protein products.	*Material Process*
Sulfonate	A hydrocarbon in which a hydrogen atom has been replaced with the highly polar (SO2OX) group, where X is a metallic ion or alkyl radical. Petroleum sulfonates are refinery by-products of the sulfuric acid treatment of white oils. Sulfonates have important applications as emulsifiers and chemical intermediates in petrochemical manufacture, and substituted sulfonates are widely used as corrosion inhibitors. Synthetic sulfonates can be manufactured from special feedstocks rather than from white oil base stocks.	*Lubrication*
Sulfone Polymers	Sulfone Polymers are found in automotive parts and electronics. The foam polyurethanes have excellent thermal insulating properties and, therefore, are used in building insulation. In addition, they have good dimensional stability and compressive strength, making them ideal for use in trucks, refrigerators, and boats for floatation purposes. They can also be very cushiony with energy-absorbing properties and durability. Therefore, they are also used as carpet underlay, in furniture, in automobile seating, in bedding, in packaging, and as safety padding.	*Material Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sulfur	A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.	*Energy*
Sulfur	A common natural constituent of petroleum products. While certain sulfur compounds are commonly used to improve the EP, or load-carrying, properties of an oil, high sulfur content in a petroleum product may be undesirable as it can be corrosive and create an environmental hazard when burned. For these reasons, sulfur limitations are specified in the quality control of fuels, solvents, etc.	*Lubrication*
Sulfur dioxide (SO_2)	A toxic, irritating, colorless gas soluble in water, alcohol, and ether. Used as a chemical intermediate, in paper pulping and ore refining, and as a solvent.	*Energy*
Sulfur hexafluoride (SF_6)	A colorless gas soluble in alcohol and ether, and slightly less soluble in water. It is used as a dielectric in electronics. It possesses the highest 100-year Global Warming Potential of any gas (23,900).	*Energy*
Sulfur oxides (SO_x)	Compounds containing sulfur and oxygen, such as sulfur dioxide (SO_2) and sulfur trioxide (SO_3).	*Energy*
Sulfuric acid	solution used in the cleaning stages of the galvanizing process that consists of two hydrogen ions and one sulfate ion (chemical formula: h2SO4) in a water mixture	*Materials Process*
Sulfuric acid (H2SO4)	Colorless oily liquid or hexagonal crystals. An acid catalyst and a reagent used in preparing dyes and other compounds to be used in plastics.	*Material Process*
Sulfuric acid treating	A refining process in which unfinished petroleum products such as gasoline, kerosene, and lubricating oil stocks are treated with sulfuric acid to improve their color, odor, and other characteristics.	*Petroleum Engineering*
Sulfurization	Combining sulfur compounds with petroleum lubricants.	*Petroleum Engineering*
Sulfurized Oil	Oil to which sulfur or sulfur compounds have been added.	*Lubrication*
Sulfidation	The reaction of a metal or alloy with a sulfur containing species to produce a sulfur compound that forms on or beneath the surface of the metal or alloy.	*Paint and Coatings*
Sulfide dust explosions	An underground mining hazard involving the spontaneous combustion of airborne dust containing sulfide minerals.	*Mining*
Sulfide	A compound of sulfur and some other element.	*Mining*
Sulfur dioxide	A gas liberated during the smelting of most sulfide ores; either converted into sulfuric acid or released into the atmosphere in the form of a gas.	*Mining*
Sulfuret	Combination of sulfur with a metallic, earthy or alkaline base.	*Mining*
Summer and winter peaking	Having the annual peak demand reached both during the summer months (May through October) and during the winter months (November through April).	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Summer Peak	The greatest load on an electric system during any prescribed demand interval in the summer.	*Energy*
Summing Point	Any point at which signals is added algebraically.	*Process Control*
Sump	a pit or depression where liquids drain, collect, or are stored.	*Chemical*
Sump	An underground excavation where water accumulates before being pumped to surface.	*Mining*
Sump in	to break into the solid coal with a cutter jib prior to cutting along the face. Also called 'to jib in'.	*Mining*
Sump or Sumph	a lodgement for accumulating water in a mine prior to pumping it to the surface, usually at the base of a shaft; or that part of the shaft below the lowest landing, the bottom of the shaft. –see also Back end.	*Mining*
Sump or Sumph	A pit sunk at the bottom of a mine to collect the water. It can be the bottom of a shaft.	*Mining*
Sumpers	shotholes drilled, usually inclined, in the centre of the shaft during sinking. Also called 'sumping holes'.	*Mining*
Sumping	To force the cutter bar of a machine into or under the coal. Also called a sumping cut, or sumping in.	*Mining*
Sumping drum	a shearer drum fitted with additional picks on its face side to enable it to be advanced into the coal to the required depth of web.	*Mining*
Sunk cost	Part of the capital costs actually incurred up to the date of reserves estimation minus depreciation and amortization expenses. Items such as exploration costs, land acquisition costs, and costs of financing can be included.	*Energy*
Sunk Cost	Any cost that has already been incurred and that cannot be changed by any decision made now or in the future.	*Procurement*
Super Cooling	The cooling of a liquid below its freezing temperature without the formation of the solid phase.	*General*
Super Heating	1. The heating of a liquid above its boiling temperature without the formation of the gaseous phase. 2. The heating of the gaseous phase considerably above the boiling-point temperature to improve the thermodynamic efficiency of a system.	*Electronic Process*
Superalloy	Broad class of metals with especially high strength at elevated temperatures.	*Material Process*
Supercharge	(See charge)	*Mechanical, Process, and Operations*
Superclean	10 particles >10 micron per milliliter	*Oil Analysis*
Superconducting magnet	Magnet made from a superconducting material.	*Material Process*
Superconductivity	The abrupt and large increase in electrical conductivity exhibited by some metals as the temperature approaches absolute zero.	*Energy*
Superconductor	Material that is generally a poor conductor at elevated temperature but, upon cooling below a critical temperatures, has zero resistivity. 1-2-3 superconductor The material YBa2Cu3O7, the material which is the most commonly studied ceramic superconductor and whose name is derived from the three metal ion subscripts.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Superconductor	Superconductor Material that is generally a poor conductor at elevated temperature but, upon cooling below a critical temperatures, has zero resistivity. 1-2-3 superconductor The material YBa2Cu3O7, the material which is the most commonly studied ceramic superconductor and whose name is derived from the three metal ion subscripts.	*Material Process*
Super-conductors	under special conditions, offer no electrical resistance, so electricity can flow indefinitely. More generally, a conductor refers to a material that can transmit electricity, heat or sound.	*Electrical*
Supercritical power plant	A supercritical power plant is a thermal electricity generating station that uses steam at extremely high temperature and pressure to generate electricity with improved efficiency. Above 374°C and 22.064 MPa (the "critical" point of water), water simply exists as super-heated steam, which can be used to drive the turbines of a generator more efficiently than steam at a lower (subcritical temperature). Operating under such conditions requires the use of extremely robust equipment. The specifications for products used in supercritical plants are higher than those used in subcritical plants.	*Electrical*
Supergrid	Trademarked by Airtricity in 2006, the term Supergrid refers to a pan-European subsea power grid. The term is widely used in the context of renewable energy. The Desertec project, for example would rely on a supergrid for the transmission of offshore wind power from European coastlines, solar power from northern Africa and southern Europe, together with hydro power from northern Europe.	*Electrical*
Superheated Steam	Steam that has been imparted with extra heat whilst heating it from a dry saturated condition. Also the corresponding rise in temperature.	*Industrial*
Superplastic forming	Method for forming complex shaped metal parts from certain fine grained alloys at elevated temperatures.	*Material Process*
Supervisory Control and Data Acquisition (electric)	A system of remote control and telemetry used to monitor and control the transmission system. NERC definition	*Energy*
Supplement	The angle that needs to be added to a given angle to give 180°.	*Math*
Supplemental gas	Any gaseous substance introduced into or commingled with natural gas that increased the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke-oven gas, still gas, manufactured gas, biomass gas, or air or inerts added for Btu stabilization.	*Energy*
Supplemental gaseous fuels supplies	Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.	*Energy*
Supplemental Steel	Structural members that frame between existing building framing steel members and are significantly smaller than the existing steel.	*Maintenance and Repair*
Supplementary	Two angles that add up to 180°.	*Math*
Supplier	A person or corporation, generator, broker, marketer, aggregator or any other entity, that sells electricity to customers, using the transmission or distribution facilities of an electric distribution company.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Supplier Evaluation	Objective analysis of either existing suppliers by evaluating past performance, or as a preliminary assessment of potential new suppliers. Suppliers typically are evaluated on the basis of their technical quality, production capabilities, delivery, service, cost, and managerial capabilities.	*Procurement*
Supplier JIT deliveries	See "JIT delivery."	*Quality*
Supplier partnerships	Agreements with suppliers whereby operations are linked together, information is openly shared, problems and issues are commonly solved, and joint performance is mutually approved. They usually include multiyear purchase agreements.	*Quality*
Supplies	anything such as rings, timber, stonedust, lagging boards, chock wood, props etc. needed in the mine.	*Mining*
Supply	The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.	*Energy*
Supply Chain	The system of organizations, people, technologies, activities, information and resources that are involved in moving (or transforming) a product or service from its basic form to its finished or end form.	*Reliability Engineering*
Supply Chain Management	Supply chain management deals with the management of materials, information, and financial flows in a network consisting of suppliers, manufacturers, distributors, and customers. The coordination and integration of these flows within and across companies are critical in effective supply chain management. The ultimate goal is to manage effectively and efficiently the activities of design, manufacturing, distribution, service, and recycling of their products and services to their customers. (From Stanford University)	*Procurement*
Supply current	The typical current that must be supplied to a sensor (along with the supply voltage) to make it function properly.	*Reliability Engineering*
Supply Current	The units = Amps or milliamps. The amount of current necessary to maintain operation of a photoelectric control, proximity sensor or control base. Sometimes referred to as Current Consumption.	*Electrical Engineering*
Supply gate	the roadway at the opposite end of a longwall face to the Main gate. Used for taking supplies to the face, it is also usually the return airway. -see also Return gate and Tailgate.	*Mining*
Supply Header	Portion of the water supply system, which contains the valves and distribution boxes in a crossflow tower or the lateral pipes in a counterflow tower.	*Facility Engineering*
Supply Pressure	The pressure at the supply port of a device such as a controller, positioner or transducer. Common values of control valves supply pressure are 20 psig. for a 3-15 psig. output and 35 psig. for a 6-30 psig. output.	*Industrial Engineering*
Supply source	May be a single completion, a single well, a single field with one or more reservoirs, several fields under a single gas-purchase contract, miscellaneous fields, a processing plant, or a field area; provided, however, that the geographic area encompassed by a single supply source may not be larger than the state in which the reserves are reported.	*Energy*
Supply Voltage	The units + Volts. The range of power required to maintain proper operation of a photoelectric control, proximity sensor or control base. The difference in potential (or range of difference in potential) necessary to operate the unit.	*Electrical Engineering*

Term	Definition	*Industry*
Supply, petroleum	A set of categories used to account for how crude oil and petroleum products are transferred, distributed, or placed into the supply stream. The categories include field production, refinery production, and imports. Net receipts are also included on a Petroleum Administration for Defense (PAD) District basis to account for shipments of crude oil and petroleum products across districts.	*Energy*
Supply-chain/logistics systems	A class of manufacturing software designed to optimize scheduling and other activities throughout the supply chain - or "value chain" - including transportation and distribution functions.	*Quality*
Supply-Side	Technologies that pertain to the generation of electricity.	*Energy*
Support	A support contributes to keeping a structure in place by restraining one or more degrees of freedom. In a structural model, supports represent boundary entities which are not included in the model itself, e.g., foundations, abutments, or the earth itself. For each restrained translation degree of freedom at a support, there is a corresponding reaction force; for each restrained rotation degree of freedom, there is a reaction moment.	*Engineering Physics*
Support	The all-important function of keeping the mine workings open. As a verb, it refers to this function; as a noun it refers to all the equipment and materials--timber, roof bolts, concrete, steel, etc.--that are used to carry out this function.	*Mining*
Support equipment and facilities	These include, but are not limited to, seismic equipment, drilling equipment, construction and grading equipment, vehicles, repair shops, warehouses, supply points, camps, and division, district, or field offices.	*Energy*
Supporting structure	The main supporting unit (usually a pole or tower) for transmission line conductors, insulators, and other auxiliary line equipment.	*Energy*
Surface	Oilfield wellhead equipment used on land or above the waterline in offshore applications.	*Petroleum Engineering*
Surface analysis	Method such as Auger's electron spectroscopy in which the first few atomic layers of the material's surface are chemically analyzed.	*Material Process*
Surface blush	See surface haze.	*Material Process*
Surface break	a break in the ground at the surface caused by subsidence.	*Mining*
Surface casing	The first string of casing put into a well; it is cemented into place and serves to shut out shallow water formations and as a foundation for well control.	*Petroleum Engineering*
Surface condition	state of the surface of the steel	*Materials Process*
Surface defect	Exterior planar boundary of a solid that can be considered a defect structure.	*Material Process*
Surface diffusion	Enhanced atomic flow along the relatively open structure of a material's surface.	*Material Process*
Surface drift	a drift or inclined tunnel starting at the surface and usually connecting with the existing mine workings. Surface drifts were equipped with conveyors to convey the coal directly out of the mine, thus bypassing the shafts.	*Mining*
Surface drilling expenses (uranium)	These include drilling, drilling roads, site preparation, geological and other technical support, sampling, and drill-hole logging costs.	*Energy*
Surface fatigue wear	Wear occurring during repeated sliding or rolling of a material over a track.	*Material Process*
Surface Filtration	Filtration which primarily retains contaminant on the influent surface.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Surface force	A force applied to the surface of an object.	*Engineering Physics*
Surface gloss	A condition of specular, rather than diffuse, reflection from a given surface.	*Material Process*
Surface haze	A hazy appearance of the surface due to microscopically small surface imperfections.	*Material Process*
Surface lease	Includes all leases, easements, and rights-of way that may be required for a well site, access road, pipeline, camp, workspace, sump, borrow pit and/or any other area related to oil and gas production.	*Petroleum Engineering*
Surface Location	The location of a well; its measurement point	*Petroleum Drilling*
Surface Location	The location of a well or facility/measurement point.	*Petroleum Drilling*
Surface mine	A coal-producing mine that is usually within a few hundred feet of the surface. Earth above or around the coal (overburden) is removed to expose the coal-bed, which is then mined with surface excavation equipment, such as draglines, powers hovels, bulldozers, loaders, and augers. It may also be known as an area, contour, open-pit, strip, or auger mine.	*Energy*
Surface mining equipment	Surface mining equipment:	*Energy*
Surface mining methods	Surface mining methods:	*Energy*
Surface preparation	stages of cleaning that prepare the steel for finishing (galvanizing)	*Materials Process*
Surface Reclamation	A restoration of the surface for productivity.	*Petroleum Drilling*
Surface Reclamation	A restoration of the surface as for productivity or usefulness.	*Petroleum Drilling*
Surface rights	Fee ownership in surface areas of land. Also used to describe a lessee's right to use as much of the surface of the land as may be reasonably necessary for the conduct of operations under the lease.	*Energy*
Surface tension	The contractile surface force of a liquid by which it tends to assume a spherical form and to present the least possible surface. It is expressed in dynes/cm or ergs/cm2.	*Oil Analysis*
Surface Tension	A fluid in contact with a surface exhibits phenomena, due to molecular attractions, which appears to arise from a tension in the surface of the fluid. It may be expressed a dynes per centimeter or as ergs per square centimeter.	*Engineering Physics*
Surface Topography	The geometrical detail of a surface, relating particularly to microscopic variations in height.	*Paint and Coatings*
Surface water	All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.).	*Petroleum Drilling*
Surfacing	The application of a coating or cladding to a surface to impart a change in its surface behavior.	*Paint and Coatings*
Surfactant	Surfactants are products used as detergents, dispersing agents, emulsifiers, wetting agents, foaming or anti-foam agents, and solubilizers. They also constitute the raw material for the formulation of household products such as fabric detergents, shampoos, housecleaning products, as well as industrial auxiliary products for facilitating work in the manufacture of textile, flotation agents for ore, metal working, etc. They are used in other sectors of industry such as food processing, metallurgy, pharmaceuticals and public works.	*Chemical*

Please see the Appendix for further illustration

Term	Definition	Industry
Surfactant	Surface-active agent that increases the emulsifying, foaming, dispersing, spreading and wetting properties of a product.	*Chemistry*
Surfeit	the pressure exercised by pent up gas of any kind easing itself off with some force, frequently affecting the roof, sides, or floor of the seam. (N. East).	*Mining*
Surge	To rise suddenly to an excessive or abnormal value; a transient sudden rise of pressure in a pipeline. Pipeline surges can be positive or negative and are caused most frequently by the sudden closure of a block valve or emergency shutdown of a pump. Surge pressures in excess of the rated capacity of a pipeline can cause ruptures of the piping system. See Section 2.	*Mechanical*
Surge	A momentary rise of pressure in a circuit.	*Lubrication*
Surge Current	A current of short duration that occurs when power is first applied to capacitive loads or temperature dependent resistive loads such as tungsten or molybdenum heaters—usually lasting not more than several cycles.	*Electrical*
Surge pressure	The pressure changes caused in a circuit from a rapidly accelerated column of oil. The "surge" includes the span of these changes, from high to low.	*Mechanical, Process, and Operations*
Surge protector	Also known as a surge arrester, this is a device used to protect equipment from damage caused by high-voltage power surges. These can occur when substations are hit by lightning or as a result of switching operations in high-voltage transmission.	*Electrical*
Surge reliever	A valve designed to relieve pressure surges in liquid pipelines, thus preventing line rupture due to transient pressures exceeding design limits of the pipe. A special flexible tube type valve can function as a fast acting surge reliever. See Section 2.	*Mechanical*
Surging	In extrusion, an unstable pressure buildup leading to variable output and waviness of the surface of the extrudate. In extreme cases, the flow of extrudate may even cease momentarily at intervals.	*Engineering Physics*
Surplus	Excess firm energy available from a utility or region for which there is no market at the established rates.	*Energy*
Surplus energy	Energy generated that is beyond the immediate needs of the producing system. This energy may be supplied by spinning reserve and sold on an interruptible basis.	*Energy*
Surrogate endpoints	Outcome measures that are not of direct practical importance but are believed to reflect outcomes that are important; for example, blood pressure is not directly important to patients but it is often used as an outcome in clinical trials because it is a risk factor for stroke and heart attacks. Surrogate endpoints are often physiological or biochemical markers that can be relatively quickly and easily measured, and that are taken as being predictive of important clinical outcomes. They are often used when observation of clinical outcomes requires long follow-up. Also called: Intermediary outcomes, Surrogate outcomes	*Quality Engineering*
Survey	Steam trap survey's are a means of accurately determining how effectively your steam traps are operating.	*Industrial*
Survey station	same as directional survey station.	*Petroleum Drilling*
Survivability	A survivability subsytem detects and counters hostile actions.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Survival analysis	The analysis of data that measure the time to an event e.g. death, next episode of disease. See also: Time to event	*Quality Engineering*
Survival curve	A graph of the number of events occurring over time or the chance of being free of these events over time. The events must be discrete and the time at which they occur must be precisely known. In most clinical situations, the chance of an outcome changes with time. In most survival curves the earlier follow-up periods usually include results from more patients than the later periods and are therefore more precise.	*Analysis*
SUS	Saybolt Universal Second (same as SSU)	*Petro-Chemical Abbreviations*
SUS (SSU)	Saybolt Universal Seconds. A measure of lubricating oil viscosity in the oil industry. The measuring apparatus is filled with specific quantity of oil or other Fluid and its flow time through standardized office is measured in Seconds. Fast flowing fluids (low viscosity) will have low value; Slow flowing fluids (high viscosity) will have high value.	*Lubrication*
Suscept	Any organism that can be attacked by a biotic pathogen.[1]	*Forestry*
Suspended data	See Censored data	*Reliability Engineering*
Suspended rates	New rates that have been accepted for review by a utility commission. When these rates are suspended, they do not go into effect for a designated period of time. Charges under the new rate may be refunded after the resolution of the rate proceeding.	*Energy*
Suspended Sediment	Very fine soil particles remaining in suspension in water for a considerable period of time without contacting the bottom.	*Petroleum Engineering*
Suspended solids	Insoluble particles suspended in water	*Chemical Engineering*
Suspended Well	A well that has been temporarily capped off.	*Petroleum Drilling*
Suspended well	A well that has been capped off temporarily.	*Petroleum Drilling*
Suspended-Sediment Concentration	Ratio of the mass of dry sediment in a water-sediment mixture to the mass of water-sediment mixture.	*Petroleum Engineering*
Suspended-Sediment Discharge	Quantity of suspended sediment passing a point in a stream over a specific period of time.	*Petroleum Engineering*
Suspension	Dispersion of a solid in a fluid.	*Material Process*
Suspension Agent	Some fluids develop carbon and other particulate matter after years of use. Even new systems have things like weld slag and metal shavings that can become trapped in instrument lines or cause problems in other areas. Suspension agents help ensure particulate is held in suspension and easily filtered or caught in strainers.	*Lubrication*
Suspension Effect	The source of error due to varied reference liquid junction potential depending upon whether the electrodes are immersed in the supernatant fluid or deeper in the sediment. Normally encountered with solutions containing resins or charged colloids.	*General Engineering*
Susquehanna River Basin Commission (SRBC)	Regulatory body that governs water withdrawals from the Susquehanna River, but it does not have regulatory control over what flows into the river.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sustainability	the length of time a material will remain adequate for use; meeting needs of the present generation without compromising the ability of future generations to meet their needs. Examining methods of conserving energy and water resources; look for opportunities for reuse or recycling of existing materials; select renewable resources when practical; consider the end use of the material as part of the design process	*Physics*
Sustainable Agriculture	an approach that encompasses a wide variety of methods of farming and ranching with the common goals of providing more farm profits, achieving greater environmental stewardship, and benefiting their families and communities. Some common practices include protecting and improving soil quality, reducing dependence on fuel, synthetic fertilizers and pesticides, and minimizing adverse impacts on wildlife, water quality and other environmental resource.	*Agriculture*
Sustainable agriculture	There is no commonly agreed upon definition of sustainable agriculture. The concept has been, and continues to be, surrounded by controversy. At Washington State University the term is used to describe agricultural management practices that are profitable, environmentally sound and socially acceptable. Broadly speaking, the movement to promote this type of agriculture arose from the negative effects of changes in agriculture that were brought about by vast and rapid technological changes introduced with the application of mechanization and chemicals to farming and ranching.	*Agriculture*
Sustainable development	Industrial development that does not detract from the potential of the natural environment to provide benefits to future generations.	*Mining*
Sustainable forestry	A holistic, conservation ethic based on environmental balance and health that helps ensure forests will be managed in ways that have the potential to meet the social, physical and economic needs of the present while ensuring similar options for the future.	*Forestry*
Sustainably managed forest	A forest that is managed using sustainable forestry principles and criteria. Such management can be confirmed through certification.	*Forestry*
Sustained yield	Management of forestland to produce a relatively constant amount of wood products, revenue or wildlife.	*Forestry*
Sutler	A merchant who accompanies an army and sells the soldiers provisions	*Breakroom*
SUV	sport utility vehicle	*Petro-Chemical Abbreviations*
Swad	a thin layer of stone or inferior coal at the base of a coal seam. (N. East).	*Mining*
Swage	The most common use of swaging is to attach fittings to steam pipes; the parts loosely fit together, and a mechanical or hydraulic tool compresses and deforms the fitting, creating a permanent joint. Pipe flaring machines are another example. Flared pieces of pipe are sometimes known as "swage nipples," "pipe swages," "swedge nipples," or "reducing nipples."	*Industrial*
Swage Nipple	See Nipple Swage	*Petroleum Engineering*
Swaged Fitting	Fitting into which wire rope can be inserted and then permanently attached by cold pressing (swaging) the shank that encloses the rope.	*Wire Rope & Cable*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Swaging	Reducing the ends of pipe and tube sections with rotating dies which are pressed intermittently against the pipe or tube end.	*Maintenance and Repair*
Swallow	a ridge in the roof or floor of a mine. (Scot.).	*Mining*
Swally, Swilley, Swelly or Swilly	a short dip in the coal seam, or in a roadway, often associated with the thickening out of the seam over a limited area.	*Mining*
Swamp coolers (evaporative coolers)	Air-conditioning equipment that removes heat by evaporating water. Evaporative cooling techniques are most commonly found in warm, dry climates such as in the Southwest, although they are found throughout the country. They usually work by spraying cool water into the air ducts, cooling the air as the spray evaporates.	*Energy*
Swarf	The cuttings, and grinding fines that result from metal working operations.	*Lubrication*
Swash plate	A stationary canted plate in an axial type piston pump which causes the pistons to reciprocate as the cylinder barrel rotates.	*Mechanical, Process, and Operations*
Swashplate	A device to control the pitch of rotors; on rotary-wing aircraft, the swashplate is controlled by a collective and a cyclic;	*Aeronautical Engineering*
Sweating	Exudation of small drops of liquid, usually a plasticizer or softener, on the surface of a plastic part.	*Material Process*
Sweep	direction or departure of a curve, a road, an arch, or the like, away from a rectilinear line	*Materials Process*
Sweep plates or Swapes	curved plates for laying barrow-way round a turn. (N. East).	*Mining*
Sweet	Crude oil or natural gas without appreciable amounts of sulfur, i.e. 'Standard Service'.	*Petroleum Engineering*
Sweet Gas	Natural gas with no measurable quantities of hydrogen sulfide (H2S).	*Petroleum Engineering*
Sweet gas	Natural gas having no significant hydrogen sulfide content.	*Mechanical*
Sweetening	Processes that either remove obnoxious sulfur compounds (primarily hydrogen sulfide, mercaptans, and thiophens) from petroleum fractions or streams, or convert them, as in the case of mercaptans, to odorless disulfides to improve odor, color, and oxidation stability.	*Petroleum Engineering*
Swelling	see 'Roll' (N. Staffs.).	*Mining*
Swept-sine testing	Sine shaking whose frequency is smoothly and continuously varied. Commonly required for sequentially identifying resonances. By contrast, see stepped sine testing.	*Reliability Engineering*
Swine	A domesticated member of the species Sus scrofa.	*Agriculture*
Swine breeds	that may be encountered by American journalists:	*Agriculture*
Swing check valve	A check valve in which the closure element is a hinged clapper which swings or rotates about a supporting shaft.	*General Mechanical*
Swint or Swinting	a tunnel driven at an angle off the main road. (Lancs.).	*Mining*
Switch	(1) Any device for connecting two or more contiguous package conveyor lines; (2) An electrical control device.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Switch function	Conditional function that gives a smooth onset of a variable, for example from 0 to 1 or from 1 to 0. Often used for phase changes or saturation.	*Chemical*
Switch loading	The loading of a high static-charge retaining hydrocarbon (i.e., diesel fuel) into a tank truck, tank car, or other vessel that has previously contained a low-flash hydrocarbon (gasoline) and may contain a flammable mixture of vapor and air.	*Petroleum Engineering*
Switch, Float	An electrical switch which is responsive to liquid level.	*Mechanical, Process, and Operations*
Switch, Flow	An electric switch operated by a fluid flow. SWITCH, PRESSURE - An electric switch operated by fluid pressure.	*Mechanical, Process, andOperations*
Switch, Pressure Differential	An electric switch operated by a difference in pressure.	*Mechanical, Process, and Operations*
Switches or Sidings	passing places in the underground rail transport system attended by switch-keepers. (N. East). A switch can also be a rail junction or points. Switches can also refer to a bank of electrical panels.	*Mining*
Switchgear	Equipment used to control, protect, and regulate the flow of electrical power in a transmission or distribution network. It is often located in substations, but can be associated with any electrical equipment that might need to be isolated for fault correction (e.g., if a voltage drop occurred in one part of the grid, it might be necessary to shut off the affected section to prevent the fault spreading), or for maintenance purposes. The main components of switchgear are circuit breakers, which interrupt high-voltage current to protect electrical equipment from excessive current. The terms gas- and air-insulated switchgear (GIS and AIS) refer to switchgear equipped with gas- and air-insulated circuit breakers. The gas-insulated variety is more costly than the air, but it takes up less space and is therefore the preferred option when installing switchgear in urban environments (the substations can be one fifth the size of a conventional AIS substation).	*Electrical*
Switching Frequency	The actual number of targets to which the sensor can respond in a given time period, usually expressed as Hertz (cycles per second).	*Electrical Engineering*
Switching Station	Facility used to connect two or more electric circuits through switches.	*Energy*
Switch-keepers	see Switches.	*Mining*
Swivel	Attaches between the back reamer and the product being pulled back to keep the product from twisting.	*Petroleum Engineering*
Swivel Joint	A joint which permits single-plane rotational movement in a piping system.	*Maintenance and Repair*
Swivel Union	Also known as a 'Chicksan', Swivel unions are a rotatable union used for drilling loops. They are available in various configurations. (These swivels are not designed for continuous rotating service).	*Petroleum Engineering*
SWOL	An acronym you may hear on the in-car audio, referring to the electronic "Shift With Out a Lift" device, which allows gear shifts without lifting off the throttle, making the shift faster.	*NASCAR*
Swom stuff	an old term for alluvial deposits met within the coal measure.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Sword capel	a special capel attached to the end of a winding rope and secured to the winding drum by bolts.	*Mining*
SWU	See Separative Work Unit	*Energy*
SY	Scotch Yoke - See "Scotch Yoke Operator"	*Mechanical*
Syenite	An intrusive igneous rock composed chiefly of orthoclase.	*Mining*
Syllogism	An argument made by a series of statements	*Management Discussion*
Sylvester	a hand operated turfer for removing props from the waste and moving other objects, consisting of a notched bar and lever operated ratchet, with chains attached at each end. During the late nineteenth century the commonest type of a fatal mine accident was a roof collapse caused by knocking out the pit props with a sledgehammer. In order to try and counter this problem, Walter Sylvester, who worked for a colliery in North Staffordshire, invented a ratcheted pulling device, which could be attached to the pit props by a long chain and used to haul them out without any danger to the operator. It could also be used for pulling trucks and other heavy items, and tightening-up cables. It was patented in 1895; known locally as a "Walter" it soon became widely used in mining and other industries as the "Sylvester".	*Mining*
Sylvite	potassium chloride, the principal ore of potassium mined for fertilizer manufacturing.	*Mining*
Symbol, Combination	A symbol which combines graphical cutaway, and pictorial representations.	*Mechanical, Process, and Operations*
Symbol, Cutaway	A symbol showing principal internal parts, controls, and actuating mechanisms, interconnecting lines, and functions of a component.	*Mechanical, Process, and Operations*
Symbol, Fluid Power	A representation of the characteristics of a fluid power component by means of lines on a flat surface.	*Mechanical, Process, and Operations*
Symbol, Graphical (Schematic)	A simplified symbol which indicates essential characteristics applicable to all similar components.	*Mechanical, Process, and Operations*
Symbol, Pictorial	A symbol showing the actual shape of a component according to the manufacturer's description.	*Mechanical, Process, and Operations*
Symmetrical Thread	A symmetrical thread is one which has both flanks of the thread profile inclined at the same angle.	*Maintenance*
Symptom	Visible or measurable manifestation that an organism is diseased; a change in the organism itself.	*Forestry*
Synchro	A rotary electromagnetic device generally used as an AC feedback signal generator which indicates position. It can also be used as a reference signal generator.	*Mechanical, Process, and Operations*
Synchronous	Vibration components (on rotating machinery) that are related to shaft speed.	*Reliability Engineering*
Synchronous Generators	also referred to as alternators.	*Electrical*
Synchronous machines	See Machines	*Electrical*
Synchronous sampling	Control of a computer's rate of data sampling to achieve order tracking.	*Reliability Engineering*
Syncline	A down-arching fold in bedded rocks.	*Mining*

Term	Definition	*Industry*
Syncrude	Unconventional crudes such as those derived from tar sands, oil shale and coal liquefaction.	*Lubrication*
Syndiotactic	Regular alteration of side groups along a polymeric molecule.	*Material Process*
Synergism	The condition existing where the effect of two or more materials added to water is greater than the sum of their individual effects	*Chemical Engineering*
Synergism	A phenomenon wherein the effect of a combination of two additives is greater than the effect that could be expected from the known performance of each additive used singly.	*Engineering Physics*
Syngenetic	A term used to describe when mineralization in a deposit was formed relative to the host rocks in which it is found. In this case, the mineralization was formed at the same time as the host rocks. (The opposite is epigenetic.)	*Mining*
Syntax	The rules governing the structure of a language.	*General Engineering*
Synthetic fluid	Fluid which has been artificially compounded for use in a fluid power system.	*Mechanical, Process, and Operations*
Synthetic fluid, Halogenated	A fluid composed of halogenated organic materials. It may contain additives.	*Mechanical, Process, and Operations*
Synthetic fluid, Organic ester	A fluid composed of esters which are compounds of carbon, hydrogen, and oxygen only. It may contain additives.	*Mechanical, Process, and Operations*
Synthetic fluid, Phosphate ester base	A fluid which contains a phosphate ester as one Of the major components.	*Mechanical, Process, and Operations*
Synthetic fluid, Polyglycol	A nonaqueous fluid composed of polyglycol derivatives. It may contain additives.	*Mechanical, Process, and Operations*
Synthetic fluid, Silicate Ester	A fluid composed of organic silicates. It may contain additives.	*Mechanical, Process, and Operations*
Synthetic fluid, Silicone	A fluid composed of silicones. It may contain additives. SYSTEM - One or more series of component parts connected to each other. Often made up of two or more "circuits."	*Mechanical, Process, and Operations*
Synthetic Grease	A grease that contains a liquid lubricant that is not a mineral oil.	*Lubrication*
Synthetic hydrocarbon	Oil molecule with superior oxidation quality tailored primarily out of paraffinic materials.	*Oil Analysis*
Synthetic Lubricant	Lubricating fluid made by chemically reacting materials of a specific chemical composition to produce a compound with planned and predictable properties. A lubricant produced by chemical synthesis rather than by extraction or refinement of petroleum to produce a compound with planned and predictable properties.	*Lubrication*
Synthetic natural gas (SNG)	(Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.	*Energy*
Synthetic Oils	Oils produced by synthesis (chemical reaction) rather than by extraction or refinement. Many (but not all) synthetic oils offer immense advantages in terms of high temperature stability and low temperature fluidity, but are more costly than mineral oils. Major advantage of all synthetic oils is their chemical uniformity.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Synthetic resin	resins prepared by chemical means.	*Material Process*
Synthetic rubber	Any of several synthetic materials resembling rubber which can be used as rubber substitutes.	*Material Process*
System	Applied to measurements, means the best value that the system can determine.	*Aeronautical Engineering*
System (Electric)	Physically connected generation, transmission, and distribution facilities operating as a single unit.	*Energy*
System (gas)	An interconnected network of pipes, valves, meters, storage facilities, and auxiliary equipment used in the transportation, storage, and/or distribution of natural gas or commingled natural and supplemental gas.	*Energy*
System 800xA	An Industrial IT-compatible control system that provides a means of achieving measurable productivity and profitability improvements. The full name is Extended Automation System 800xA, and it is used in many industry sectors to oversee and control a wide range of processes. It extends the scope of traditional control systems to include all automation functions within a single operations and engineering environment. This enables plants to perform in a more intelligent and cost-effective way, and to improve productivity.	*Electrical*
System effectiveness	(a) For repairable systems and items: the probability that a system can successfully meet an operational demand within a given time when operated under specified conditions. (b) For "one-shot" devices and non-repairable items: the probability that the system will operate successfully when called upon to do so under specified conditions.	*Reliability Engineering*
System engineering	That engineering approach which deals with the design and integration of multiple components and controls into an assembled piping complex to accomplish a specified function or functions. The skid mounted Arcron Surge Relieve is an example of system engineering. See Section 2.	*Mechanical*
System interconnection	A physical connection between two electric systems that permits the transfer of electric energy in either direction.	*Energy*
SYSTEM INTERNATIONALE d' UNITES	See SI Metric System.	*Mechanical, Process, and Operations*
System of Forces	One or more forces and/or moments acting simultaneously.	*Engineering Physics*
System operator (electric)	An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time. NERC definition	*Energy*
System Peak Demand	The highest demand value that has occurred during a specified period for the utility system.	*Energy*
System reliability	The reliability of an entire system, as opposed to the reliability of its components. The system reliability is defined by the reliability of the components as well as the way the components are arranged reliability-wise.	*Reliability Engineering*
System, Directly-Controlled	The body, process, or machine directly guided or restrained by the final controlling element to achieve a prescribed value of the directly-controlled variable.	*Process Control*
System, Indirectly-Controlled	That portion of the controlled system in which the indirectly controlled variable is changed in response to changes in the controlled variable.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Systematic error, SE	An error that is always in one direction and is predictable, in contrast to random errors that may be either positive or negative and whose direction cannot be predicted.	*Quality*
Systematic Preventive Maintenance	Maintenance that is planned and programmed in a fixed period of time independent of equipment condition.	*Maintenance*
Systematic review (synonym systematic overview)	A review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyze data from the studies that are included in the review. Statistical methods (meta-analysis) may or may not be used to analyze and summarize the results of the included studies. See also: Cochrane Review Also called: Overview, systematic	*Quality Engineering*
Systems Benefits Charge	This is a per-customer charge intended to recover the costs of utility demand-side management reach and development, renewable resources or low-income programs.	*Energy*
--T--	--T--	*Petroleum Drilling*
t	tenth	*Energy*
t distribution	A statistical distribution describing the distribution of the means of samples taken from a population with unknown variance.	*Quality Engineering*
t test	A statistical hypothesis test derived from the t distribution. It is used to compare continuous data in two groups. Also called: Student's t-test	*Quality Engineering*
T&D Losses	Transmission Losses & Distribution Losses	*Energy*
TAAF	Acronym for Test, Analyze and Fix	*Reliability Engineering*
Tab Gate	A small removable tab of approximately the same thickness as the molded item, usually located perpendicularly to the item. The tab is used as a site for edge gate location, usually on items with large flat areas	*Engineering Physics*
Tablets	A firmly compacted mass of molding powder of predetermined weight made by application of high pressure without heat.	*Material Process*
TAC	toxic air contaminant	*Petro-Chemical Abbreviations*
TACAN Point-to-Point (TCNP)	A basic guidance mode, providing lateral guidance to a point relative to a TACAN station by specified range and bearing.	*Aeronautical Engineering*
Tachometer	A device for measuring angular velocity.	*Aeronautical Engineering*
Tack	That property of a rubber or compounded stock which causes two layers of stock, which have been pressed together, to adhere firmly.	*Material Process*
Tack	The stickiness of an adhesive, measurable as the force required to separate an adherent from it by viscous or plastic flow of the adhesive.	*Engineering Physics*
Tack Weld	A small weld made to hold parts of a weldment in proper alignment until the final welds are made.	*Maintenance and Repair*
Tackifier	A substance such as a resin ester which is added to synthetic resins or elastomeric adhesives to improve the initial and extended tackiness of the film.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tackler skip	a type of box used to wind men and material (S. Staffs.)—see also Paddy pan and Man hudge.	*Mining*
Tacklers or Tucklers	four lengths of chain with hooks on the end joined together at the other end by a ring, used to tackle up a skip for winding up the shaft (S. Staffs.); or small chains fastened round a loaded corve to give it strength when winding.	*Mining*
Tacks	When driving a heading in a fiery mine a series shot holes would be drilled then the area between the shot holes, the 'tacks' would be forced down by using wedges. (N. East).	*Mining*
Tacky	Sticky or adhesive.	*Material Process*
Tacky	A descriptive term applied to lubricating oils and greases which appear particularly sticky or adhesive.	*Lubrication*
Taconite	A highly abrasive iron ore.	*Mining*
Tactical Air Navigation (TACAN)	A basic guidance mode, providing lateral guidance to a TACAN station; Equipment that determines range and bearing to a radio station with a TACAN transmitter.	*Aeronautical Engineering*
Tadge	see Radge.	*Mining*
Tadger	an electric drill used for drilling shotholes for explosives and holes for roof bolts etc.	*Mining*
Tag	This is a number given to individual DCS control units so that the system can identify them.	*Control Engineering*
Tag Line	A small wire rope used to prevent rotation of a load.	*Wire Rope & Cable*
Tagg	Day-wage work. Usually on the underground haulage. Also called 'datalling' or 'odd-working'. (Mids.).	*Mining*
Tague	a metal plate fitted with guides to direct the wheels of a tram off the plate and onto the rails.	*Mining*
Taigle	the cleek, to interfere with the working of the pit (Scot.)—see also Steg the cleek.	*Mining*
Tail End	Usually the end of a conveyor nearest loading point.	*Manufacturing*
Tail gas	The lightest hydrocarbon gas released from a refining process.	*Petroleum Engineering*
Tail gate	the roadway at the opposite end of a longwall face to the Main gate. Usually the return airway and secondary access to the face. Also known as the 'Supply gate' when it is used to take materials to the face. Also called the 'Return' or 'Return gate'.	*Mining*
Tail in	to begin working 'open-off stalls' from the side of a heading. (Mids.); or to terminate a length of stall face against a buttock after measuring off the holing stints. (Mids.).	*Mining*
Tail Pulley	A pulley mounted at the tail end of a conveyor, its purpose is to return the belt.	*Manufacturing*
Tail rope	the return rope of a main & tail haulage system.	*Mining*
Tail runner	a haulage hand who accompanied the set of tubs on their journey to and from the shaft, or the guard on the man-riding bogies. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tail section	A term used in both belt and chain conveyor work to designate that portion of the conveyor at the extreme opposite end from the delivery point. In either type of conveyor it consists of a frame and either a sprocket or a drum on which the chain or belt travels, plus such other devices as may be required for adjusting belt or chain tension.	*Mining*
Tail sheave	also known as the 'return sheave'. The pulley around which the tail rope of the main and tail haulage or a scraper loader passes.	*Mining*
Tailgate	The outlet of a natural gas processing plant where dry residue gas is delivered or re-delivered for sale or transportation.	*Energy*
Tailing out	the gradual nip-out of a coal seam.	*Mining*
Tailings	The remaining portion of a metal-bearing ore consisting of finely ground rock and process liquid after some or all of the metal, such as uranium, has been extracted.	*Energy*
Tailings pond	A low-lying depression used to confine tailings, the prime function of which is to allow enough time for heavy metals to settle out or for cyanide to be destroyed before water is discharged into the local watershed.	*Mining*
Tailoring	Selecting or altering test procedures, conditions, values, tolerances, measures of failure, etc., to simulate or exaggerate the environmental effects of one or more forcing functions.	*Reliability Engineering*
Tailor-Made Test	tests specifically signed (tailor-made) to meet a particular situation when recruiting for a person of highly specialized skills or requirements.	*Industrial Relations*
Tailpiece	Also known as foot section pulley. The pulley or roller in the tail or foot section of a belt conveyor around which the belt runs.	*Mining*
Take	the extent or area of a lease often covering several thousand acres; or the reserves area of the colliery in which the colliery is permitted to work; or to show or reveal the presence of gas. (Lancs.). Also called the 'taking' (S. Wales).	*Mining*
Take a look	A driver following closely behind another car may dart momentarily to the inside at the entry to a corner, pretending to attempt a pass in order to disrupt the concentration of the driver in front and hopefully cause a small mistake, setting up a subsequent passing attempt.	*NASCAR*
Take the air	to test the ventilation by using an anemometer.	*Mining*
Take-Home Pay	the net amount of money which a worker receives in his pay check after all of the required deductions are made.	*Industrial Relations*
Take-Off	The mechanism for drawing extruded or calendered material away from the extruder or calendar.	*Engineering Physics*
Take-Up	The assembly of the necessary structural and mechanical parts which provide the means to adjust the length of belt and chain to compensate for stretch, shrinkage or wear and to maintain proper tension.	*Manufacturing*
Take-up Belt Tension	The actual amount of tension in each of the two runs of conveying medium approaching and leaving the take-up.	*Equipment*
Take-up Pulley	A pulley mounted on the take-up shaft.	*Equipment*
Taking of props	drawing the timber out of the waste. (Lancs.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Takt time	The optimum frequency at which product should be produced to meet customer demand, calculated by dividing available work time per shift by actual customer demand. For example, an 8-hour, one-shift operation might have 435 minutes of available time (480 minutes minus two 15-minute breaks and a 15-minute cleanup period). If daily demand is 1,305 products, then the takt time of the operation would be 20 seconds.	*Quality*
Takt Time	The rate that a completed product needs to be finished in order to meet customer demand.	*Reliability Engineering*
Talc	A flaky or fibrous form of hydrated magnesium silicate used as a filler and pigment.	*Material Process*
Talc	A natural hydrous magnesium silicate, used frequently as a filler such as steatite, talcum, mineral graphite.	*Engineering Physics*
Tale	a day's work; or the amount of coal raised in a day. (Som.).	*Mining*
Tall oil	The oily mixture of rosin acids, fatty acids, and other materials obtained by acid treatment of the alkaline liquors from the digesting (pulping) of pine wood.	*Energy*
Tallies	means of identification that were sent out of the pit with each tub of coals, or later, the name for the brass and aluminum small, round or square, uniquely numbered tokens, two of which were given to the collier before going underground. One was handed to the banksman on entering the cage and the other on returning again to the surface. Various names were used for them throughout the coalfields. -see Cuts, Checks and Pins.	*Mining*
Tally	a count of ballots in a National Labor Relations Board or state election.	*Industrial Relations*
Tally lamp	a small coffee-pot-shaped container made of tin, fixed to the miner's cap and lit by tallow and a wick. In the 1920s it was replaced by the carbide lamp.	*Mining*
Talus	A heap of broken, coarse rock found at the base of a cliff or mountain.	*Mining*
TAME	See Tertiary Amyl Methyl Ether.	*Energy*
TAN (Total Acid Number)	Acids are formed when a fluid comes in contact with oxygen, TAN levels are a means to show the extent of which a fluid has been oxidized. New fluids typically have a TAN less than 0.05, most fluids should be changed at and have a condemning limit of a TAN of 1.0. The rate of oxidation is minimal under 200F however as the temperature climbs the effects of oxidation are exponential. It is an industry accepted standard to assume the rate of oxidation doubles for each 15 degree increase above 200F.	*Lubrication*
Tandem Cylinder	Two or more cylinders With interconnected rod and piston assemblies.	*Mechanical, Process, and Operations*
Tandem Increases	adjustments or increases to certain employees or groups which correspond to increases granted to related employees.	*Industrial Relations*
Tandem pits	A pair of shafts, with one cage in each, both shafts being worked by one winding engine. The word 'tandem' can also refer to a place where one belt conveyor loads onto another.	*Mining*
Tangent	Straight portion after a curve conveyor.	*Manufacturing*
Tangent Plane	A plane tangent to the tooth surfaces at a point or line of contact.	*Mechanical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tangential Flow Filtration (TFF)	Filtration in which liquid flows tangential to (along) the surface of the membrane. Synonymous to the term crossflow. The sweeping action of fluid acts to minimize gel layer formation and surface fouling. Contrast with direct flow filtration.	*Contamination Control*
Tangers	timbers set to support the sides of headings in shifting or very soft ground (S. Wales); or roof bars used as forward support between the last row of props and the coal face.	*Mining*
Tangible development costs	Costs incurred during the development stage for access, mineral-handling, and support facilities having a physical nature. In mining, such costs would include tracks, lighting equipment, ventilation equipment, other equipment installed in the mine to facilitate the extraction of minerals, and supporting facilities for housing and care of work forces. In the oil and gas industry, tangible development costs would include well equipment (such as casing, tubing, pumping equipment, and well heads), as well as field storage tanks and gathering systems.	*Energy*
Tank	The reservoir or sump; container for the storage of fluid in a fluid power system. TANK, AIR-OIL - A tank in which pressurized air is used to force oil into the outlet port. TANK, VACUUM - A tank for storing gas at less than atmospheric pressure.	*Mechanical, Process, and Operations*
Tank	container for chemicals used in the galvanizing process; steel is dipped sequentially in solution-containing tanks	*Materials Process*
Tank battery	A group of tanks that are connected to receive crude oil production from a well or a producing lease. A tank battery is also called a battery. In the tank battery, the oil volume is measured and tested before pumping the oil into the pipeline system.	*Petroleum Drilling*
Tank farm	An installation used by trunk and gathering pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.	*Energy*
Tank Test	A voltage dielectric test where the specimen to be tested is submerged in a liquid (usually water) and a voltage potential applied between the conductor and the liquid as ground.	*Electrical*
Tanker and barge	Vessels that transport crude oil or petroleum products. Note: Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal to a PAD District.	*Energy*
Tape	A recording medium for data or computer programs. Tape can be in permanent form, such as perforated paper tape, or erasable, such as magnetic tape. Generally, tape is used as a mass storage medium, in magnetic form, and has a much higher storage capacity than disk storage, but it takes much longer to write or recover data from tape than from a disk.	*Electrical*
Tape Wrap	A term denoting a spirally or longitudinally applied tape material wrapped around the wire, either insulated or uninsulated, used as an insulation or mechanical barrier.	*Electrical*
Tapered Roller	A conveyor roller for use in a curve with end and intermediate diameters proportional to their distance from the center of the curve.	*Equipment*
Tapered Roller Curve	A curved section of roller conveyor having tapered rollers.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	Industry
Tapered Wage Increases	a wage stabilization technique devised by the World War II War Labor Board to maintain wage structure differentials when eliminating standard conditions.	*Industrial Relations*
Tapering & Welding	Reducing the diameter of the end of a wire rope and welding it to facilitate reeving.	*Wire Rope & Cable*
Tapped End Studs	Stud bolts threaded on each end, with an unthreaded portion on the body center diameter (or cab be all threaded). The thread length dimension on one end controls the depth of engagement of that end into a tapped hole.	*Petroleum Engineering*
Tapping and Alloy Addition	Desulfurizing reagents and alloys such as manganese, aluminum and silicon are added to the molten stream during tapping from the furnace to the ladle.	*Steel*
Tar sands	Naturally occurring bitumen-impregnated sands that yield mixtures of liquid hydrocarbon and that require further processing other than mechanical blending before becoming finished petroleum products.	*Energy*
Tardiness	a form of absenteeism; lack of punctuality in arriving at the place of work.	*Industrial Relations*
Target	Object or point pointed by FLIR or radar.	*Aeronautical Engineering*
Target	The part or piece being detected.	*Electrical Engineering*
Target area	Predefined area in a gas spacing area where wells can be located without incurring a penalty on production for impacting adjacent spacing areas.	*Petroleum Engineering*
Target cursor	A symbol on a display, moved by a track handle or similar device, to select objects on the display.	*Aeronautical Engineering*
Target Market	A specific group of people or geographical area that has been identified as the primary buyers of a product or service.	*Energy*
Target measurement uncertainty	Measurement uncertainty formulated as a goal and decided on the basis of a specific intended use of measurement results.	*Quality*
Target value, TV	Used in proficiency testing to designate the correct value, usually estimated by the mean of all participant responses, after removal of outliers, or by the mean established by definitive or reference methods.	*Quality*
Tariff	A document, approved by the responsible regulatory agency, listing the terms and conditions, including a schedule or prices, under which utility services will be provided.	*Energy*
Tars	A term applied to pyrogenous residues obtained in the destructive distillation of organic materials.	*Material Process*
Task	One line on a task list that gives the inspector specific instruction to do one thing.	*Maintenance*
Task	a term used to describe a unit of work or effort exerted to achieve a specific purpose, such as setting up a machine to perform a certain job.	*Industrial Relations*
Task List	In a maintenance inspection context, a task list provides directions about what to look for during an inspection. Tasks include inspecting, cleaning, tightening, adjusting, lubricating, replacing, etc. Tasks are specific, complete, and have a performance standard. Avoid 'ticks' as the only feedback that a task is completed.	*Maintenance*
Task Time	the determination of the time required for the average worker to perform a job according to the prescribed standard.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Taut line	Basic guidance mode; provides vertical guidance to maintain a taut line for a dipping sonar, or other such device.	*Aeronautical Engineering*
Tax Credits	Credits established by the federal and state government to assist the development of the alternative energy industry.	*Energy*
Tax-cost	A deduction (allowance) under U.S. Federal income taxation normally calculated under a formula whereby the adjusted basis of the mineral property is multiplied by a fraction, the numerator of which is the number of units of minerals sold during the tax year and the denominator of which is the estimated number of units of unextracted minerals remaining at the end of the tax year plus the number of units of minerals sold during the tax year.	*Energy*
Tax-percentage (for Statutory)	A deduction (allowance) allowed to certain mineral producers under U.S. Federal income taxation calculated on the basis of a specified percentage of gross revenue from the sale of minerals from each mineral property not to exceed the lesser of 50 percent of the taxable income from the property computed without allowance for depletion. (There are also other limits on percentage depletion on oil and gas production.) The taxpayer is entitled to a deduction representing the amount of tax-cost depletion or percentage (statutory) depletion, whichever is higher.	*Energy*
Tayloresque	a term describing either scientific management or the differential piece rate system sponsored by Frederick W. Taylor.	*Industrial Relations*
Taylor-Forge Method	A method developed by four engineers of the Taylor-Forge Company in Chicago in the 1930's that subsequently formed the basis of the ASME code for flanged joint design. The assumptions made by the method are now generally regarded as too simplistic. This method gives rise to the m and y gasket factors.	*Maintenance*
TBA	See Tertiary Butyl Alcohol	*Energy*
TBC	Total Business Concept	*Gears*
TBD	Thousand barrels a day	*Petro-Chemical Abbreviations*
TBI	throttle body injection	*Petro-Chemical Abbreviations*
TBN	total base number	*Petro-Chemical Abbreviations*
TBN	(Total) base number	*Lubrication*
TCF	temperature correction factors	*Petro-Chemical Abbreviations*
tcf	Trillion Cubic Feet (of gas)	*Petroleum Drilling*
tcf	Trillion Cubic Feet (of gas).	*Petroleum Drilling*
TCW-3	water cooled 2-cycle engine oil specification	*Petro-Chemical Abbreviations*
TDC	top dead center	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TDS	Total dissolved solids. These solids are in molecular, ionized or microgranular form and can pass through a two-micron filter.	*Filtration*
TDSP	Transmission and/or Distribution Service Provider	*Energy*
TE	Total Error	*Quality*
Tea	Something which is not coffee	*Breakroom*
Teamsters, Chauffeurs, Warehousemen and Helpers of America	International Brotherhood of (Ind) - organized in 1899 as the Team Drivers' International Union.	*Industrial Relations*
Tear drop	Surface blemishes of a scaly appearance usually caused by a nonuniform temperature of a charge as it flows into the mold. Term not recommended. See Fish-eye.	*Material Process*
Tear Propagation Resistance	Resistance of a material to a force acting to propagate an initiated tear in the material.	*Engineering Physics*
Tear Resistance	Resistance of material to a force acting to initiate and then propagate a failure at the edge of a test specimen.	*Engineering Physics*
Tear Strength	The force required to initiate or continue a rip in a jacket or other insulation under specified conditions.	*Electrical*
Technical Ceramic	A ceramic that exhibits a high degree of industrial efficiency through carefully designed microstructures and superb dimensional precision.	*Engineering Physics*
Technical Hole Deviation Technology	a general term that refers to using Technical Hole Deviation to rationalize directional tool settings while drilling, to monitor directional progress as a directional well is drilled, or to evaluate driller or service company directional control performance.	*Petroleum Drilling*
Technical Hole Deviation	a quantitative description of how a directional well bore trajectory differs from its planned trajectory; mathematically ties a directional well plan to its actual well path. Eight variables collectively define technical hole deviation. Not to be confused with general "hole deviation", which attempts to explain/model why a well bore can't economically be drilled in a continuously-straight direction. Most of technical hole deviation is undefined if a preferred well path is vertical. See table.	*Petroleum Drilling*
Technical Implementation Advisory Group (TIAG)	A sub-group of the Information Management System Group (IMSG), the TIAG advises the Information Management System Group on technical issues.	*Quality Engineering*
Technocracy	a theory of economic and social organization in which industrial management would be scientifically controlled by engineers.	*Industrial Relations*
Technological Change	changes in production methods which involve the use of new machinery and equipment for the purpose of increasing productivity.	*Industrial Relations*
Technological Unemployment	unemployment which results from changes in techniques of production that reduce the amount of labor required to produce an article.	*Industrial Relations*
Technology	instruments, tools or inventions developed through research to increase efficiency	*Agriculture*
Technology	Technology is a assembly procedures for producing something. In refer to a process, technology is fix.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tedlar bags	gas-tight bags constructed of non-reactive material (Tedlar) for the collection and transport of gas/vapor samples.	*Chemical*
Tee	A tee is used to either combine or split a steam or fluid flow. Most common are tees with the same inlet and outlet sizes, but reducing tees are also widely used. See also Pipe Fittings.	*Industrial*
Tee Joint	A welded joint between two members located approximately at right angles to each other in the form of a T.	*Maintenance and Repair*
Teem bye	to empty the coals over the resting coal stock or heap when there are no wagons available. (N. East).	*Mining*
Teem or Tem	to tip rubbish on the spoil bank.	*Mining*
Teeming trough	a cistern into which the water was pumped out of the mine. (Lancs.).	*Mining*
Teeth work	working the coal end on or against the cleat. (Scot.).	*Mining*
Teflon	A fluorocarbon polymer used for insulation of electrical wires (trademark of DuPont Company).	*General Engineering*
Teflon	Dupont's trademark covering all of its fluorocarbon resins, including PTFE, FEP, and various copolymers.	*Engineering Physics*
Tego	Proprietary term describing a paper film coated on both sides with phenol-formaldehyde resin.	*Material Process*
TEL	tetraethyl lead	*Petro-Chemical Abbreviations*
Telecommunication	Synonym for data communication. The transmission of information from one point to another.	*Electrical*
Telegraphers' Union; The Commercial (AFL-CIO)	organized in 1903 as an amalgamation of two competing organizations, the International Union of Commercial Telegraphers and the Order of Commercial Telegraphers.	*Industrial Relations*
Telemetring (electric)	The process by which measurable electrical quantities from substations and generating stations are instantaneously transmitted to the control center, and, by which, operating commands from the control center are transmitted to the substations and generating stations. NERC definition	*Energy*
Telemetry	A technique which permits a measured quantity to be transmitted and interpreted at a distance from the measuring location. Form, or types of telemetry include analog, digital, frequency, and pulse.	*Electrical Engineering*
Telemetry	Data acquisition transmitted wirelessly while the car is on the track.	*NASCAR*
Telescoping Cylinder	A cylinder with nested multiple tubular rod segments which provide a long working stroke in a short retracted envelope.	*Mechanical, Process, and Operations*
Telial stage (telium)	A stage of the rust fungi; a fruiting structure usually appearing as fine, hairlike projections from lower surfaces of infected leaves.	*Forestry*
Telluride	A chemical compound consisting of the element tellurium and another element, often gold or silver.	*Mining*
temp	Temperature	*General*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TEMPCO	Abbreviation for "temperature coefficient": the error introduced by a change in temperature. Normally expressed in %/°C or ppm/°C.	*General*
TEMPCO	Abbreviation for "temperature coefficient" - the error introduced by a change in temperature. Normally expressed in %/°C or ppm/°C.	*Electronic Process*
Temperature	The range of ambient temperatures, given by their extremes, within which the transducer may be operated. Exceeding compensated range may require recalibration.	*General*
Temperature coefficient of resistivity	The coefficient that indicates the dependence of a metal's resistivity on temperature.	*Material Process*
Temperature coefficient (of a solar photovoltaic cell)	The amount that the voltage, current, and/or power output of a solar cell changes due to a change in the cell temperature.	*Energy*
Temperature Error	The maximum change in output, at any measurand value within a specified range, when the transducer temperature is changed from room temperature to specified temperature extremes.	*Electrical*
Temperature Error	The maximum change in output, at any measurand value within the specified range, when the transducer temperature is changed from room temperature to specified temperature extremes.	*Electronic Process*
Temperature range	The temperatures between which a sensor will operate accurately.	*Reliability Engineering*
Temperature Range, Compensated	The range of ambient temperatures within which all tolerances specified for Thermal Zero Shift and Thermal Sensitivity Shift are applicable (temperature error).	*Electrical*
Temperature Range, Operable	The range of ambient temperatures, given by their extremes, within which a transducer may be operated. Exceeding compensated range may require recalibration.	*Electrical*
Temperature Rating	The maximum temperature at which a given insulation or jacket may be safely maintained during continuous use, without incurring any thermally induced deterioration.	*Electrical*
Temperature, Ambient	The temperature of the medium surrounding a device. Note: allowable ambient temperature limits are based on the assumption that the device in question is not exposed to significant radiant energy sources.	*Process Control*
Temperature, Process	The temperature of the process medium at the sensing element.	*Process Control*
Temperature-humidity model	An accelerated life testing model used when the two accelerating factors are temperature and humidity.	*Reliability Engineering*
Temperature-non-thermal model	An accelerated life testing model used when the two accelerating factors are temperature and another non-thermal stress factor.	*Reliability Engineering*
Tempered	Metal is reheated after quenching for the purpose of making it more stress-free, crack-free, distortion-free, and slightly softening it.	*Petroleum Engineering*
Tempered glass	A strengthened glass involving a heat treatment that serves to place the exterior surface in a residual compressive state.	*Material Process*
Tempered martensite	An a+Fe3C microstructure produced by heating the more brittle martensite phase.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tempering	A process of heating a normalized or quench-hardened steel to a temperature below the transformation range and, from there, cooling at any rate desired. This operation is also frequently called stress relieving.	*Maintenance and Repair*
Temporal sequence	The sequence of events in time, used as one of the criteria in evaluating causation – the exposure or intervention must have occurred before the outcome to be a plausible cause of the outcome.	*Quality Engineering*
Temporarily Abandoned	The act of isolating the completed interval or intervals within a wellbore from the surface by means of a cement retainer, cast iron bridge plug, cement plug, tubing and packer with tubing plug, or any combination thereof.	*Petroleum Drilling*
Temporarily discharged fuel	Fuel that was irradiated in the previous fuel cycle (cycle N) and not in the following fuel cycle (cycle N+1) and that will be irradiated in a subsequent fuel cycle.	*Energy*
Temporary Arbitrator	an individual who handles a single case for the parties in dispute.	*Industrial Relations*
Temporary bracing	metal that is attached to a fabrication prior to galvanizing in order to provide added support so that the steel does not change shape during heating and cooling; temporary bracing is removed after galvanizing.	*Materials Process*
Temporary Disability	an injury resulting in the temporary incapacity to perform work.	*Industrial Relations*
Temporary Employee	a worker hired for a limited time only, frequently to meet a peak demand or special rush job.	*Industrial Relations*
Temporary Extended Unemployment Compensation	unemployment insurance provided by federal law to provide additional unemployment compensation to those who had exhausted their rights under the existing state law.	*Industrial Relations*
Temporary Layoff	a separation from employment at the instigation of the employer but without fault on the employee's part, usually of a temporary nature.	*Industrial Relations*
Temporary Shear Stability Index (TSSI)	The measure of the viscosity modifier's contribution to an oil's percentage viscosity loss under high shear conditions. Temporary shear loss results from the reversible lowering of viscosity in high shear areas of the engine, an effect that can positively influence fuel economy and cold cranking speed.	*Lubrication*
Temporary Viscosity Loss (TVL)	Measure of decrease in dynamic viscosity under high shear rates compared to dynamic viscosity under low shear.	*Lubrication*
Temporary Wetland	A type of wetland in which water is present for only part of the year, usually during wet or rainy seasons; also known as vernal pools.	*Petroleum Engineering*
Ten	a measure of coal, usually consisting of 440 bolls of 8 pecks each, but varied within the range of from 418 to 440 bolls; it could, however, be as high as 550 bolls. As the weight of a boll of coal was 2.35284 cwts., the weight of the ten of 440 bolls is 51.76428 tons. Sometimes it was fixed at 50 tons.	*Mining*
Ten (j)	a provision in the Taft-Hartley Act which permits the National Labor Relations Board to obtain injunctive relief when "there is reasonable cause to believe that the charges filed were true" and that injunctive relief in necessary to effectuate the policies of the Act.	*Industrial Relations*
Ten mile long flume, Twin Springs, Idaho Flume	A boxing or piping for carrying water. Similar to sluice boxes, but they do not have riffles and are used solely to transport water in areas where a ditch would be impossible such as cliff sides and rocky hillsides.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tenant	a person who pays rent to live on someone else's land	*Agriculture*
Tender bind	soft shale or mudstone, (Yorks.).	*Mining*
Tenite I	A trade name for cellulose acetate plastic.	*Material Process*
Tenite II	A trade name for cellulose acetate butyrate plastic.	*Material Process*
Tennessee Valley Authority	established by congress in the Tennessee Valley Authority Act of 1933, the first major program for comprehensive river valley development in the United States.	*Industrial Relations*
Tennessee Valley Authority (TVA)	A federal agency established in 1933 to develop the Tennessee river valley region of the southeastern U.S.	*Energy*
Tennessee Walking Horse	AKA, Tennessee Walker. The breed evolved from the Narragansett Pacer, Canadian, Morgan, Standardbred, Thoroughbred and American Saddlebred. It takes its name from the place most associated with its development, the middle Tennessee bluegrass region. Prized for its smooth-riding gait. But a hundred years ago the breed was a utility animal used for all type of farm work. Recognized as a breed only since formation of the Tennessee Walking Horse Breeders' Association of America in 1935.	*Agriculture*
Tensile strength	The maximum engineering stress experienced by a material during a tensile test.	*Material Process*
Tensile strength	The highest tensile stress that a material can withstand before failure or rupture occurs - the force being applied in a direction tending to elongate the material.	*General Mechanical*
Tensile Strength	The longitudinal stress required to break a specimen of prescribed dimension divided by the original cross-sectional area at the point of rupture (usually expressed in pounds per square inch).	*Electrical*
Tensile Stress	Axial forces per unit area applied to a body that tend to extend it.	*Mechanical*
Tensile test	A destructive test performed on a specially machined specimen taken from material in its delivered condition to determine mechanical properties, such as tensile strength, yield strength, and percent elongation.	*Mechanical*
Tensiometer	The instrument used for measuring the capillary pressure in an unsaturated zone.	*Petroleum Engineering*
Tension	The act of stretching.	*Mining*
Tension Leg Platform	A type of platform generally used in deep waters. Instead of a stationary platform attached to the ocean floor, the surface platform is tethered to a template on the ocean floor by flexible steel tendons.	*Petroleum Drilling*
Tension test	Same as "Tensile Test"	*Mechanical*
Tension Washers	A general name given to spring washers, curved washers, Belleville washers and disc springs. This type of washer provides a relatively low stiffness (compared to the joint stiffness) and can be used to act as a spring take-up with a bolt to prevent movement between parts.	*Maintenance*
Tentale	the tonnage rent upon coals drawn, the rent paid to the lessor for a ten of coals. (N. East).	*Mining*
Tenter	the man who ran the engine or jig; or the engineer (Yorks.); or the person who looked after the horses in the pit.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tenure	Tenure is a time-limited ownership of the subsurface petroleum and natural gas (PNG) rights, and confers the right to apply to access, explore and develop oil and gas according to applicable statutory requirements.	*Petroleum Engineering*
Teost	A bench test for assessing the tendency of an oil to form high temperature deposits.	*Mechanical, Process, and Operations*
Terawatt hour	One trillion watt hours.	*Energy*
Term	Definition	*Discipline*
Term agreement	Any written or unwritten agreement between two parties in which one party agrees to supply a commodity on a continuing basis to a second party for a price or for other considerations.	*Energy*
Terminal	An input/output device used to enter data into a computer and record the output.	*Electrical*
Terminal Base Linearity T.B.L. (End Point Linearity)	A method of defining linearity. The maximum deviation of any data point on a sensor output curve from a straight line drawn between the end data points on that output curve. (T.B.L. is approximately twice the magnitude of B.F.S.L.).	*Electrical Engineering*
Terminal electron acceptor (TEA)	a compound or molecule that accepts an electron (is reduced) during metabolism (oxidation) of a carbon source. Under aerobic conditions molecular oxygen is the terminal electron acceptor. Under anaerobic conditions a variety of terminal electron acceptors may be used. In order of decreasing redox potential, these TEAs include nitrate, manganic manganese, ferric iron, sulfate, and carbon dioxide. Microorganisms preferentially utilize electron acceptors that provide the maximum free energy during respiration. Of the common terminal electron acceptors listed above, oxygen has the highest redox potential and provides the most free energy during electron transfer.	*Chemical*
Terminal Line	A theoretical slope for which the theoretical end points are normalized at 0 and 100% of both measurand and output. Interchangeability error is referenced to this line.	*Electrical Engineering*
Terminal location	The physical location of one end of a transmission line segment.	*Energy*
Termination	the severing of an employee's relationship with his employer.	*Industrial Relations*
Termination	1). The load connected to the output end of a transmission line. 2). The provisions for ending a transmission line and connecting to a bus bar or other terminating device.	*Electrical*
Terminator	Chemical species that ends a chain growth polymerization mechanism.	*Material Process*
Terms of Service	Content of the agreement between a customer and a REP.	*Energy*
Terotechnology	The application of managerial, financial, engineering, and other skills to extend the operational life of, and increase the efficiency of, equipment and machinery. "A combination of management, financial, engineering, and other practices applied to physical assets in pursuit of economic life-cycle costs (LCC). Its practice is concerned with specification and design for reliability and maintainability of plant machinery, equipment, buildings, and structures with their installation, commissioning, maintenance, modification, and replacement, and with feedback of information on design, performance, and costs" (from the definition endorsed by the British Standards Institute).	*Maintenance*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TERP	Texas Emissions Reduction Program	*Petro-Chemical Abbreviations*
Terpene	Any of series of isomeric hydrocarbons, C10H16, obtained by the distillation of plants, especially the conifers.	*Material Process*
Terpolymer	The product of copolymerization of three different monomers, or of the grafting of one monomer to the copolymer of two different monomers. An example of a terpolymer is ABS resin, derived from acrylonitrile, butadiene, and styrene.	*Engineering Physics*
Terrain	The contour of the earth.	*Aeronautical Engineering*
Terrain avoidance (TA)	Flight such that the aircraft maintains a constant barometric altitude but flies around obstacles; Compare: obstacle avoidance, threat avoidance.	*Aeronautical Engineering*
Terrain following (TF)	A basic guidance mode, providing vertical guidance to maintain an operator selected radar altitude above the terrain. Flight such that the aircraft tries to maintain a constant height above the terrain, usually in the range of 100-1,000 ft; Uses a g-command from the Multi-Mode Radar to generate a flight director cue. This controls the aircraft flight path so that the set clearance altitude is achieved over major high points in the terrain with zero flight path angle. Compare: nap-of-the-earth flight.	*Aeronautical Engineering*
Terrain Referenced Navigation (TRN)	A navigation mode based on comparison of barometric altitude and radar altitude with a map; Kalman filters correlate the terrain data and the altitudes. A primary navigation data source. TRN combines INS with map references. It is most accurate over rough terrain. Does not give accurate data while over flat areas or water. See Also: Digital Map Generator.	*Aeronautical Engineering*
Terrazzo	A non-resilient floor material composed of marble and Portland cement.	*Chemistry*
Terrestrial sequestration	Biotic sequestration of carbon in above- and below-ground biomass and soils.	*Energy*
Tertiary	Treatment of water to remove nutrients such as phosphorus and nitrogen	*Filtration*
Tertiary	Lateral or panel openings (e.g., ramp, crosscut).	*Mining*
Tertiary amyl methyl ether - $(CH_3)_2(C_2H_5)COCH_3$	An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.	*Energy*
Tertiary butyl alcohol - $(CH_3)_3COH$	An alcohol primarily used as a chemical feedstock or a solvent or feedstock, for isobutylene production for MTBE (methyl tertiary butyl ether) and produced as a co-product of propylene oxide production or by direct hydration of isobutylene.	*Energy*
Test	any device or questionnaire, written or oral, for the purpose of measuring a person's abilities.	*Industrial Relations*
Test certificates	Documents provided by a manufacturer certifying that required tests were performed.	*Mechanical*
Test complexity	Refers to the CLIA system of classifying tests into categories on the basis of the difficulty of measurement and interpretation. Categories include waived, provider performed microscopy, moderate complexity, and high complexity.	*Quality*
Test Flange	A blind flange, usually with a lead filled cavity used to cushion and minimize the wear caused by erosion from high velocity and abrasive fluids.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Test Hands	employees used in motion study in order to determine the proper sequence of job operations to eliminate waste effort.	*Industrial Relations*
Test hole	A well drilled to shallow depths for evaluation purposes. It can be drilled deeper in formations with BC Oil and Gas Commission approval and without the requirement of holding subsurface rights.	*Petroleum Engineering*
Test method	The method which is selected for experimental testing to validate its performance characteristics.	*Quality*
Test of association	A statistical test to assess whether the value of one variable is associated (i.e. varies with) the value of another variable, or whether the presence or absence of a factor is more likely when a particular outcome is present. See also: Correlation	*Quality Analysis*
Test status words	Status words reported at the conclusion of a test. Values: test in progress, not tested, normal, redundant, degraded, failed.	*Aeronautical Engineering*
Test well contribution	A payment made to the owner of an adjacent or nearby tract who has drilled an exploratory well on that tract in exchange for information obtained from the drilling effort.	*Energy*
Testing	An element of verification for the determination of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions.	*Maintenance and Repair*
Testing flame	the lowered flame of the flame safety lamp when the lamp is being used to test for firedamp.	*Mining*
Tether	Braided Kevlar double strap bolted to the wheel on one end and to the chassis on the other to keep the wheel attached to the chassis in case of an accident.	*NASCAR*
Tetra ethylene glycol	A solvent - glycol.	*Material Process*
Tetrahedral position	Site in a crystallographic structure at which an atom or ion would be surrounded by four neighboring atoms or ions.	*Material Process*
Tetrachlorethane	1,2,2,2-Tetrachlorethane A solvent chlorinated hydrocarbons.	*Material Process*
Tetradecyl alcohol	A solvent - alcohol.	*Material Process*
Tetrahedral	Involving fourfold coordination.	*Material Process*
Tetrahydrofurfuryl alcohol	A solvent-furan.	*Material Process*
Texas and New Orleans Railway v. Brotherhood of Railway and Steamship Clerks	a case which resulted from an action by the Railway Clerks in 1927 under Section 2 of the Railway Labor Act seeking an injunction against the Texas and New Orleans Railway Company.	*Industrial Relations*
Texas Longhorn	A breed of beef cattle. They are registered by the Texas Longhorn Breeders Association of America.	*Agriculture*
Textile Workers of America; United (AFL-CIO)	organized in Washington, D.C., in November 1901.	*Industrial Relations*
Textile Workers Union of America (AFL-CIO)	a union which developed out of the activities in the late 1930's of the Textile Workers Organizing Committee.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Texture	The texture of a grease is observed when a small portion of it is pressed together and then slowly drawn apart. Texture can be described as: Brittle — ruptures or crumbles when compressed Buttery — separates in short peaks with no visible fibers. Long Fibers — stretches or strings out into a single bundle of fibers. Resilient — withstands a moderate compression without permanent deformation or rupture. Short Fibers — short break-off with evidence of fibers. Stringy — stretches or strings out into long fine threads, but with no evidence of fiber structure	*Lubrication*
Textured microstructure	Microstructure	*Material Process*
Textured microstructure	Textured microstructure Microstructure associated with preferred orientation.	*Material Process*
TFB	Swedish Transport Research Board	*Petro-Chemical Abbreviations*
TFMO	abbreviation for tool force magnitude and orientation. (lbf @ degrees)	*Petroleum Drilling*
TFOUT	thin film oxygen uptake test	*Petro-Chemical Abbreviations*
TGF	top groove fill	*Petro-Chemical Abbreviations*
THD	Total Harmonic Distortion. For a signal, the ratio of the sum of the powers of all harmonic frequencies above the fundamental frequency to the power of the fundamental frequency.	*Reliability Engineering*
THD	abbreviation for Technical Hole Deviation.	*Petroleum Drilling*
THD Technology	abbreviation for Technical Hole Deviation Technology.	*Petroleum Drilling*
THD well log	either the Vertical THD Log or the Horizontal THD Log.	*Petroleum Drilling*
The Collaboration Trading Company, Limited	A wholly owned subsidiary of The Cochrane Collaboration, the registered charity.	*Quality Engineering*
The English Suffolk Society	was formed in 1886 to provide a registry service and to promote the breed. First imported to the United States (New York) in 1888. The breed didn't make its way to the western states until 1919.	*Agriculture*
The following coal-producing States are split in origin of coal, as defined by	The following coal-producing States are split in origin of coal, as defined by:	*Energy*
The Frack Act	The Fracturing Responsibility and Awareness of Chemicals Act seeks to reverse some of the policies enacted in the 2005 energy policy and compel full disclosure of the chemicals, and specifically the concentrations of the chemicals used in hydraulic fracturing. Currently, the amount of each chemical is considered proprietary information. Democratic Senator Bob Casey (Pennsylvania) and Congresswoman Diana DeGette (Colorado) are the primary sponsors of the bill.	*Petroleum Drilling*
The PCIe electrical interface	The PCIe electrical interface is also used in a variety of other standards, most notably the Express Card laptop expansion card interface.	*Electrical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
The Stag	term used for Nystagmus, an eye disease caused by working in low light conditions.	*Mining*
The term derate can also refer to discounting a portion of a generating units capacity for planning purposes	The term derate can also refer to discounting a portion of a generating units capacity for planning purposes.	*Energy*
Theoretical critical shear stress	High stress level associated with the sliding of one plane of atoms over an adjacent plane in a defect free crystal.	*Material Process*
Therblig	an element of motion first classified by Frank G. Gilbreth. He classified the 17 basic types by setting out a symbol for each movement.	*Industrial Relations*
There are of two types of conveyor systems	There are of two types of **conveyor systems**:	*Energy*
Therm	One hundred thousand (100,000) Btu.	*Energy*
Thermal activation	Atomic scale process in which an energy barrier is overcome by thermal energy.	*Material Process*
Thermal Barrier Coating	A coating forming an insulating barrier to a heat source to protect the substrate.	*Paint and Coatings*
Thermal capacity	The number of gallons per minute (GPM) a cooling tower will handle for a specified range, wet-bulb temperature, and approach. Also simply known as Capacity.	*Facility Engineering*
Thermal coal	Coal burned to generate the steam that drives turbines to generate electricity.	*Mining*
Thermal Coefficient of Resistance	The change in resistance of a semiconductor per unit change in temperature over a specific range of temperature.	*Electrical*
Thermal Conductivity	The ability of a material to conduct heat in the form of thermal energy.	*Electrical*
Thermal Conductivity	Ability of material to conduct heat.	*Electrical*
Thermal conversion factor	A factor for converting data between physical units of measure (such as barrels, cubic feet, or short tons) and thermal units of measure (such as British thermal units, calories, or joules); or for converting data between different thermal units of measure. See Btu conversion factor.	*Energy*
Thermal cracking	A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal-cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking).	*Energy*
Thermal cycling	Subjecting a product to predetermined temperature changes, between hot and cold extremes.	*Reliability Engineering*
Thermal Decomposition	Decomposition resulting from action by heat. It occurs at a temperature at which some components of the material are separating or reacting together, with a modification of the macro or microstructure.	*Engineering Physics*
Thermal Degradation	Thermal degradation or thermal cracking is the breaking of carbon - carbon bonds in the fluid molecules by heat to form smaller fragments which are free radicals. The reaction may either stop at that point, in which case smaller molecules than previously existed are formed, or, the fragments may react with each other to form polymeric molecules larger than previously existed in the fluid.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	In heat transfer terminology, the two types of degradation products are known as "low boilers" and "high boilers." If thermal degradation occurs at extreme temperatures greater than 400°C (752°F), the effect is not only to break carbon - carbon bonds but to separate hydrogen atoms from carbon atoms and form coke. In this case, fouling of the heat transfer surfaces is very rapid and the system will soon cease to operate. The effect of the low boilers is to decrease the flash point and viscosity of the fluid as well as to increase its vapor pressure. The effect of the high boilers is to increase the viscosity of the fluid as long as they remain in solution. However, once their solubility limit is exceeded, they begin to form solids which can foul the heat transfer surfaces.	
Thermal desorber	describes the primary treatment unit that heats petroleum-contaminated materials and desorbs the organic materials into a purge gas or off-gas.	*Chemical*
Thermal desorption system	refers to a thermal desorber and associated systems for handling materials and treated soils and treating offgases and residuals.	*Chemical*
Thermal Diffusivity	The measure of the transient heat flow through a material.	*Metallurgy*
Thermal Direct Printer	Forms images by pressing heated areas of printing head against heat-sensitive paper. (No ribbon is needed)	*General*
Thermal Drift Chart	A chart illustrating sensor operating variance due to changes in temperature.	*Electrical Engineering*
Thermal efficiency	A measure of the efficiency of converting a fuel to energy and useful work; useful work and energy output divided by higher heating value of input fuel times 100 (for percent).	*Energy*
Thermal emf	See Seebeck emf	*Electrical*
Thermal Endurance	The time in hours at a selected temperature for an insulating material or system of material or system of materials to deteriorate to some predetermined level of electrical, mechanical, or chemical performance under prescribed conditions of test.	*Electrical*
Thermal energy storage	The storage of heat energy during utility off-peak times at night, for use during the next day without incurring daytime peak electric rates.	*Energy*
Thermal Expansion	An increase in size due to an increase in temperature expressed in units of an increase in length or increase in size per degree, i.e. inches/inch/degree C.	*General Engineering*
Thermal expansion	the process by which steel becomes larger upon heating	*Materials Process*
Thermal Expansion (Coefficient of)	The fractional change in length (sometimes volume) of a material for a unit change in temperature.	*Electrical*
Thermal Expansion Coefficient	The amount a material will change in dimension with a change in temperature. It is the amount of strain due to thermal expansion per degree Kelvin expressed in units of K-1.	*Metallurgy*
Thermal Gradient	The distribution of a differential temperature through a body or across a surface.	*Electrical*
Thermal Gradient	The distribution of a differential temperature through a body or across a surface.	*Electronic Process*
Thermal limit	The maximum amount of power a transmission line can carry without suffering heat-related deterioration of line equipment, particularly conductors.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thermal Pollution	A reduction in water quality caused by increasing its temperature, often due to disposal of waste heat from industrial or power generation processes. Thermally-polluted water can harm the environment because plants and animals have a hard time adapting to it.	*Petroleum Engineering*
Thermal Rating	The maximum and/or minimum temperature at which a material will perform its function without undue degradation.	*Electrical*
Thermal rating (electric)	The maximum amount of electrical current that a transmission line or electrical facility can conduct over a specified time period before it sustains permanent damage by overheating or before it sags to the point that it violates public safety requirements. NERC definition	*Energy*
Thermal Relief Valve	A valve which limits the pressure in a system caused by heat expansion of oil.	*Mechanical, Process, and Operations*
Thermal resistance (R-Value)	This designates the resistance of a material to heat conduction. The greater the R-value the larger the number.	*Energy*
Thermal Sensitivity Shift	The sensitivity shift due to changes of the ambient temperature from room temperature to the specified limits of the compensated temperature range.	*General Engineering*
Thermal shock	The fracture of a material as the result of a temperature change, usually a sudden cooling.	*Material Process*
Thermal Shock Resistance	The measure of how large a change in temperature a material can withstand without damage. Thermal shock resistance is very important to most high temperature designs. Measurements of thermal shock resistance are highly subjective because it is extremely process dependent. Thermal shock resistance is a complicated function of heat transfer, geometry and material properties. The temperature range and the shape of the part play a key role in the material's ability to withstand thermal shock. Tests must be carefully designed to mimic anticipated service conditions to accurately assess the thermal shock resistance of a material.	*Metallurgy*
Thermal spraying	A process in which coating material is heated and accelerated from a spray torch towards the work piece. The deposited material forms a coating on the surface.	*Paint and Coatings*
Thermal Spring	Heated groundwater naturally flowing to the land surface.	*Petroleum Engineering*
Thermal Stability	Ability of a polymer to maintain its initial physical and chemical properties at elevated temperature.	*Engineering Physics*
Thermal storage	Storage of heat or heat sinks (coldness) for later heating or cooling. Examples are the storage of solar energy for night heating; the storage of summer heat for winter use; the storage of winter ice for space cooling in the summer; and the storage of electrically-generated heat or coolness when electricity is less expensive, to be released in order to avoid using electricity when the rates are higher. There are four basic types of thermal storage systems: ice storage; water storage; storage in rock, soil or other types of solid thermal mass; and storage in other materials, such as glycol (antifreeze).	*Energy*
Thermal Transfer Printer	Forms images by pressing heated areas of printing head against heat-sensitive ribbon which presses against media.	*Gears*
Thermal vibration	Periodic oscillation of atoms in a solid at a temperature above absolute zero.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thermal Zero Shift	An error due to changes in ambient temperature in which the zero pressure output shifts. Thus, the entire calibration curve moves in a parallel displacement.	*General*
Thermistor	A temperature-sensing element composed of sintered semiconductor material which exhibits a large change in resistance proportional to a small change in temperature. Thermistors usually have negative temperature coefficients.	*Electrical*
Thermochemically Formed Coatings	A painted, dipped or sprayed chromium oxide based coating consolidated by repeated deposition and curing cycles (about 500oC).	*Paint and Coatings*
Thermocouple	The junction of two dissimilar metals which has a voltage output proportional to the difference in temperature between the hot junction and the lead wires (cold junction) (refer to Seebeck emf).	*Electrical*
Thermocouple	A device which uses a circuit of two wires of dissimilar metals or alloys, the two junctions of which are at different temperatures. A net electromotive force (emf) occurs as a result of differences in conductivity. The minute electromotive force or current, is sufficient to drive a galvanometer or potentiometer.	*Engineering Physics*
Thermodynamic	characteristics of or resulting from the conversion of heat into other forms of energy	*Materials Process*
Thermodynamics	A study of the transformation of energy from one form to another, and its practical application.	*Energy*
Thermoelectric Power Water Use	Water used in the process of the generation of thermoelectric power. Power plants that burn coal and oil are examples of thermoelectric-power facilities.	*Petroleum Engineering*
Thermoforming	The process of forming a thermoplastic sheet into a three dimensional shape by clamping the sheet in a frame, heating it to render it soft, then applying differential pressure to make the sheet conform to the shape of the mold or die positioned below the frame.	*Engineering Physics*
Thermography	The process of monitoring the condition of equipment through the measurement and analysis of heat. Thermography is typically conducted through the use of infrared cameras and associated software. It is commonly used for monitoring the condition of high voltage insulators and electrical connections, which includes refractory in furnaces and boilers, and other applications.	*Maintenance*
Thermogravimetric Analysis	The measurement of changes in weight of a specimen as it is heated. Some tests are conducted in air and some in other atmospheres. The resulting data reveals information about the materials thermal stability and polymerization processes.	*Engineering Physics*
Thermophilic	A type of bacteria that thrives in very high temperatures.	*Chemical Engineering*
Thermophotovoltaic cell	A device where sunlight concentrated onto a absorber heats it to a high temperature, and the thermal radiation emitted by the absorber is used as the energy source for a photovoltaic cell that is designed to maximize conversion efficiency at the wavelength of the thermal radiation.	*Energy*
Thermopile	An arrangement of thermocouples in series such that alternate junctions are at the measuring temperature and the reference temperature. This arrangement amplifies the thermoelectric voltage. Thermopiles are usually used as infrared detectors in radiation pyrometry.	*Electrical*
Thermoplastic	A plastic which is capable of being repeatedly softened by increase of temperature and hardened by decrease of temperature.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thermoplastic	A classification of resin that can be readily softened and reformed by heating and be rehardened by cooling.	*Electrical*
Thermoplastic elastomer	Composite like polymer with rigid, elastomeric domains in a relatively soft matrix of crystalline, thermoplastic polymer.	*Material Process*
Thermoplastic polymer	See thermoplastic.	*Material Process*
Thermoplastic Polyster (Saturated)	Thermoplastic Polyster compounds were introduced in the 1970s and are hard, crystalline, strong, and tough. They are commonly used in soda bottles, as well as in magnetic tape for video, audio, and computers. They are also used in X-ray film, strapping, labels, and packaging.	*Material Engineering*
Thermoplastics	Resins or plastic compounds which, in their final state as finished articles, are capable of being repeatedly softened by an increase of temperature and hardened by a decrease of temperature.	*Engineering Physics*
Thermoset	polymer that cannot be repeatedly melted and reformed because of strong covalent bonding between chains	*Physics*
Thermoset	1). To cure through chemical reaction by heat to a point of not being resoftened by subsequent heating. 2). A resin which cures by chemical reaction.	*Electrical*
Thermosets	Resins or plastic compounds which in the final state as finished articles are substantially infusible and insoluble. Thermosetting resins are often liquids at some stage in their manufacture or processing, and are cured by heat, catalysis, or other chemical means. After being fully cured, thermosets cannot be resoftened by heating.	*Engineering Physics*
Thermosetting	A plastic which when cured under application of heat or chemical means changes into a substantially infusible or insoluble product. Polymer that becomes hard and rigid upon heating.	*Material Process*
Thermosetting Plastic	Plastic which is capable of being changed into a substantially infusible or insoluble product when cured under application of heat or chemical means.	*Maintenance and Repair*
Thermosiphon system	A solar collector system for water heating in which circulation of the collection fluid through the storage loop is provided solely by the temperature and density difference between the hot and cold fluids.	*Energy*
Thermosiphon systems	Thermosiphon systems are simple solar thermal systems which are only used to heat the domestic water. They comprise a solar collector and an storage tank above the collector Radiation from the sun heats the solar liquid in the collector; the liquid becomes lighter and rises through the piping to the storage tank above. Thermosiphon systems are simple solar thermal systems which are only used to heat the domestic water. They comprise a solar collector and an storage tank above the collector Radiation from the sun heats the solar liquid in the collector; the liquid becomes lighter and rises through the piping to the storage tank above.	*Thermal Management*
Thermostat	A device that adjusts the amount of heating and cooling produced and/or distributed by automatically responding to the temperature in the environment.	*Energy*
Thermotechnology	The term thermotechnology refers to all technologies for the generation of space heat and hot water.	*Thermal Management*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thermowell	A closed-end tube designed to protect temperature sensors from harsh environments, high pressure, and flows. They can be installed into a system by pipe thread or welded flange and are usually made of corrosion-resistant metal or ceramic material, depending upon the application.	*Electrical*
They built a temporary dike of sandbags to keep the river from flooding the town. A bank of earth formed of material being excavated. A causeway. To furnish or drain with a dike. To enclose, restrain, or protect by a dike - Example - to dike a tract of land	They built a temporary dike of sandbags to keep the river from flooding the town. A bank of earth formed of material being excavated. A causeway. To furnish or drain with a dike. To enclose, restrain, or protect by a dike - Example - to dike a tract of land.	*Civil Engineering*
THF	tractor hydraulic fluid	*Petro-Chemical Abbreviations*
Thickener	The structure within a grease of extremely small, uniformly dispersed particles in which the liquid is held by surface tension and/or other internal forces.	*Lubrication*
Thickener	A large, round tank used in milling operations to separate solids from liquids; clear fluid overflows from the tank and rock particles sink to the bottom.	*Mining*
Thick-Film Technology	Technology using silk screened pastes to form conductor, resistor, thermistors, and insulator patterns; screened onto the substrate (usually ceramic) and cured by firing at elevated temperatures.	*Electrical Engineering*
Thill	the floor directly beneath a coal seam. –see also Warrant and Pavement.	*Mining*
Thimble	Grooved metal fitting to protect the eye, or fastening loop of a wire rope.	*Wire Rope & Cable*
Thimbles	loops on the sides of the cages through which the guide ropes pass.	*Mining*
Thin Film Lubrication	A condition of lubrication in which the film thickness of the lubricant is such that the friction between the surfaces is determined by the properties of the surfaces as well as by the viscosity of the lubricant.	*Lubrication*
Thin out	a seam which becomes nipped or narrows to a point where it is unprofitable to work.	*Mining*
Thin-Film Technology	A technology using vacuum deposition of conductors and dielectric materials onto a substrate (frequently silicon) to form an electrical circuit.	*Electrical Engineering*
Thing	a straight facing or cleat from the floor to the roof that was often many yards in length (N. Staffs.), or a fault slip. (Mids.).	*Mining*
Thinning	This refers to the finished wall of a blow molded container or the corners of a thermoformed part. The wall thickness has thinned out in some areas due to improper blowing or excessive stretching.	*Engineering Physics*
Thin-seam miner	resembles an auger machine but has a drum-type cutting head that cuts a rectangular cross section.	*Energy*
Thiokol	A trade name for synthetic rubber made from a polysulfide base.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thiourea (NH2CSNH2)	Rhombic prisms from alcohol. Sometimes used with or instead of urea in urea –aldehyde plastics.	*Material Process*
Third Order Input Intercept Point	The point at which the power in the third-order product and the fundamental tone intersect, when the amplifier is assumed to be linear. IIP3 is a very useful parameter to predict low-level intermodulation effects.	*Electrical Engineering*
Third Party Services	Services performed by any person or firm other than the buyer and supplier. Examples include transportation, public warehousing, brokerage services, rate auditing firms, and third-party network services in EDI data transmission.	*Procurement*
Third Quantum Number (Mλ)	Number representing the orientation of the electron cloud; can have any integer value (including zero) from -λ to +λ	*Physics*
Third Round Increases	general demands for wage adjustments following the end of World War II.	*Industrial Relations*
Third-party DSM program sponsor	An energy service company (ESCO) which promotes a program sponsored by a manufacturer or distributor of energy products such as lighting or refrigeration whose goal is to encourage consumers to improve energy efficiency, reduce energy costs, change the time of usage, or promote the use of a different energy source.	*Energy*
Third-party transactions	Third-party transactions are arms-length transactions between non affiliated firms. Producing country-to-company transactions are not considered to be third-party transactions.	*Energy*
Thirl or Thurl	a drift connecting two rooms or working places; an end; or to cut through, to make a connection; a 'cross-heading'.	*Mining*
Thirling, Thurling or sometime Thol	to cut away the last web of coal that separates two roadways driven from separate points to meet each other; or the connecting of underground roadways or shafts.	*Mining*
Thirty-Hour Week	a move in the early 1930's to reduce the daily hours of work to six in order to stimulate recovery from economic depression.	*Industrial Relations*
Thixotropic Liquid	If the viscosity of a liquid decreases as agitation is increased at constant temperature, the liquid is called thixotropic. Examples include glues, greases, paints, etc.	*Maintenance and Repair*
Thixotropy	Thixotropy of a lubricating grease is manifested by a decrease in consistency (softening) as a result of shearing and an increase in consistency after shearing is stopped. That property of a lubricating grease which is manifested by a softening in consistency as a result of shearing followed by a hardening in consistency starting immediately after the shearing is stopped.	*Lubrication*
Thomson Effect	When current flows through a conductor within a thermal gradient, a reversible absorption or evolution of heat will occur in the conductor at the gradient boundaries.	*Electrical*
Thoracic	Belonging or attached to the thorax.[1] Fin.	*Forestry*
Thorax	The body region behind the head, which bears wings and true (jointed) legs if present.	*Forestry*
Thorium	An element that is a byproduct of the decay of uranium.	*Energy*
THOT	turbo hydramatic oxidation test	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thousand-Hour Clause	the provision in Section 7(b) of the Fair Labor Standards Act which permits the employment of individuals up to 12 hours a day and 56 hours a week without overtime penalty if the employer and the union have entered into an agreement to the effect that no worker would be employed for more than 1,000 hours in any period of 26 consecutive weeks.	*Industrial Relations*
Thread	the cleat in a seam; or the straight line of stall faces without any loose ends, fast ends or steps. (Mids.).	*Mining*
Thread Compound	Used to lubricate the thread and shoulder area of the drill joint. Suitable thread compound should have a zinc base of 40-60% by weight to withstand the pressures and torque applied to the drill stem joints. Sometimes mistakenly referred to as grease.	*Petroleum Engineering*
Thread Crest	The top part of the thread. For external threads, the crest is the region of the thread which is on its outer surface, for internal threads it is the region which forms the inner diameter.	*Maintenance*
Thread Flank	The thread flanks join the thread roots to the crest.	*Maintenance*
Thread Height	This is the distance between the minor and major diameters of the thread measured radially.	*Maintenance*
Thread Length	Length the portion of the fastener with threads.	*Maintenance*
Thread plug	A part of a mold that shapes an internal thread and must be un screwed from the finished piece.	*Material Process*
Thread Root	The thread root is the bottom of the thread, on external threads the roots are usually rounded so that fatigue performance is improved.	*Maintenance*
Thread Runout	The portion at the end of a threaded shank which is not cut or rolled to full depth, but which provides a transition between full depth threads and the fastener shank or head.	*Maintenance*
Threaded parts	parts such as bolts and rods that allow nuts to be screwed on to one or both ends	*Materials Process*
Threadlocker	Can be a term used for a number of vibration resistant products but is now usually reserved for threadlocking adhesives. Specifically, a liquid anaerobic adhesive applied to nut or bolt thread, once hardened it fills the inner spaces between the threads to produce a solid plastic of a known shear strength.	*Maintenance*
Threat avoidance (ThA)	Flight cues designed to avoid enemy threats, such as anti-aircraft artillery and aircraft; Compare: obstacle avoidance, terrain avoidance.	*Aeronautical Engineering*
Threatened species	Condition that occurs when a species exhibits declining or dangerously low populations but still has enough members to maintain or increase numbers.	*Forestry*
Three Phase Line	This is capable of carrying heavy loads of electricity, usually to larger commercial customers.	*Energy*
Three Piece Expansion Adapter	used with open-end bits.	*Petroleum Drilling*
Three Position Plan	a procedure combining both training and promotion. It provides that every individual in the plant shall have three functions or three positions within the over-all group.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Three-body Abrasion	A particulate wear process by which particles are pressed between two sliding surfaces.	*Lubrication*
Three-phase power	Power generated and transmitted from generator to load on three conductors.	*Energy*
Three-phase power	A form of electricity used to supply heavy loads (power-hungry electrical equipment) such as industrial air conditioning units, grinding machines etc. Almost all power is generated as three-phase and, with the exception of HVDC, most transmission lines are three-phase. Three-phase is a more efficient way of delivering heavy loads and the three-phase motors it supplies are more efficient, smaller and cheaper to build than their single-phase counterparts. Wiring is simplified because no neutral return path is provided. Residential premises, however, are supplied with single-phase power.	*Electrical*
Thresh	to beat out a grain or seed from a stalk by treading, rubbing or striking with a flail, or with a machine	*Agriculture*
Threshold	The smallest change in a measured variable that gives a measurable change in output signal.	*Reliability Engineering*
Threshold Response	A control type that responds to the change in input signal level. Plug: in amplifiers are either threshold or transition responsive.	*Electrical Engineering*
Thrift Plans	programs promoted or sponsored by employers to educate employees in financial matters and to promote saving.	*Industrial Relations*
Throat diameter	Diameter of the shell in a natural draft tower at its narrowest point.	*Facility Engineering*
Throat of a Weld	A term applied to fillet welds. It is the perpendicular distance from the beginning of the root of a joint to the hypotenuse of the largest right triangle that can be inscribed within the fillet-weld cross section.	*Maintenance and Repair*
Throttle	A flight control operated by moving fore or aft with hands, primarily to control thrust (speed) in fixed-wing aircraft.	*Aeronautical Engineering*
Throttle cue	A longitudinal flight director cue for fixed-wing aircraft, primarily to control speed, by changing power; Compare: longitudinal cyclic cue; Symbols: Gamma sub LONG; Typical Units: percent, in.	*Aeronautical Engineering*
Throttling	The intentional restriction of flow by partially closing or opening a valve.	*General Mechanical*
Through coal	coal as it left the mine without any attempt at grading it into different sizes, run-of-the-mine coal. In South Wales it is sometimes called 'thro and thro' coal.	*Mining*
Through ventilation	the normal ventilation throughout a mine as opposed to ventilation produced by auxiliary fans for local ventilation such as in a blind heading.	*Mining*
Througher or Thrower	a room driven between two levels or main roads to win the coal and improve the ventilation. (Scot.).	*Mining*
Throughput	The quantity or amount of product moved on a conveyor at a given time.	*Manufacturing*
Throughput	Output or production measured over a period of time.	*Reliability Engineering*
Through-steel	A system of dust collection from rock or roof drilling. The drill steel is hollow, and a vacuum is applied at the base, pulling the dust through the steel and into a receptacle on the machine.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Throw	The number of circuits that each individual pole of a switch can control. The number of throws is completely independent of the number of poles and number of breaks. A single: pole double: throw single: break switch connects the common terminal of the switch to the normally closed terminal when the plunger is free, but connects the common terminal to the normally open terminal when the plunger is depressed. A single: pole single: throw single: break switch has a common terminal and either a normally open terminal or a normally closed terminal but not both.	*Electrical Engineering*
Throw	the vertical displacement on a fault, either a down-throw or an up-throw.	*Mining*
Throwaway Maintenance	This represents a variation on the Run-to-Failure approach. It differs in that the decision is made in advance that the corrective action on failure will always be replacement rather than repair. This is a very common approach to maintenance of electronic components, which often exhibit random failure rates, and for which no repair is feasible.	*Maintenance*
Throwing	breaking out the spurns from the cuttings and knocking out the nogs from the under-cut ready to bring down the main body of coal.	*Mining*
Thru Scan	A scanning technique in which the emitter (light source) is aimed directly at the receiver. Also called direct scan and transmitted scan, since light is transmitted directly, not reflected to the sensor. Presently, it is the only scanning technique commonly used to scan distances greater than 40 feet.	*Electrical Engineering*
Thru-conduit	An expression characterizing valves when in the open position, wherein the bore presents a smooth uninterrupted interior surface across seat rings and thru the valve port, thus affording minimum pressure drop. There are no cavities or large gaps in the bore between seat rings and body closures or between seat rings and ball/gate. Consequently, there are no areas that can accumulate debris to impede pipeline cleaning equipment or restrict the valve's motion.	*Mechanical*
Thrust	Force, created by engines and rotors, acting in the direction of the engine; Symbols: T; Typical Units: lbf, kip; Dimensions: Mass * Length / Time-squared.	*Aeronautical Engineering*
Thrust	The net force applied to a part in a particular direction - e.g., on the end of a valve stem.	*Mechanical*
Thrust Bearing	An axial-load bearing.	*Equipment*
Thrust position	Location in direction of a shaft centerline. See axial position.	*Reliability Engineering*
Thrusters	children who pushed the corves with their hands and heads from the headings to the shaft. (Yorks.).	*Mining*
Thrutcher	a person who pushed tubs, a drawer or putter; or a bag filled with a soft material e.g. cork dust, worn inside a flat cap to protect the head when pushing tubs. (Lancs.).	*Mining*
Thwarting	short branches or roads, where the seam was almost vertical, driven through the rock from one seam to the other. (Som.).	*Mining*
Thyristor	A thyristor is a semiconductor device used in electrical systems, such as HVDC installations, as a high-speed, high-power switch, capable of turning power supplies of many megawatts on within a split second. Thyristors are a component used in inverters and rectifiers. (See also Inverter and Rectifier).	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Thyristor-controlled series capacitor	see Capacitor	*Electrical*
Tich	a hand-held drilling machine for boring shot-holes. (Mids.).	*Mining*
Tidewater piers and coastal ports (method of transportation to consumers)	Shipments of coal moved to tidewater piers and coastal ports for further shipments to consumers via coastal water or ocean.	*Energy*
Tie Bars	Bars which provide structural rigidity to the clamping mechanism often used to guide platen movement.	*Engineering Physics*
Tie line	A transmission line connecting two or more power systems.	*Energy*
Tie line (electric)	A circuit connecting two Balancing Authority Areas. Also, describes circuits within an individual electrical system. NERC definition	*Energy*
Tie rod	An axial external cylinder rod which traverses the length of the cylinder. It is prestressed at assembly to hold the ends of the cylinder against the tubing. Tie rod extensions can be a mounting device.	*Mechanical, Process, and Operations*
Tight	See Push.	*NASCAR*
Tight gas	Natural gas found in reservoirs with low porosity and low permeability. It can be compared to drilling a hole into a concrete driveway–the rock layers that hold the natural gas are very dense, therefore the gas doesn't flow easily.	*Petroleum Drilling*
Tight oil	Oil produced from petroleum-bearing formations with low permeability such as the Eagle Ford, the Bakken, and other formations that must be hydraulically fractured to produce oil at commercial rates. Shale oil is a subset of tight oil.	*Energy*
Tight sands	A geological formation consisting of a matrix of typically impermeable, nonporous tight sands.	*Petroleum Drilling*
Till	Predominantly unsorted layered drift. Generally unconsolidated, deposited directly by and underneath a glacier without subsequent reworking by meltwater, and consisting of a mixture of clay, silt, sand, gravel, and boulders ranging widely in size and shape.	*Petroleum Engineering*
Tiller Rope Cable	A very flexible operating rope, commonly made by laying six 6x7 ropes around a fiber core resulting in a 6x42 construction. As well as, a 3/32 inch 7x7 galvanized cable coated to an outside diameter of 3/16 inch with vinyl or nylon.	*Wire Rope & Cable*
Tilt boundary	Grain boundary associated with the tilting of a common crystallographic direction in two adjacent grains.	*Material Process*
Tilt rotor	An aircraft with tilting rotors for fixed-wing flight or rotary-wing flight.	*Aeronautical Engineering*
Tim yin	empty tubs. (Scot.).	*Mining*
Timber	A collective term for underground wooden supports.	*Mining*
Timber cruise	A survey of forestland to locate timber and estimate its quantity by species, products, size, quality, or other characteristics.	*Forestry*
Timber set	A timber frame to support the roof, sides, and sometimes the floor of mine roadways or shafts.	*Mining*
TIMBER STAND IMPROVEMENT (TSI)	Improving the quality of a forest stand by removing or deadening undesirable species to achieve desired stocking and species composition.	*Forestry*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Timbering	The setting of timber supports in mine workings or shafts for protection against falls from roof, face, or rib.	*Mining*
Time and a Half Pay	overtime or premium compensation of one and one-half times the regular rate for time worked as overtime under the Fair Labor Standards Act.	*Industrial Relations*
Time and Motion Study	the analysis of motions and measurement of time required to perform a specific job with specified materials and equipment.	*Industrial Relations*
Time Basis	applies to wages received by employees on an hourly, weekly, or other time basis.	*Industrial Relations*
Time clocks or timed switches	Time clocks are automatic controls, which turn lights off and on at pre determined times.	*Energy*
Time constant	Constant for a first-order filter determining time at which the output of the filter reaches nearly 0.6321 percent of a step input; Symbols: tau; Typical Units: s; Dimensions: Time.	*Aeronautical Engineering*
Time constant	Constant for a first-order filter determining time at which the output of the filter reaches nearly 0.6321 percent of a step input; Symbols - tau; Typical Units - s; Dimensions - Time.	*Aeronautical Engineering*
Time Delay Before Availability	Also know as False Pulse Protection. Outputs are turned Off when power is first applied during this time period.	*Electrical Engineering*
Time Limits	may apply to many areas of collective bargaining but most frequently to the time limits set forth in the grievance procedure.	*Industrial Relations*
Time Lost on Grievances	provisions in many contracts require pay to shop stewards or grievance committee members for the time necessarily spent in handling grievances during working hours.	*Industrial Relations*
Time of Travel (TOT)	The time required for a contaminant to move in the saturated zone from a specific point to a well.	*Petroleum Engineering*
Time of use (TOU) Rates	The pricing of electricity based on the estimated cost of electricity during a particular time block, either time-of-day or by season.	*Energy*
Time Rules	The amount of time given to each part of the debate	*Management Discussion*
Time Study	the attempt to make an accurate stop-watch study of each individual job to determine the best way or performing it.	*Industrial Relations*
Time Study Analyst	an individual who makes a detailed analysis of the time required for an average operator to perform a particular job.	*Industrial Relations*
Time Study Engineer	a person who specializes and has been trained in motion and time study and has a proper background in engineering.	*Industrial Relations*
Time to event	A description of the data in studies where the analysis relates not just to whether an event occurs but also when. Such data are analyzed using survival analysis. (Also called survival data.) See also: Survival analysis	*Quality Engineering*
Time to Re-instate (TTR)	Time required to re-instate equipment back into production at full speed.	*Maintenance*
Time Wages	a fixed wage based on an hour, day, week, or month paid for a specific job or occupation.	*Industrial Relations*
Time, Dead	The interval of time between initiation of an input change or stimulus and the start of the resulting response.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Time, Ramp Response	The time interval by which an output lags an input, when both are varying at a constant rate.	*Process Control*
Time, Rise	The time required for the output of a system (other than first order) to make the change from a small specified percentage (often 5 or 10) of the steady-state increment to a large specified percentage (often 90 to 95), either before or in the absence of overshoot.	*Process Control*
Time, Settling	The time required, following the initiation of a specified stimulus to a system, for the output to enter and remain within a specified narrow band centered on its steady-state value.	*Process Control*
Time, Step	Response Of a system or an element, the time required for an output to make the change from an initial value to a large specified percentage of the final steady-state value either before or in the absence of overshoot, as a result of a step change to the input.	*Process Control*
Timed Availability	Available for unrestricted operation during a period of time in which operation is required. Sometimes referred to as Total Available Time (be careful total available time is also sometimes referred to as the total number of installed hours, basically being the number of hours in a year).	*Maintenance*
Time-of-day lock-out or limit	A special electric rate feature under which electricity usage is prohibited or restricted to a reduced level at fixed times of the day in return for a reduction in the price per kilowatt hour.	*Energy*
Time-of-day pricing	A special electric rate feature under which the price per kilowatt hour depends on the time of day.	*Energy*
Time-of-day rate	The rate charged by an electric utility for service to various classes of customers. The rate reflects the different costs of providing the service at different times of the day.	*Energy*
Time-off Plan	a plan or system for paying a fixed or constant wage to workers who work fluctuating work weeks by giving them time off to offset the overtime work.	*Industrial Relations*
Time-of-Use Rates	Electricity prices that vary depending on the time periods in which the energy is consumed. In a time-of-use rate structure, higher prices are charged during utility peak-load times. Such rates can provide an incentive for consumers to curb power use during peak times.	*Energy*
Time-Work Contracts	agreements whereby payment is made by the hour without regard to amount of production.	*Industrial Relations*
Timing differences	Differences between the periods in which transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income. Timing differences originate in one period and reverse or "turn around" in one or more subsequent periods. Some timing differences reduce income taxes that would otherwise be payable currently; others increase income taxes that would otherwise be payable currently.	*Energy*
Timken EP Test	Measure of the extreme-pressure properties of a lubricating oil. The test utilizes a Timken machine, which consists of a stationary block pushed upward, by means of a lever arm system, against the rotating outer race of a roller bearing, which is lubricated by the product under test. The test continues under increasing load (pressure) until a measurable wear scar is formed on the block.	*Lubrication*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Timken OK Load	The heaviest load that a test lubricant will sustain without scoring the test block in the Timken Test procedures, ASTM Methods D 2509 (greases) and D 2782 (oils).	*Oil Analysis*
Timothy hay	A grass hay popular as horse feed. Timothy hay typically is a very clean hay, free of dust and mould, which is important because of potential respiratory problems in horses. Japan is a primary market for timothy hay grown in Washington.	*Agriculture*
Timps	small wedges of wood filling in irregularities between the roof bars and the roof.	*Mining*
Tin/Zinc Alloy Electroplating	Tin/zinc alloy coatings (typically 70% tin and 30% zinc) are applied to threaded fasteners to provide a corrosion resistant coating. One of the advantages of such coatings is that bimetallic corrosion will not occur when placed into contact with such metals as aluminum or steel.	*Maintenance*
Tin-can Davy	a Davy lamp enclosed in a protective container for testing for gas in mines with increased velocities of air currents.	*Mining*
Tinned Wire	Wire coated with tin.	*Wire Rope & Cable*
Tinned Wire	Copper wire that has been coated during manufacture with a layer of tin or solder to prevent corrosion or facilitate soldering.	*Electrical*
Tinplate	Thin steel sheet with a very thin coating of metallic tin. Used primarily in can-making.	*Metallurgy*
Tins	corrugated iron sheets used for lining/covering the roadway behind the arches.	*Mining*
Tinted or reflective glass or shading films	Types of glass or a shading film applied to glass that, when installed on the exterior of a building, reduces the rates of solar penetration into the building. Includes Low E Glass.	*Energy*
Tip	colliery waste heap, pit tip. –see Bing and Spoil heap etc.	*Mining*
Tip	a gratuity given to an employee by a customer in recognition of the satisfactory performance of personal service.	*Industrial Relations*
Tip Relief	An arbitrary modification of a tooth profile whereby a small amount of material is removed near the tip of the gear tooth.	*Gears*
Tipper or Tippler	an apparatus for emptying tubs of coal onto the screens or down a chute into a wagon or boat. –see also Tumblers.	*Mining*
Tipping Fee	A credit received by municipal solid waste companies for accepting and disposing of solid waste.	*Energy*
Tipple	A central facility used in loading coal for transportation by rail or truck.	*Energy*
Tirfor	a hand operated device used for dragging equipment into position.	*Mining*
TISI	Thailand Industrial Standards Institute	*Petro-Chemical Abbreviations*
Titanium alloy	Metal alloy composed of predominantly titanium.	*Material Process*
Titanium Dioxide	A white powder available in tow crystalline forms, the anatase and rutile types. Both are widely used as opacifying pigments in thermosets and thermoplastics.	*Engineering Physics*
Titanium pigments	Pigments prepared from or including titanium oxide, a white compound.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TL 9000	A quality system certification program developed by the Quality Excellence for Suppliers of Telecommunications Leadership Forum for the telecommunications industry. The requirements include the ISO 9000 family of standards as a base-line but add specific performance metrics and a formal benchmarking mechanism.	*Quality*
TLEV	transitional low-emission vehicle	*Petro-Chemical Abbreviations*
TLF	Transmission Loss Factor	*Energy*
TMA	Truck Manufacturers Association	*Petro-Chemical Abbreviations*
TMC	Test Monitoring Center (ASTM)	*Petro-Chemical Abbreviations*
TME	tall methyl ester	*Petro-Chemical Abbreviations*
TMR	In safety PLCs, Triple Modular Redundancy is the provision of three micro processors instead of one in situations where continuing functioning has to be ensured.	*Control Engineering*
TO-2/4	Caterpillar transmission oil specification	*Petro-Chemical Abbreviations*
Toadback marl	unlaminated marl with a lumpy fracture, in contrast with 'Beachleaf Marl'. (Lancs.).	*Mining*
Tobacco Workers International Union (AFL-CIO)	organized in Missouri in 1895 and affiliated with the AF of L.	*Industrial Relations*
Toe	the base of the coal, or the base of the overburden in opencast workings, or a small pillar of coal left in place to support the coal during undercutting. - see also Spurn.	*Mining*
Toe of Weld	The junction between the face of a weld and the base metal. 8 See	*Maintenance and Repair*
TOG	total organic gases	*Petro-Chemical Abbreviations*
Toggle	A mechanism that exerts pressure developed by applying force on a knee joint. It is used to close and exert pressure on a mold in a press.	*Engineering Physics*
Token	a small piece of leather with a collier's number or mark stamped into it, which he sent out of the pit with each tub of coal. (N. East). -see also Checks, Tallies and Pins.	*Mining*
Token hanger	the person who attaches the tokens to the corves to indicate the hewer.	*Mining*
Toledo Industrial Peace Board (Toledo Plan)	a tripartite citizens board concerned primarily with mediation and conciliation of labor disputes within the Toledo, Ohio area.	*Industrial Relations*
Tolerability	[of an intervention:] usually refers to medically less important (that is, without serious or permanent sequelae), but unpleasant adverse effects of drugs. These include symptoms such as dry mouth, tiredness, etc, that can affect a person's quality of life and willingness to continue the treatment. As these adverse effects usually develop early on and are relatively frequent, randomized controlled trials may yield reliable data on their incidence.	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tolerance	The amount by which any characteristic, such as dimensional, chemical, physical or mechanical properties, may vary from that specified.	*Metallurgy*
Tolerance	A specified allowance for error from a standard or given dimension, weight or property.	*Electrical*
Tolerance Class	A combination of tolerance grade and a fundamental deviation which is given to an internal or external thread. A tolerance class for an internal thread when combined with the tolerance class for an external thread gives the class of fit for the mating threads.	*Maintenance*
Tolerance Grade	The difference between maximum and minimum metal conditions for a tolerance applied to a screw thread. For metric threads the tolerance grade is given a number.	*Maintenance*
Tolerances	Allowed error in measurements.	*Aeronautical Engineering*
Tolerant species	A species of tree that has the ability to grow in the shade of other trees and in competition with them.	*Forestry*
Tolling	a form of job selling or kicking back (somewhat similar to fee-splitting) engaged in by supervisors and superintendents in days passed.	*Industrial Relations*
Tolling arrangement	Contract arrangement under which a raw material or intermediate product stream from one company is delivered to the production facility of another company in exchange for the equivalent volume of finished products and payment of a processing fee.	*Energy*
Toluene sulfonamide (CH3C6H4 SO2 NH2)	o-and p- Toluene sulfonamide (CH3C6H4 SO2 NH2) Colorless crystals, a plasticizer also, called Santicizer.	*Material Process*
Toluene ($C_6H_5CH_3$)	Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, and a base for TNT (explosive).	*Energy*
Toluene (C6H5CH3)	Colorless liquid, solvent hydrocarbon and raw material, and intermediate in the synthesis of materials used in plastics.	*Material Process*
Toluene ethyl sulfonamide (CH3C6H4 SO2 NHC2H5)	o-and p- Toluene ethyl sulfonamide (CH3C6H4 SO2 NHC2H5) A plasticizer, called Santicizer.	*Material Process*
Tomahawk	large sort of wedge with a handle for raising or lifting heavy blocks of stone that are sent up the shaft in slings during shaft sinking.	*Mining*
Tommy or Truck	a method of payment-in-kind by way of tokens for mining work done. The tokens could only be exchanged for overpriced and sometimes poor quality goods in the 'Tommy Shop' owned and run by the Butty.	*Mining*
Tommy-bag, Tommy-box and Tommy-tin	a bag or tin used to carry food into the pit. –see Snap tin and Bait.	*Mining*
Tommy-can	a cylindrical shaped can in which the butty man received his pay and from which he in turn would pay the men working under him.	*Mining*
Tommyhawk	18th & 19th Century tool, part axe, part hammer, used for timbering.	*Mining*

Term	Definition	*Industry*
Ton	Tons come in both weight and volume. In weight, a short ton, the common measure in the United States, is 2,000 pounds. A long ton, the common measure in Great Britain, is 2,240 pounds. U.S. journalists would encounter this measure only rarely. A metric ton, the standard used for maritime shipments of agricultural products, is 2,204.6 pounds.	*Agriculture*
Ton	A short or net ton is equal to 2,000 pounds; a long or British ton is 2,240 pounds; a metric ton is approximately 2,205 pounds.	*Mining*
Ton mile	The product of the distance that freight is hauled, measured in miles, and the weight of the cargo being hauled, measured in tons. Thus, moving one ton for one mile generates one ton mile.	*Energy*
Ton, Gross	2,240 pounds. Standard measurement in steel scrap pricing.	*Metallurgy*
Ton, Long	2,240 pounds.	*Metallurgy*
Ton, Metric	2,204.6 pounds. It is often spelled "tonne" to distinguish it from other standard ton measures.	*Metallurgy*
Ton, Short	2,000 pounds. Often called a net ton.	*Metallurgy*
Tongs	Large wrenches used for turning when making up or breaking out drill pipe, casing, tubing or other pipe. Also called casing tongs or rotary tongs.	*Petroleum Drilling*
Tons-per-vertical-meter	Common unit used to describe the amount of ore in a deposit; ore length is multiplied by the width and divided by the appropriate rock factor to give the amount of ore for each vertical meter of depth.	*Mining*
Tool Maintenance Time	a time allowance permitted individual workers for the repair, overhauling, and maintenance of their tools.	*Industrial Relations*
Tool setting	refers to directly controllable settings of a directional drilling tool located in a bottomhole assembly; for example, the net pressure-area force acting at a specified angle in a rotary-steerable adjustable stabilizer.	*Petroleum Drilling*
Tool steel	Ferrous alloy used for cutting, forming, or otherwise shaping another material.	*Material Process*
Tool Steels	Steels that are hardened for the use in the manufacture of tools and dies.	*Metallurgy*
Toolhand	Refers to a third party (down hole services provider) service representative or field service supervisor with "tools" to be run and operated in a well.	*Petroleum Drilling*
Tooling-Up Period	procedures in highly mechanized mass production such as automobile production in which the equipment and production machinery are tooled for the production of a new model.	*Industrial Relations*
Toolpush	You'll want to know this one. This is a reference to the Rig Manager – the top dog on a rig and your new boss.	*Petroleum Drilling*
Toolpusher	An employee of the drilling contractor who is in charge of the drilling crew and rig. Also referred to as a rig superintendent, drilling foreman or rig supervisor.	*Petroleum Drilling*
Toolpusher	Second-in-command of a drilling crew under the drilling superintendent. Responsible for the day-to-day running of the rig and for ensuring that all the necessary equipment is available.	*Petroleum Drilling*
Toom or Tume	a word meaning empty. (N. East).	*Mining*
TOP	TOP	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Top caunch	see Rip.	*Mining*
Top Connector	The Top Connector of a Christmas Tree also referred to as a 'tree cap' that allows full bore access to the bore of the valves. Usually a flange bottom and union top (ACME thread) with a cap. The cap normally is LP tapped to facilitate a needle valve & test gauge. Referred to as a Bottom Hole Test Adaptor.	*Petroleum Engineering*
Top cut	a machine cut made along the top of a coal seam. -see Over cut.	*Mining*
Top entry	The design of a particular valve or regulator where the unit can be serviced or repaired by leaving its body in the line, and its internals can be accessed by removing a top portion of the unit.	*Mechanical*
Top gate	a roadway at the upper end of an inclined longwall face.	*Mining*
Top heads	narrow passages or headings driven into the upper section of the Thick Coal to drain off the gas while the lower sections of the seam was being worked (S. Staffs.).	*Mining*
Top leaf	the uppermost division of a thick seam. Also called 'top ply' and 'tops'.	*Mining*
Top-Down Contract	an agreement between an employer or employer group with th officer or head of the union without the participation of the rank and file.	*Industrial Relations*
Top-holes. Pronounced 'topple'	An early system of step-working a steeply inclined seam. The top-holes would be driven to the full rise and the face-line would be stepped. The loose coal was allowed to gravitate down the face to be loaded into tubs.	*Mining*
Topping	The amount of coal loaded up and above the normal capacity of a tub.	*Mining*
Topping cycle	A boiler produces steam to power a turbine-generator to produce electricity. The steam leaving the turbine is used in thermal applications such as space heating and/or cooling or delivered to other end user(s).	*Energy*
Topple height	roadways driven on small dimensions e.g. about 4 ft high. (Som.).	*Mining*
Tops	sticking coal which remains stuck to the roof after the coal has been brought down; or coal left up to support a weak roof. -see Sticking coal and Top leaf.	*Mining*
Topsides	The superstructure of a platform.	*Petroleum Drilling*
Topsides	The superstructure of a platform.	*Petroleum Drilling*
Torbanite	a tough, dark brown or black carbonaceous substance, rich in oil algae. –see Boghead Coal.	*Mining*
Toricellps theorem	The liquid velocity at an outlet discharging into the free atmosphere is proportional to the square root of the head.	*Mechanical, Process, and Operations*
Tornesit	A trade name for a chlorinated rubber used principally in paints. See Parlon.	*Material Process*
Torpedo	A streamlined metal block placed in the path of flow of the plastic material in the heating cylinder of extruders and injection molding machines, to spread it into thin layers, thus forcing it into intimate contact with the heating areas.	*Engineering Physics*
Torque	The rotational force imposed on or through a shaft, usually expressed in foot-pounds.	*General Mechanical*
Torque	The turning effort required to operate a valve. Usually expressed in "pound-feet" and referred to the stem nut, handwheel or operator pinion shaft.	*Mechanical*

Term	Definition	*Industry*
Torque Converter	A rotary fluid coupling that is capable of multiplying torque.	*Mechanical, Process, and Operations*
Torque Motor	A type of electromechanical transducer having rotary motion used in the input stages of servo valves.	*Mechanical, Process, and Operations*
Torque Multiplier	A gearbox used to increase the torque produced by a small hand wrench.	*Maintenance*
Torque Switch	An electrical device on a motor operator which cuts off power to the operator when allowable torque is exceeded, thus preventing damage to the valve and/or the operator.	*Mechanical*
Torque Wrench	A manual wrench which incorporates a gauge or other method to indicate the amount of torque transferred to the nut or bolt.	*Maintenance*
Torque wrench	A wrench that indicates, as on a dial, the amount of torque (in units of foot-pounds) exerted in tightening a roof bolt.	*Mining*
TORR	A unit of absolute pressure less than atmospheric pressure, equivalent to 1 mm Hg. It is used primarily to describe a vacuum of 25 mm. Hg. absolute or less.	*Mechanical, Process, and Operations*
Torsional spring	A coiled spring which exerts a force by twisting about its axis rather than by compression or elongation. The spring in a check valve slam retarder which is restrained at one end and fastened to the clapper shaft on the other end. As the clapper opens, the spring resists the motion creating a closing force. During a rapid decrease in flow rate, the clapper is urged toward the closed position and is virtually closed just prior to the instant of actual flow reversal – thus slamming is avoided. See "Slam Retarder."	*Mechanical*
Tortuosity	TORTUOSITY - The ratio of the average effective flow path length to minimum theoretical flow path length (thickness) of a flow medium.	*Mechanical, Process, and Operations*
ToSS	See Total System Support	*Management*
TOST	turbine oxidation stability test	*Petro-Chemical Abbreviations*
Total Acid Number (TAN)	The quantity of base, expressed in milligrams of potassium hydroxide, that is required to neutralize all acidic constituents present in 1 gram of sample. (ASTM Designation D 974.)	*Oil Analysis*
Total Asset Management	An integrated approach to Asset Management that incorporates elements such as reliability-centered maintenance, total productive maintenance, design of maintainability, design for reliability, value engineering, life cycle costing, probabilistic risk assessment, etc., to arrive at the optimum cost-benefit-risk asset solution to meet any given production requirements.	*Maintenance*
Total Base Number (TBN)	The quantity of acid, expressed in terms of the equivalent number of milligrams of potassium hydroxide that is required to neutralize all basic constituents present in 1 gram of sample. (ASTM Designation D 974.)	*Oil Analysis*
Total Base Number (TBN)	The quantity of acid, expressed in terms of the equivalent number of milligrams of potassium hydroxide that is required to neutralize all basic constituents present in 1 gram of sample. (ASTM Designation D 974.) See Base Number.	*Lubrication*

Term	Definition	*Industry*
Total Chlorine (new)	The total amount of all types of chlorine compounds present. This includes Cl2, hypochlorous acid, hypochlorite ion, and all the chloramine compounds. Free Chlorine + Combined Chlorine = Total Chlorine.	*Chemical Engineering*
Total cost of quality	The aggregate cost of poor quality or product failures - including scrap, rework, and warranty costs - as well as expenses incurred to prevent or resolve quality problems (including the cost of inspection).	*Quality*
Total discoveries	The sum of extensions, new reservoir discoveries in old fields, and new field discoveries, that occurred during the report year.	*Energy*
Total Dissolved Solids	The sum of the organic and inorganic materials dissolved in water.	*Chemical Engineering*
Total Dissolved Solids (TDS)	The amount of salt and minerals that are suspended in water. TDS occur naturally in groundwater, but at high concentrations, TDS can be corrosive, and can cause ground (drinking) water to be classified as contaminated. New Pennsylvania Department of Environmental Protection rules on TDS discharges will take effect in January 2011, and will require discharges into Pennsylvania waterways to meet stricter standards of 500 parts per million.	*Petroleum Drilling*
Total DSM Cost	Total utility and nonutility costs.	*Energy*
Total Effective Equipment Productivity (TEEP)	The ratio between the actual amount of "in-specification product" produced in a given total time period and the output theoretically available in the same period if the machine operates at its designed operating rate. The product of Asset Utilization, quality rate, and operating speed rate. Irrespective of the definition used, TEEP measurement takes account of machine availability (with respect to total rather than loading time), quality rate, and performance rate. Therefore, it represents a modified view of OEE based on total time rather than loading time, and arguably provides a more holistic measure of overall effective asset utilization. Inversely, it may be considered as a modified view of asset utilization rate, factored to take account of actual machine performance.	*Maintenance*
Total error requirement	See allowable total error.	*Quality*
Total error, TE	The net or combined effect of random and systematic errors.	*Quality*
Total Face Width	The actual width dimension of a gear blank. It may exceed the effective face width, as in the case of double-helical gears where the total face width includes any distance separating the right-hand and left-hand helical teeth.	*Mechanical Engineering*
Total gas in storage	The sum of base gas and working gas.	*Energy*
Total imprecision	The random error observable over a period of many runs and many days.	*Quality*
Total Incentives	The incentive a utility offers is expressed as a percentage of the technology cost. The utility can assume any level between 0 and 100 percent. A value greater than 100 percent is possible if the utility decides to pay for all the equipment and give a rebate as an additional incentive. You can calculate the required incentive by setting the participant test to one by using the following formula: Total Incentives = (Technology Costs - Bill Reductions)/2.	*Energy*
Total liquid hydrocarbon reserves	The sum of crude oil and natural gas liquids reserves volumes.	*Energy*
Total Load	Amount of weight distributed over the entire length of a conveyor.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Total logistics costs	Total costs for inbound delivery and storage of material and parts, plus the total cost to store, transport and deliver (and possibly set up) product to the customer following final manufacture and assembly. That a manufacturer calculates and monitors such a measure indicates that management is not only focused on improving efficiencies within the walls of the factory, but also on the total order-fulfillment process.	*Quality*
Total Man Hours	the cumulative or aggregate number of hours worked by a group of employees in a particular period.	*Industrial Relations*
Total Mixed Ration	a feed combination of hay, corn, barley, field grasses, cotton seed, and bakery or grocery by-products	*Agriculture*
Total Natural Gas Storage Field Capacity (Design Capacity)	The maximum quantity of natural gas (including both base gas and working gas) that can be stored in a natural gas underground storage facility in accordance with its design specifications, the physical characteristics of the reservoir, installed compression equipment, and operating procedures particular to the site. Reported storage field capacity data are reported in thousand cubic feet at standard temperature and pressure.	*Energy*
Total Nonutility Costs	Cash expenditures incurred through participation in a DSM program that are not reimbursed by the utility.	*Energy*
Total Opening	The distance between opposed pinching surfaces when a pinch valve is open. The total of pinch gap and stroke.	*Mechanical*
Total operated basis	The total reserves or production associated with the wells operated by an individual operator. This is also commonly known as the "gross operated" or "8/8ths" basis.	*Energy*
total petroleum hydrocarbons (TPH)	a measure of the concentration or mass of petroleum hydrocarbon constituents present in a given amount of air, soil, or water. The term total is a misnomer, in that few, if any, of the procedures for quantifying hydrocarbons are capable of measuring all fractions of petroleum hydrocarbons present in the sample. Volatile hydrocarbons are usually lost in the process and not quantified. Additionally, some non-petroleum hydrocarbons may be included in the analysis.	*Chemical*
Total pressure	A measure of barometric pressure in the moving air; Synonyms: dynamic pressure, Pitot pressure, stagnation pressure; Compare: static pressure; Symbols: p sub t; Typical Units: psi, lbf/in-squared; Dimensions: Mass / Time-squared * Length.	*Aeronautical Engineering*
Total pressure	A measure of barometric pressure in the moving air; Synonyms - dynamic pressure, Pitot pressure, stagnation pressure; Compare - static pressure; Symbols - p sub t; Typical Units - psi, lbf/in-squared; Dimensions - Mass / Time-squared * Length.	*Aeronautical Engineering*
Total Productive Maintenance	A Company-Wide Equipment Management Program, With Its Origins In Japan, Emphasizing Production Operator Involvement In Equipment Maintenance, And Continuous Improvement Approaches. Numerous Books Have Been Written On The Subject, Including Nakajima'S Authoritative Introduction, And A More Recent Western Hemisphere Update By Willmott.	*Plant Engineering*
Total productive maintenance (TPM)	A comprehensive program to maximize equipment availability in which production operators are trained to perform routine maintenance tasks on a regular basis, while technicians and engineers handle more specialized tasks. The scope of TPM programs includes unscheduled maintenance prevention (through	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	design or selection of easy-to-service equipment), equipment improvements, preventive maintenance, and predictive maintenance (determining when to replace components before they fail).	
Total Productive Maintenance (TPM)	Also known as autonomous maintenance or operator-driven reliability. It is maintenance tasks that are performed by the machine operator/operations crew/production department rather than the maintenance staff. It generally includes tasks such as lubricating and tightening machine parts, and changing filters or belts.	*Reliability Engineering*
Total pumping head	The total head of water, measured above the basin curb, required to deliver the circulating water through the distribution system. (See Tower Pumping Head.) Units: ft.	*Facility Engineering*
Total QC strategy	The balance of the efforts expended on statistical QC, preventive maintenance, instrument function checks, method performance tests, and quality improvement.	*Quality*
Total Quality Management (TQM)	A multifaceted, company-wide approach to improving all aspects of quality and customer satisfaction-including fast response and service, as well as product quality. TQM begins with top management and diffuses responsibility to all employees and managers who can have an impact on quality and customer satisfaction. It uses a variety of quality tools such as QFD, Taguchi methods, SPC, corrective-action response teams, cause-and-effect analysis, problem-solving methodologies, and fail-safe-ing (or "poka-yoke" methods).	*Maintenance*
Total Quality Management (TQM)	Also referred to as TQM. It is a philosophy that embraces all activities through which the needs and expectations of the customer (both internal and external) and the community, and the objectives of the organization, are satisfied in the most efficient and cost-effective way possible by maximizing the potential of all employees in a continuous drive for improvement.	*Reliability Engineering*
total recoverable petroleum hydrocarbons (TRPH)	an EPA method (418.1) for measuring total petroleum hydrocarbons in samples of soil or water. Hydrocarbons are extracted from the sample using a chlorofluorocarbon solvent (typically Freon-113) and quantified by infrared spectrophotometry. The method specifies that the extract be passed through silica gel to remove the non-petroleum fraction of the hydrocarbons.	*Chemical*
Total Resource Cost (TRC) Test	A ratio used to assess the cost effectiveness of a demand-side management program. Although this economic desirability test provides information about the relative merits of different DSM programs, several important issues are not addressed in this analysis. First, this cost-effectiveness test does not indicate the level of program participation that will be achieved. Second, the most cost-effective mix of DSM technologies is not determined by this test because this methodology only evaluates one specific measure at a time. Finally, these tests are static; they do not include a feedback mechanism to account for changes in demand due to the DSM program. The TRC Test measures the ratio of total benefits to the costs incurred by both the utility and the participant. The TRC test is applicable to conservation, load management, and fuel substitution technologies. For fuel substitution technologies, the test compares the impact from the fuel not selected to the impact of the fuel that is chosen as a result of implementing the technologies. The TRC Test includes benefits occurring to both participants and nonparticipants. Benefits include avoided supply costs (i.e. transmission, distribution, generation, and capacity costs). Costs include those incurred by both the utility and program participant.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TOTAL STATISTICAL COUNT	The raw count multiplied by a counting calibration factor.	*Mechanical, Process, and Operations*
Total System Support (ToSS)	The Composite Of All Considerations Needed To Assure The Effective And Economical Support Of A System Throughout Its Programmed Life-Cycle.	*Management*
Total testing process	CLIA's term for the entire testing process that includes pre-analytic, analytic, and post-analytic steps and procedures.	*Quality*
Total Time	All time during the period being measured (at the rate of 24 hours per day, seven days per week.) Also equal to the sum of time spent in all six equipment time categories.	*Maintenance*
Total Travel	The distance from the plunger free position to the full overtravel point.	*Electrical Engineering*
Total Utility Costs	Total direct and indirect utility costs.	*Energy*
Totality of Conduct	a policy or doctrine determined by the National Labor Relatins Board prior to the Taft–Hartley amendments that statements that may be non-coercive when standing alone may be found coercive when considered along with the employer's background of anti-union history.	*Industrial Relations*
Total-Productive Maintenance (TPM)	A Japanese maintenance improvement program used to change the maintenance processes and culture to increase productivity. It particularly focuses on aspects such as attitude, motivation, responsibilities, and performance of the workforce. Thus, everyone in the company must understand that their job performance impacts the performance of the asset. It empowers operators to take over maintenance tasks. The results are measured by the OEE rate. TPM is a company wide management program that emphasizes production operator involvement in equipment maintenance, and continuous improvement approaches	*Reliability Engineering*
TOU	tractor oil universal	*Petro-Chemical Abbreviations*
Tough Tom	The soft tenacious clay floor of seams, or roads, which sticks to the shoes in walking and renders travelling more laborious.	*Mining*
Toughness	A property of plastics which can be expressed numerically when judged in terms of the area beneath the tensile stress strain curve from the beginning of the moment of failure.	*Material Process*
Tour	A 'tower' refers to a worker's shift. A drilling crew typically works a 12 hour tour every day until they have finished their hitch.	*Petroleum Drilling*
Tour	a term not frequently used although "tour of duty" is familiar. The term "shift" is used as its equivalent.	*Industrial Relations*
Tow	the winding rope. Before the introduction of steel winding ropes or winding chains, the winding rope made of hemp or tow, or the journey in the cage up and down the shaft e.g., 'to catch the last tow', was to catch the last 'wind' before coal winding began. Also called 'the last rope'; or a dark, tough, earthy clay or shale. (Leics.).	*Mining*
Tower	A steel structure found along transmission lines which is used to support conductors.	*Energy*
Tower dimension	(See Nominal or Overall Tower Dimensions).	*Facility Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Tower pumping head	That part of the "total pumping head" for which the design of the tower and the piping furnished with it are responsible. It is expressed as the head of water above the basin curb measured at the center of the inlet connecting the tower distribution system with the riser, and consists of the total pressure at the centerline of the inlet plus the vertical distance between the inlet centerline and the basin curb. Unit: ft.	*Facility Engineering*
Towt	a piece of old rope used, when lit, to provide light when working in a shaft. (N. East).	*Mining*
TO-X	heavy-duty diesel engine oil specification	*Petro-Chemical Abbreviations*
Toxicity	The state of being poisonous. Toxic effect of chemicals may be caused by reversible and irreversible interactions in the organism. For example, benzene and formaldehyde are toxic.	*Material Process*
Toxicity	The degree of which a substance is poisonous. Although most pure resins and polymers are relatively nontoxic, compounding additives such as stabilizers, colorants, and plasticizers must be carefully selected when products are to be used for food packaging or other applications involving body contact.	*Engineering Physics*
Toyota Production System	Toyota's vehicle production system is sometimes referred to as a "lean manufacturing system" or a "just-in-time (JIT) system," and has come to be well known and studied worldwide. This production control system has been established based on many years of continuous improvements, with the objective of "making the vehicles ordered by customers in the quickest and most efficient way, in order to deliver the vehicles as quickly as possible." TPS was established based on two concepts. The first is called "jidoka" (loosely translated as "automation with a human touch"), which means that when a problem occurs, the equipment stops immediately, preventing defective products from being produced. The second is the concept of JIT, in which each process produces only what is needed by the next process in a continuous flow.	*Reliability Engineering*
TPI	Threads per Inch.	*Petroleum Engineering*
TPM	See Total Productive Maintenance	*Management*
TPR	A trade name of Uniroyal Inc. for their thermoplastic rubber.	*Electrical*
TQC	Total Quality Control	*Gears*
Traceability	"A property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparison, all having stated uncertainties." [CLSI]	*Quality*
Track (TRK)	A basic guidance mode, providing lateral guidance to an operator selected ground track.	*Aeronautical Engineering*
Track Cable	On an aerial system it is the suspended wire rope or strand along which the carriers move.	*Wire Rope & Cable*
Track handle	A device to move a cursor in two axes on a display, much like a mouse.	*Aeronautical Engineering*
Tracking	Tracking is performed by the TRN.	*Aeronautical Engineering*
Tracking filter	A narrow bandpass filter whose center frequency follows an external synchronizing signal.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Traction motor	A traction motor is typically used to power the driving wheels of a railroad locomotive, a tram or an electric train, like a subway or light rail vehicle. There is usually one traction motor on each driven axle. Traction motors differ from other motors in the scale of their design. They must be extremely compact, because of the limited space available on the locomotives, and highly reliable as there is no room for any backup systems. (See also Traction transformer.)	*Electrical*
Traction Rope	On an aerial conveyor or haulage system it is the wire rope that propels the carriages.	*Wire Rope & Cable*
Traction substation	A substation used to feed power into railway electrification systems.	*Electrical*
Traction transformer	This is a fundamental component of a rail locomotive's traction chain. It adapts the catenary (overhead) voltage to the various low voltage levels needed by the train, mainly for traction, but also for lighting, heating and ventilation, passenger information and safety systems such as door blocking, brakes, signaling and communication. The traction transformer is the unique energy transfer point between high voltage (HV) and low voltage (LV) and therefore must achieve the highest availability and reliability levels to guarantee uninterrupted train service.	*Electrical*
Tractor	A battery-operated piece of equipment that pulls trailers, skids, or personnel carriers. Also used for supplies.	*Mining*
Trade Union	an association of workers in a particular trade or craft organized to promote a common interest and to further that interest through negotiations of wages, hours, and other conditions of employment.	*Industrial Relations*
Trade Union Educational League	with the demise of the I.W.W. at the end of World War I, there remained no union with a revolutionary philosophy in the country. In 1920, William Z. Foster, a communist leader, established an organization, the Trade Union Educational League, for the purpose of training leaders and propagandizing for the promotion or revolutionary unionism in the United States.	*Industrial Relations*
Trade Union Publications	Trade Union Publications, a three-volume index of the journals and convention proceedings of 50 selected unions from the time of their origin unit 1941.	*Industrial Relations*
Trade Union Unity League	the Trade Union Unity League attempted to establish new industrial unions of groups which had previously been under the jurisdiction of the AF of L.	*Industrial Relations*
Trades Council	a group of trade unions in a locality or geographic region which organizes usually for the purpose of dealing with an employers' association and to promote activities of mutual benefit to the members.	*Industrial Relations*
Tradesperson	Alternative To Craftsperson. A Skilled Maintenance Worker Who Has Typically Been Formally Trained Through An Apprenticeship Program.	*Management*
Trading floor	the area of a stock exchange building where shares are bought and sold.	*Mining*
Trading post	An area on the trading floor of a stock exchange where current stock prices are listed and where the floor traders (representatives of brokerage firms) meet to buy or sell the stocks listed at that particular post.	*Mining*
Traffic Cop	A mechanical or electrical mechanism to prevent collision of objects as they merge from two conveyor lines into a single line.	*Manufacturing*
Trail jud	When driving a wideboard, a narrow jud was driven 3 to 4 yards in advance and then a trail jud was cut off to the side to take the board to its correct width. (N. East).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Trailer	a jock which was fastened to the last hutch being hauled up an incline. (Scot.); or a putter, a lad who pushed the tubs. (N. East).	*Mining*
Trailerload, Truckload	quantities of commodities, including primary and secondary metals, that amount to as much as 44,000 pounds each, which is the standard weight limit on U.S. highways.	*Metallurgy*
Trailing cable	a flexible cable designed to be moveable whilst in use, such as a heavily insulated electrical cable used to bring power to an machine such as a Dosco roadheader. The cable trails along the ground from a power point.	*Mining*
Trainee	an employee who is assigned to a prescribed training program to fit him to perform adequately the normal operations of a specified job.	*Industrial Relations*
Training - systematic	instruction and programs of activities and learning for the purpose of acquiring skills for particular jobs.	*Industrial Relations*
Training Within Industry	Also referred to as TWI. It is a program which uses a learn-by-doing approach, teaching essential skills for supervisors and team leaders. Its four core elements are: Job Relations, Job Instruction and Job Methods. Its roots go back to the Training Within Industry service created by the U.S. Department of War in 1940.	*Reliability Engineering*
trajectory	same as well path, either actual or planned; the traverse that defines the actual or preferred existence of a well bore via spatial properties.	*Petroleum Drilling*
Tram	Used in connection with moving self-propelled mining equipment. A tramming motor may refer to an electric locomotive used for hauling loaded trips or it may refer to the motor in a cutting machine that supplies the power for moving or tramming the machine.	*Mining*
TRAM	To haul cars of ore or waste in a mine.	*Mining*
Tramming	controlling the tubs along the face to the gate end.	*Mining*
Tramp iron	metal objects such as coal-cutter picks, nuts and bolts etc. that have become mixed with the run-of--mine coal. To avoid damage to machinery in the coal preparation plant various types of magnet are suspended above the conveyor system to remove the tramp iron.	*Mining*
Tramping Committee	similar to walking delegates or union functionaries who check on activities of individuals, particularly during strikes, to make sure that no scabbing takes place.	*Industrial Relations*
Tramway	An aerial conveying system for transporting multiple loads.	*Wire Rope & Cable*
Transceivers	A device that receives and transmits.	*Aeronautical Engineering*
Transducer	A device (or medium) that converts energy from one form to another. The term is generally applied to devices that take physical phenomena (pressure, temperature, humidity, flow, etc.) and convert them to electrical signals.	*Electrical*
Transducer	A fully packaged, signal conditioned, compensated and calibrated sensor.	*Electrical Engineering*
TRANSDUCER (or feedback transducer)	An element which measures the results at the load and sends a signal back to the amplifier.	*Mechanical, Process, and Operations*
Transducer (or *pickup* or *sensor*)	A device which converts some mechanical quantity into an electrical signal. Less commonly, the reverse conversion.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Transducer Vibration	Generally, any device which converts movement, either shock or steady state vibration, into an electrical signal proportional to the movement; a sensor.	*General Engineering*
Transfer	A device or series of devices, usually mounted inside a conveyor section, which uses belts, chains, o-rings, rollers, or skate-wheels, to move products at right angles to adjacent or parallel conveyor lines.	*Equipment*
Transfer	the shifting or movement of an employee from one job to another.	*Industrial Relations*
Transfer	**Transfer** : To move electric energy from one utility system to another over transmission lines.	*Energy*
Transfer capability	The overall capacity of interregional or international power lines, together with the associated electrical system facilities, to transfer power and energy from one electrical system to another.	*Energy*
Transfer molding	Processing technique for thermosetting polymers.	*Material Process*
Transfer molding	A type of molding similar to injection molding but applied to thermosetting plastics.	*Material Process*
Transfer point	Location in the materials handling system, either haulage or hoisting, where bulk material is transferred between conveyances.	*Mining*
Transfer price	The monetary value assigned to products, services, or rights conveyed or exchanged between related parties, including those occurring between units of a consolidated entity.	*Energy*
Transferred Arc	In a plasma torch the plasma jet is emitted from the torch and the current flows from the internal cathode to the internal anode represented by the nozzle of the torch. When the jet is carried to another anode with it being electrically favorable to do so the current will then transfer to the second anode, usually the work piece and the arc is said to be transferred.	*Paint and Coatings*
Transformation Range	A temperature range in which a phase change is initiated and completed.	*Maintenance and Repair*
Transformation Temperature	A temperature at which a phase change occurs.	*Maintenance and Repair*
Transformation Toughening Mechanism	A Mechanism for enhanced fracture toughness in a partially stabilized zirconium ceramic involving a stress-induced phase transformation of tetragonal grains to the monoclinic structure.	*Material Process*
Transformer	A transformer is a device used to transfer energy from one AC circuit to another and to increase (step up) or reduce (step down) voltage as required. Transformers are an essential component in an electrical grid. Electricity generated in a power station must be stepped up to the appropriate voltage for transmission (between 100 and 800 kV) and then stepped down again to the distribution voltage (110 - 230 V), which is delivered to homes. Note that the voltage of DC cannot be transformed in the same way as it can for AC. (See Alternating current.)	*Electrical*
Transient Protection	The circuitry to guard against spikes induced on the supply lines by inductive sources such as heavy motors or solenoids turning On and Off.	*Electrical Engineering*
TRANSIENT RECOVERY TIME	The period of time required for ail abrupt change in the power supply output pressure to dampen out to within the operating band.	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Transient Vibration	A temporary vibration or movement of a mechanical system.	*General Engineering*
Transient vibration	Short-term vibration of a mechanical system.	*Reliability Engineering*
Transient-free switch	A switch with a wash-out filter so that the output contains no transients (steps) at switch time.	*Aeronautical Engineering*
Transients	An unwanted, temporary, large increase or decrease in a current or supply voltage that only occurs occasionally. Almost always due to reactive components during rapid changes in voltage or current.	*Electrical Engineering*
Transistor	A solid state amplifier.	*Material Process*
Transition Charge	A charge on every customer's bill designed to recover an electric utility's transition or stranded costs as determined by a Public Utility Commission.	*Energy*
Transition Costs	Costs incurred by electric utilities to meet obligations, which required the utilities to meet current and future load demand. The utilities ensured sufficient power generating capacity by building additional power plants, whose debts are currently recovered through a regulated rate of return that would not continue in a competitive marketplace. They could be recovered with a special charge during the transition to competition.	*Energy*
Transition metal	Element in a region of the periodic table associated with a gradual shift from the strongly electropositive elements of groups IA and IIA to the more electronegative elements of groups IB and IIB.	*Material Process*
Transition metal ion	Charged species formed from a transition metal atom.	*Material Process*
TRANSITION PIECE	A length of pipe that is welded to a valve hub or closure. Generally provided by the customer, it serves as a transition from the customer's piping to the valve to compensate for differences in material or size.	*Mechanical*
Transition Responsive	A control type that responds to the rate of change in light intensity rather than the level change. Used to detect fast moving objects that cause little change in light intensity level.	*Electrical Engineering*
Transition Section	In an extruder, the section of the screw that contains material in both the solid and molten state.	*Engineering Physics*
Transition Temperature	The temperature at which a polymer changes from (or to) a viscous or rubbery condition to (or from) a hard and relatively brittle one.	*Engineering Physics*
Transitional	before being considered eligible for organic certification, any given piece of land must be free of prohibited substances for three years. Many farmers use the term "transitional" during those three years to indicate they are using organic management practices but have not yet fulfilled the time requirement for certification.	*Agriculture*
Transitional Flow	Flow between laminar and turbulent flow, usually between a pipe Reynolds number of 2000 and 4000.	*General Engineering*
Transitional work program	A transitional work program offers various options to assist an injured worker in progressively performing the duties of a targeted job.	*Quality*
Translation	Motion of an object where the path of every point is a straight line.	*Engineering Physics*
Translucency	Transmission of a diffuse image.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Translucent	Allows light to pass through. Detecting translucent objects is often best done with retroreflective scan, during which the light must pass through the object twice, thereby causing more of a signal change (larger signal ratio).	*Electrical Engineering*
Transmembrane Pressure (TMP)	The force which drives liquid flow through a crossflow membrane. In tangential flow devices, the TMP is calculated as an average related to the pressures of the inlet, outlet and permeate ports. The TMP can be expressed as: TMPavg = (Pin + Pout)/2 – Permeate	*Pollution Engineering*
Transmissibility	The principle stating that a force has the same external effect on an object regardless of where it acts along its line of action.	*Engineering Physics*
Transmission	The act or process of transporting electric energy in bulk.	*Energy*
Transmission (electric)	An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems. NERC definition	*Energy*
Transmission (electric) (verb)	The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to consumers or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.	*Energy*
Transmission and distribution (T&D)	The term refers to the transport of electricity from the power station to the end user. Transmission is the movement of power at high voltage (above ca. 50 kV), usually over long distances. Raising the voltage allows power to be transmitted more efficiently (i.e., with fewer losses - at lower voltages, more electrical power is converted to heat and lost to the atmosphere) over a wide area. Distribution is the transport of electricity at medium voltage (between ca. 1 and 50 kV) over shorter distances to industrial, commercial and residential areas. Transformers are generally, though not always, housed in substations.	*Electrical*
Transmission and Distribution (T&D) Losses	Losses the result from the friction that energy must overcome as it moves through wires to travel from the generation facility to the customer. Because of losses, the demand produced by the utility is greater than the demand that shows up on the customer bills.	*Energy*
Transmission and Distribution (T&D) System	An interconnected group of electric transmission lines and associated equipment for the movement or transfer or electric energy in bulk between points of supply and points at which it is transformed for delivery to the ultimate customers.	*Energy*
Transmission and Distribution Company	The regulated affiliate of a former monopoly electric utility that owns and may construct and maintain wires used to transmit wholesale electric power. It is regulated by the Public Utility Commission to provide nondiscriminatory connections, comparable service, and cost recovery. May also be referred to as the "wires company".	*Energy*
Transmission and distribution loss	Electric energy lost due to the transmission and distribution of electricity. Much of the loss is thermal in nature.	*Energy*
Transmission Charge	Part of the basic service charges on every customer's bill for transporting electricity from the source of supply to the electric distribution company. Public Utility Commissions regulate retail transmission prices and services. The charge will vary with source of supply.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Transmission Charges	Part of the basic service charges on every customer's bill for transporting electricity from the generation facility over transmission lines.	*Energy*
Transmission circuit	A conductor used to transport electricity from generating stations to load.	*Energy*
Transmission constraint (electric)	A limitation on one or more transmission elements that may be reached during normal or contingency system operations. NERC definition	*Energy*
Transmission electron microscope (TEM)	Instrument for obtaining microstructural images using electron transmission in a design similar to a conventional optical microscope.	*Material Process*
Transmission line	A set of conductors, insulators, supporting structures, and associated equipment used to move large quantities of power at high voltage, usually over long distances between a generating or receiving point and major substations or delivery points.	*Energy*
TRANSMISSION LINE	A main pipeline transporting oil or gas from wells or storage fields to refineries, loading docks or distribution companies. Generally, the pipeline is bigger than 6" and the pressure greater than 150 psi.	*Mechanical*
Transmission line (electric)	A system of structures, wires, insulators and associated hardware that carry electric energy from one point to another in an electric power system. Lines are operated at relatively high voltages varying from 69 kV up to 765 kV, and are capable of transmitting large quantities of electricity over long distances. NERC definition	*Energy*
Transmission Lines	Heavy wires that carry large amounts of electricity over long distances from a generating station to places where electricity is needed. Transmission lines are held high above the ground on tall towers called transmission towers.	*Energy*
Transmission network	A system of transmission or distribution lines so cross-connected and operated as to permit multiple power supply to any principal point.	*Energy*
Transmission operator (electric)	The entity responsible for the reliability of its localized transmission system, and that operates or directs the operations of the transmission facilities. NERC definition	*Energy*
Transmission owner (electric)	The entity that owns and maintains transmission facilities. NERC definition	*Energy*
Transmission Service Provider (electric)	The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable transmission service agreements. NERC definition	*Energy*
Transmission system (electric)	An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers or is delivered to other electric systems.	*Energy*
Transmission type (engine)	The transmission is the part of a vehicle that transmits motive force from the engine to the wheels, usually by means of gears for different speeds using either a hydraulic "torque-converter" (automatic) or clutch assembly (manual). On front-wheel drive cars, the transmission is often called a "transaxle." Fuel efficiency is usually higher with manual rather than automatic transmissions, although modern, computer-controlled automatic transmissions can be efficient.	*Energy*
Transmissivity	A measure of the capability of the entire thickness of an aquifer to transmit water. Also known as coefficient of transmissivity.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Transmitter	A device that converts a process measurement (pressure, flow, level, temperature, etc.) into an electrical or pneumatic signal suitable for use by an indicating or control system.	*Electrical Engineering*
Transmitter	A transducer with a current loop output, typically 4 to 20 mA, enabling transmission of a signal over a longer distance.	*Electrical Engineering*
Transmitter (Two-Wire)	A device which is used to transmit temperature data from either a thermocouple or RTD via a two-wire current loop. The loop has an external power supply and the transmitter acts as a variable resistor with respect to its input signal.	*Electrical*
Transmitting Utility	This is a regulated entity which owns, and may construct and maintain, wire used to transmit wholesale power. It may or may not handle the power dispatch and coordination functions. It is regulated to provide non-discriminatory connections, comparable service and cost recovery. Any electric utility, qualifying cogeneration facility, qualifying small power production facility, or Federal power marketing agency which owns or operates electric power transmission facilities which are used for the sale of electric energy at wholesale.	*Energy*
Transparent Price	The most recent price contract available to any buyer or seller in the market.	*Energy*
Transpassive	The increase in corrosion rate at a relative high potential due to the breakdown of the passive surface film.	*Material Process*
Transpiration	The process by which water absorbed by plants (usually through the roots) is evaporated into the atmosphere from the plant surface (principally from the leaves).	*Petroleum Engineering*
Transponder	Small blue electronic transmitter mounted to the chassis. When the car crosses a wire embedded in the track, it sends a signal to the timing computer for lap and lap segments timing. Each car has a specific code so the computer can keep track of the individual cars.	*NASCAR*
Transport	Movement of natural, synthetic, and/or supplemental gas between points beyond the immediate vicinity of the field or plant from which produced except (1) for movements through well or field lines to a central point for delivery to a pipeline or processing plant within the same state or (2) movements from a city gate point of receipt to consumers through distribution mains.	*Energy*
Transportation agreement	Any contractual agreement for the transportation of natural and/or supplemental gas between points for a fee.	*Energy*
Transportation energy expenditures	See Vehicle fuel expenditures.	*Energy*
Transportation sector	An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. *Note:* Various EIA programs differ in sectoral coverage.	*Energy*
Transported gas	Natural gas physically delivered to a building by a local utility, but not purchased from that utility. A separate transaction is made to purchase the volume of gas, and the utility is paid for the use of its pipeline to deliver the gas. Also called "Direct-Purchase Gas," "Spot Market Gas," "Spot Gas," "Gas for the Account of Others", and "Self-Help Gas."	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Transporter	The party or parties, other than buyer or seller, owning the facilities by which gas or LNG is physically transferred between buyer and seller.	*Energy*
Transshipment	A method of ocean transportation whereby ships off-load their oil cargo to a deep water terminal, floating storage facility, temporary storage, or to one or more smaller tankers from which or in which the oil is then transported to a market destination.	*Energy*
Transversal	A line that crosses two or more other lines.	*Math*
Transverse	Always measured perpendicular to air intakes.	*Facility Engineering*
Transverse Plane	A plane perpendicular to the axial plane and to the pitch plane. In gears with parallel axes, the transverse plane and the plane of rotation coincide.	*Gears*
Transverse sensitivity	The unfortunate sensitivity of a sensor (or pickup or transducer) in a direction perpendicular to the advertised or stated sensitive axis. Also called cross-axis or lateral sensitivity.	*Reliability Engineering*
Trap	See Steam Trap	*Industrial*
Trap door	another word for 'air door'.	*Mining*
Trap stage	the stage of the pit's mouth to rest the corves on. (Yorks.).	*Mining*
Trap-down	a downthrow fault. (Bris.). Also trap-up, an upthrow fault.	*Mining*
Trapper boys	young boys employed to operate the ventilation doors.	*Mining*
Traps	lids for wooden props. (Som.); or the ventilation doors in the gates. (Yorks.).	*Mining*
Trash Conveyor	A conveyor, normally a belt conveyor, equipped with high side guards, used in transporting empty cardboard boxes and paper trash away from working areas.	*Manufacturing*
Trasher	a box-like structure placed under the tub wheels to assist breaking on steep inclines. (Burnley, Lancs.).	*Mining*
Travel	The distance the plug or stem moves to go from a fully closed to a fully open position. Also called stroke.	*Industrial Engineering*
Travel Allowance	an allowance, usually for transportation expenses, to a worker who is required to travel on company business.	*Industrial Relations*
travel time	the time it takes a contaminant to travel from the source to a particular point downgradient.	*Chemical*
Travelling belts	see manriding.	*Mining*
Travelling road	a road used by the men to walk to and from the shaft to the workings.	*Mining*
Traverser	a flat platform running on special rails laid at right angles to and below the tub or minecar track, powered by hydraulics and used to move tubs or mine cars sideways from one track to another. Turntables were used to perform this operation.	*Mining*
TRC	Transportation Research Center	*Petro-Chemical Abbreviations*
Treacle stage	Liquid form of a thermosetting resin, particularly those which are cast.	*Material Process*
Tread Plates	Diamond top steel filler plates used to fill the gap between rollers on roller conveyor.	*Manufacturing*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Treasury shares	The unissued shares in a company's treasury.	*Mining*
Treater	The head supervisor on a hydraulic fracturing crew. Leads operations execution on location in conjunction with feedback from other supervisors, equipment operators, field engineers, and customers.	*Petroleum Drilling*
Treater	Equipment used for preparing resin-impregnated reinforcements including means for the delivery of a continuous web or strand to a resin tank, controlling the amount of resin pickup, drying, or partially curing the resin, and rewinding the impregnated reinforcement. Term also used to refer to equipment and process used to render a surface of inert plastics, such as polyethylene more receptive to inks, adhesives, or coatings.	*Engineering Physics*
Treating plant	A plant designed primarily to remove undesirable impurities from natural gas to render the gas marketable.	*Energy*
Treatment	The process of intervening on people with the aim of enhancing health or life expectancy. Sometimes, and particularly in statistical texts, the word is used to cover all comparison groups, including placebo and no treatment arms of a controlled trial and even interventions designed to prevent bad outcomes in healthy people, rather than cure ill people. See also: Aggregate data, Control, Experimental intervention, Intervention	*Quality Engineering*
Treatment effect	See Estimate of effect	*Quality Engineering*
Trebles	a size or grade of coal, usually between 2 and 4 inches in dimensions.	*Mining*
Tree	a wooden prop. (Scot.). (Staffs.). –see Props.	*Mining*
Tree Cap	See Top Connector	*Petroleum Engineering*
TREE FARM	A privately owned forest or woodland in which timber crop production is a major management goal.	*Forestry*
TREE SPACING	The distance between trees, which is most often regulated at the time of planting or during a harvest or thinning operation.	*Forestry*
Tree Top	See Top Connector	*Petroleum Engineering*
Tremie Pipe	A device carrying materials to a designated depth in a drill hole or annular space.	*Petroleum Engineering*
Trench	A long, narrow excavation dug through overburden, or blasted out of rock, to expose a vein or ore structure.	*Mining*
Trend	1. A consistent movement across ordered categories, e.g. a change in the effect observed in studies grouped according to, for instance, intensity of treatment. 2. Used loosely to refer to an association or possible effect that is not statistically significant. This usage should be avoided.	*Quality Engineering*
Trend	The direction, in the horizontal plane, of a linear geological feature, such as an ore zone, measured from true north.	*Mining*
Trepanner	an early type of shearer with a large barrel shaped cutting head to produce large coal.	*Mining*
Trepanning	The removal by destructive means of a small section of piping (usually containing a weld) for an evaluation of weld and base-metal soundness. The operation is frequently performed with a hole saw.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Threshold limit value of toxicity (TLVT)	Threshold limit over than producing damage.	*Material Process*
TRI	Toxic Release Inventory (US)	*Petro-Chemical Abbreviations*
Tri-n-butyl tricarballylate ((C4H9OCOCH2)2 CHCOOC4H9)	Tri –n-butyl tricarballylate ((C4H9OCOCH2)2 CHCOOC4H9)	*Material Process*
Triac	A solid state switching device used to switch alternating current wave forms.	*Electrical*
Triad	Any grouping of three conductors or three assemblages of conductors, generally twisted together and found within a cable.	*Electrical*
Trial Examiner	the official charged by the National Labor Relations Board to conduct hearings following issuance of a complaint by the General Counsel alleging that an employer or union has violated the Taft-Hartley Act by the commission of unfair labor practices.	*Industrial Relations*
Trial Examiner's Decision	since September 3, 1963, the NLRB trail examiners have issued decisions which are not reviewed by the Board unless exceptions to the decision are filed by a party or parties to a case involving charges of unfair labor practices.	*Industrial Relations*
Trial Period	the initial or probationary period for a new employee on the job.	*Industrial Relations*
Trialist	Used to refer to a person conducting or publishing a controlled trial.	*Quality Engineering*
Trials Search Co-ordinator (TSC)	Member of the editorial team of a Cochrane Review Group (CRG), or member of a Cochrane Centre or Field. Their role is to co-ordinate trial identification by handsearching and electronic means and to make reports of trials they identify accessible through the Cochrane Central Register of Controlled Trials (CENTRAL). TSCs of CRGs and Fields establish a specialized register of studies falling within the scope of their entity and submit this to CENTRAL. TSCs of CRGs also provide listings of studies to Cochrane reviewers/authors to conduct and update their reviews. In some CRGs, the Managing Editor also fulfils the responsibilities of the TSC, but most CRGs have a dedicated TSC.	*Quality Engineering*
Triboelectric Noise	The generation of electrical charges caused by layers of cable insulation. This is especially troublesome in high impedance accelerometers.	*General*
Triboelectric Noise	The generation of electrical charges caused by layers of cable insulation. This is especially troublesome in high impedance accelerometers.	*Electronic Process*
Tribology	Science of the interactions between surfaces moving relative to each other, including the study of lubrication, friction, and wear.	*Lubrication*
Trichlorobenzene	A solvent-halogenated compound.	*Material Process*
Trichloroethane	1,1,2 Trichloroethane A solvent-chlorinated compound.	*Material Process*
Trichloroethylene	1,1,2 Trichlorethylene A solvent-chlorinated compound.	*Material Process*
Trick	generally considered as synonymous with shift or tour.	*Industrial Relations*
trickle irrigation	A system for irrigating crops by delivering water to the root zone through small, plastic pipes equipped with emitters. This technology conserves water and eliminates soil erosion from irrigation water runoff. Also called drip irrigation.	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tricresyl phosphate ((CH3C6H4O)3 PO)	An important plasticizer and fire retardant for cellulose nitrate and other cellulose derivatives. Also, called Kronitex A Lindol. Used also, as extreme pressure lubricants, and for vinyl chloride plastics.	*Material Process*
Triethanolamine	A solvent-amine.	*Material Process*
Triethylene glycol	A solvent glycol.	*Material Process*
Triethylene glycol dipropionate (CH2OCH2 CH2OCOC2H5)2	A plasticizer.	*Material Process*
Triethylenetetramine	A solvent-amine.	*Material Process*
Trig	a piece of timber laid across the tracks under the wheels of a wagon to stop it moving. (Scot.).	*Mining*
Trigger	see Bar-hook.	*Mining*
Trillion Btu	Equivalent to 1,000,000,000,000 or 10 to the 12th power Btu.	*Energy*
Trim	Includes all the parts that are in flowing contact with the process fluid except the body, bonnet and body flanges and gaskets. The plug, seats, stem, guides, bushings and cage are some of the parts included in the term trim.	*Industrial Engineering*
Trim And Shave	See "CLIP AND SHAVE"	*Metallurgy*
Trim tab	A secondary control surface, usually mounted to primary control surface such as aileron, elevator, rudder, or stabilizer, that controls the position of the primary control surface, and is controlled by the an operator or an autopilot; Symbols: delta sub T; Typical Units: rad, deg.	*Aeronautical Engineering*
Trimethyl phosphate ((CH3O)3PO)	A plasticizer.	*Material Process*
Trimmer	a tool used to clean the wick of an oil lamp. -see also Pricker; or men who filled the holds of coal vessels and trimmed or leveled the load; or a man who filled tubs at the end of a conveyor belt; or a person who spreads the coal in the wagons or carriages.	*Mining*
Trip	A train of mine cars.	*Mining*
Trip chocks	chocks erected at the entrance to the waste or gob to prevent the roof in the waste breaking down too far towards the face.	*Mining*
Tripartite Boards	a board composed of representatives of labor, management, and the public.	*Industrial Relations*
Triphenyl phosphate ((C6H5O)3PO)	An important plasticizer and fire retardant.	*Material Process*
Triping	originally run-of-mine coal, uncleaned or unsorted. Triping then became coal which had all of the large lumps taken out. The run-of-mine coal was then known as 'cleek coal'. (Scot.).	*Mining*
TRIPLE ECCENTRIC (Butterfly Valves)	A particular design of a butterfly valve where the stem is located behind the disc, below the centerline of the disc, and its cone axis is offset from the centerline of the disc. This particular design is capable of a very tight shutoff at temperatures well above 100°F.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Triple Extra Strong	See XXXS Also, See XXXH, (XXXS) also referred to as triple extra heavy (XXXH) a super heavy wall pipe schedule 3 times thicker than XS pipe. Generally custom ordered and manufactured.	*Petroleum Engineering*
Triple Point	The temperature and pressure at which solid, liquid, and gas phases of a given substance are all present simultaneously in varying amounts.	*General*
Triple Point (Water)	The thermodynamic state where all three phases, solid, liquid, and gas may all be present in equilibrium. The triple point of water is .01°C.	*General*
Triplet	a tipper for emptying tubs. (N. East).	*Mining*
Triplex	Three single conductors twisted together, usually three single conductor cables twisted without overall covering. Do not use for three conductors laid parallel on a reel.	*Electrical*
Tripod Support	Three legged stand for small roller and skatewheel conveyor. Usually easily moved or aligned to maintain elevation of the conveyor.	*Manufacturing*
Tripoli	A porous siliceous earth resulting from the natural decomposition of siliceous sandstone, used as an abrasive, polishing powder, and filler.	*Material Process*
tripolyphosphates	Salts with P(3)O(10)[-5 charge] anion. Most common is sodium tripolyphosphate [Na(5)P(3)O(10)].	*Chemical*
Tripping	The operation of hoisting the drill string out of and then returning it to the well bore.	*Petroleum Drilling*
Trochoid	The curve formed by the path of a point on the extension of a radius of a circle as it rolls along a curve or line. It is also the curve formed by the path of a point on a perpendicular to a straight line as the straight line rolls along the convex side of a base curve. By the first definition the trochoid is derived from the cycloid; by the second definition it is derived from the involute.	*Mechanical Engineering*
Trolley	a low, flat truck used for man-riding; or a basin in the strata from which the seam rises in opposite directions (S. West); or a small tram (S. Wales).	*Mining*
Trommel	to avoid breaking coal during the process of grading and sorting.	*Mining*
Tront	a long sprag set diagonally to support the coalface. (Mids.).	*Mining*
Troposphere	The inner layer of the atmosphere below about 15 kilometers, within which there is normally a steady decrease of temperature with increasing altitude. Nearly all clouds form and weather conditions manifest themselves within this region. Its thermal structure is caused primarily by the heating of the earth's surface by solar radiation, followed by heat transfer through turbulent mixing and convection.	*Energy*
Trot	an endless rope. Also a system of double haulage way (running side by side) called the rolleyway that takes the full tubs of coal to the shaft and the empty tubs inbye. (N. East).	*Mining*
Trouble	see Fault or Hitch.	*Mining*
Trouble Men	individuals who repair and service equipment.	*Industrial Relations*
Trough	High-temperature (180+) concentrator with one axis-tracking.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Trough fault	two faults between which the strata has been lowered forming a trough.	*Mining*
Troughed Bed	A belt conveyor designed with a deep trough used for carrying broken glass, cans, wood chips, stampings, etc. Also used in recycling operations. (Model TR is a typical troughed bed conveyor.)	*Manufacturing*
Troughing Attachments	Angles used on belt conveyors to cup the edge of the belt.	*Manufacturing*
Troughing idlers	The idlers, located on the upper framework of a belt conveyor, which support the loaded belt. They are so mounted that the loaded belt forms a trough in the direction of travel, which reduces spillage and increases the carrying capacity of a belt for a given width.	*Mining*
Trounters	a sprag set against the coal face. (Mids.). -see also Tront.	*Mining*
Trow or Trows	a rectangular wooden pipe for conveying water down the sides of a shaft to the garland. They were also used for directing ventilation air into headings etc. (Leics.), or a wooden trough used for channeling water.	*Mining*
Trowhole or Trowroad	a cundie, a steep road, down which coal is shot instead of being loaded into hutches. (Scot.).	*Mining*
TROY OUNCES	A type of measurement for gold. A troy is different than an ounce.	*Mining*
Truax v. Corrigan	a decision of the United States Supreme Court in which the Court decision set aside an Arizona Supreme Court decision upholding the anti-injunction law passed by that state.	*Industrial Relations*
Truck	see Tommy.	*Mining*
truck lot	A truckload of product.	*Agriculture*
Truck machine	another name for a weighbridge (N. Staffs.).	*Mining*
Truck System	a form of barter system whereby employees were paid their wages in goods or in scrip to be used at a store owned by the employer.	*Industrial Relations*
TRUE (value)	Best available estimate, such as true airspeed; referenced to true north, such as true heading.	*Aeronautical Engineering*
True Accident	a phrase used in handling employee liability or accident cases to describe an accident for which no one is to blame.	*Industrial Relations*
True airspeed (TAS)	Airspeed corrected for instrumentation errors and air density; See Also: airspeed; Symbols: V sub 'TAS'; Typical Units: kt, ft/s; Dimensions: Length / Time.	*Aeronautical Engineering*
True bearing	Symbols: B sub T; Typical Units: rad, deg.	*Aeronautical Engineering*
True Downtime Cost (TDC)	A method of recording and analyzing all significant cost metrics associated with equipment downtime in a building or manufacturing facility. TDC provides a way to assign time and/or monetary value to previously considered "non-tangible" cost of downtime. Also TDC includes downtime factors commonly overlook to arrive at a more true value for the cost of downtime.	*Maintenance*
True Fracture Strength	the load at fracture divided by the cross sectional area of the sample. Like the ultimate tensile strength the true fracture strength can help an engineer to predict the behavior of the material but is not itself a practical strength limit. Because the tensile test seeks to standardize variables such as specimen geometry, strain rate and uniformity of stress it can be considered a kind of best case scenario of failure.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	Industry
True heading	Heading of the aircraft relative to true north; Symbols: psi sub T; Typical Units: rad, deg.	*Aeronautical Engineering*
True heading	Heading of the aircraft relative to true north; Symbols - psi sub T; Typical Units - rad, deg.	*Aeronautical Engineering*
True Involute Form Diameter	The smallest diameter on the tooth at which the involute exists. Usually this is the point of tangency of the involute tooth profile and the fillet curve. This is usually referred to as the TIF diameter.	*Gears*
True RMS	The true root-mean-square value of an AC or AC-plus-DC signal, often used to determine power of a signal. For a perfect sine wave, the RMS value is 1.11072 times the rectified average value, which is utilized for low-cost metering. For significantly nonsinusoidal signals, a true RMS converter is required.	*Electrical*
True RMS	The true root-mean-square value of an AC or AC-plus-DC signal, often used to determine power of a signal. For a perfect sine wave, the RMS value is 1.11072 times the rectified average value, which is utilized for low-cost metering. For significantly non-sinusoidal signals, a true RMS converter is required.	*Electronic Process*
True track	Ground track angle; Symbols: T sub T; Typical Units: rad, deg.	*Aeronautical Engineering*
True value	Generally used to indicate that this is the correct analytical concentration or result.	*Quality*
Trueness (of measurement)	Closeness of agreement between the average value obtained from a large series of test results and an accepted reference value. NOTE: The measurement of trueness is usually expressed in terms of bias. [CLSI EP15-A2]	*Quality*
Trumpet lamp	the miners' term for the 'Mueseler' or Belgian Safety Lamp. (N. East).	*Mining*
Trumpeting	a channel cut behind, or built into, the walling of a shaft to divert the water down to the sump so that it could be pumped out of the pit. -see also Garland; or a system of bratticing a roadway to split the ventilation.	*Mining*
Truncheon	a wooden sleeper to which the tub rails were nailed. (Som.)	*Mining*
Trunk	a wooden box or sled for hauling the debris out of the heading in low seams; or winding in a staple shaft. (Mids.); or a wooden pipe for conveying air into the workings (S. West); or a kibble. (Yorks.).	*Mining*
Trunk line	A main pipeline.	*Energy*
Trunkwire	A trunkwire will be possible for a series of digital devices. Such a series will be able to use a single wire, rather than the multiplicity of wires used on analogue devices which all require separate wiring.	*Control Engineering*
Trunnion	The part of a ball valve which holds the ball on a fixed vertical axis and about which the ball turns.	*General Mechanical*
TRUNNION	That part of a ball valve which holds the ball on a fixed vertical axis and about which the ball turns. The torque requirement of a trunnion mounted ball valve is significantly less than that for a floating ball design.	*Mechanical*
Trusteeing	the practice of attaching, through a court order, the wages of a debtor and collecting it directly from his employer.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Trusteeship, Union	a trusteeship is a method of supervision or control whereby a labor organization suspends the autonomy of a subordinate group or body, under the constitution or bylaws of the organization.	*Industrial Relations*
Trying the candle	testing for firedamp using a candle before the advent of the safety lamp.	*Mining*
TSP	Transmission Service Provider	*Energy*
TSS	Total suspended solids. Generally solids that can be captured by a filter with a filtration degree.	*Filtration*
TTC	Transportation Technology Center (AAR)	*Petro-Chemical Abbreviations*
t-test	Often called Student's t-test. A statistical test of significance in which the difference between two mean values is tested. The null hypothesis is that there is no difference between the two means. The test is carried out by calculating a t-value, then comparing the calculated t-value with a critical t-value which is obtained from a statistics table. If the calculated t-value is greater than the critical t-value, the null hypothesis is rejected; this means that a statistically significant or real difference exists between the mean values being compared. If the calculated t-value is less than the critical t-value, the null hypothesis stands, therefore no difference has been observed between the two mean values.	*Quality*
TTL	A form of solid state logic which uses only transistors to form the logic gates.	*Electrical*
TTL Compatibility	TTL (transistor: transistor: logic) requires NPN (current sinking) input signals. Reliable operation demands maximum input sensor voltage drop of 0.8 V. Most TTL compatible interface devices have voltage drops of less than 0.7V.	*Electrical Engineering*
TTL Unit Load	A load with TTL voltage levels, which will draw 40 μA for a logic 1 and –1.6 mA for a logic 0.	*Electrical*
TTL Unit Load	A load with TTL voltage levels, which will draw 40 μA for a logic 1 and -1.6 mA for a logic 0.	*Electronic Process*
TTL-Compatible	For digital input circuits, a logic 1 is obtained for inputs of 2.0 to 5.5 V which can source 40 μA, and a logic 0 is obtained for inputs of 0 to 0.8 V which can sink 1.6 mA. For digital output signals, a logic 1 is represented by 2.4 to 5.5 V with a current source capability of at least 400 μA, and a logic 0 is represented by 0 to 0.6 V with a current sink capability of at least 16 mA.	*Electrical*
TTL-Compatible	For digital input circuits, a logic 1 is obtained for inputs of 2.0 to 5.5 V which can source 40 μA, and a logic 0 is obtained for inputs of 0 to 0.8 V which can sink 1.6 mA. For digital output signals, a logic 1 is represented by 2.4 to 5.5 V with a current source capability of at least 400 μA; and a logic 0 is represented by 0 to 0.6 V with a current sink capability of at least 16 mA.	*Electronic Process*
Tub	originally an open topped box constructed from wood or iron attached to a tram, used for transporting coal. A tub constructed to hold twenty-four 'pecks' of coal had an inside measurement of 36ins. x 30ins. x 26ins. Tubs were manufactured in all sizes and shapes and also had various names in the different coalfields. -see also Boxes, Dram, Hutch, Tram and Put; or a complete section of timber or metal tubbing including the wedging crib upwards to the mouth of the shaft.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tub thumper	man employed on repair of pit wagons (Tubs or jummers) (N. Staffs.).	*Mining*
Tubbing	a casing built into a pit shaft to keep back water or free running deposits such as mud or sand. Formerly constructed from planking with dressed joints, brick, stone, or later from cast-iron or concrete. When made with brick or stone it is often called 'coffering'. –see also Stone Tubbing	*Mining*
Tubbing curbs	cast iron curbs used as a foundation for tubbing. Also called 'wedging curbs'.	*Mining*
Tubbing plates	the cast iron segments making up the tubbing.	*Mining*
Tube	The terms "pipe" and "tube" are almost interchangeable, although minor distinctions exist — generally, a tube has tighter engineering requirements than a pipe. Both pipe and tube imply a level of rigidity and permanence, whereas a hose is usually portable and flexible. See also Pipe.	*Industrial*
Tube Bending Formula	a policy (formulated by the NLRB) which held that certain expressions of employers in opposition to unionism are not coercive or threatening and do not constitute improper interference within the meaning of the National Labor Relations Board Act.	*Industrial Relations*
Tube bundle	a bundle of small diameter tubing from the surface to underground, where the individual tubes split off the main bundle and were directed to different parts of the mine. Used in an automatic air sampling system.	*Mining*
Tube Detection	A sensor technique for determining the presence of tubing within a pinch valve. By using an analog hall sensor capable of multi-position output, various valve states are established. Typical states are; Tube Out-Valve Closed, Tube In-Valve Closed and Tube In-Valve Open.	*General Mechanical*
TUBE MILL	A piece of milling equipment consisting of a revolving cylinder half filled with steel rods or balls and into which crushed ore is fed for fine grinding; the material to be ground is mixed with water or other solution and comes out as a slurry.	*Mining*
Tube mill	An apparatus consisting of a revolving cylinder about half-filled with steel rods or balls and into which crushed ore is fed for fine grinding.	*Mining*
Tube or Core Barrel	The main body of the bit. Should always be tested for being in round.	*Petroleum Drilling*
Tube Slot	A slot in the side of the body for tubing to pass through.	*Mechanical*
tube tomatoes	A container holding three or four tomatoes, to be sold to consumers as a single unit.	*Agriculture*
Tuberculation	Localized attack typified by the formation of inverted pliable conical structures. In water systems, tuberculation is more commonly associated with localized corrosion of iron and the conical structures are predominately made up of several oxidation states of iron (Fe2O3, Fe3O4, etc.). Pitting is normal result.	*Chemical Engineering*
Tubing	Pipe suspended in a well bore, inside the annulus of the casing, used to produce fluid or gas from the well. Used as the production spring.	*Petroleum Engineering*
Tubing Head	(Tubing Spool) Equipment attached above the Casing Spool and, used to suspend and seal the production Tubing string.	*Petroleum Engineering*
Tubing Head Adaptor	'Adaptor Flange' Attached above the Tubing Head, used to attach the Christmas Tree onto the tubing head.	*Petroleum Engineering*
Tucklers	short chains used for lowering and raising men in the shaft. Three men usually rode in them at one time. (Leics.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Tued	meaning fatigued or tired. (N. East).	*Mining*
Tuff	Rock composed of fine volcanic ash.	*Mining*
TUFT	Bunching of twigs or needles.	*Forestry*
Tumblers	catches fitted to the deck of a cage to hold the tubs in place during winding. (N. East); or a tipper for emptying tubs, also known as a 'Tumbling Tom' (Scot.); or a quadrant for altering the direction of pumping rods. (Som.); or an apparatus fitted at the top of the shaft and at the entrance to levels within the shaft. By pulling a lever two lengths of timber would fall forward to support the cage as it was being loaded and unloaded. A forerunner of the modern day keps. Also called a tippler or kick-up.	*Mining*
Tumbling	A process of polishing, creating a smooth finish, or applying an even coating of some material on small plastics objects by placing them in a tumbling barrel with various finishing or polishing compounds and wooden pegs or other similar objects. Slow turning of the barrel causes the pieces to rub against each other and against the pegs. Many articles can be finished at once this way.	*Material Process*
Tume	see Toom.	*Mining*
Tumps	rubbish disposed of in the waste in rough packs with intervening spaces. (Som.).	*Mining*
Tune	To set the operating frequency or channel for a device.	*Aeronautical Engineering*
Tung oil	A yellow oil obtained from the fruit of Aleurites cordata used in the manufacture of quick drying varnishes and as a modifier or lubricant for plastics.	*Material Process*
TUNNEL	A horizontal underground passage that is open at both ends; the term is loosely applied in many cases to an adit, which is open at only one end.	*Mining*
Tunnel	A horizontal, or near-horizontal, underground passage, entry, or haulage way, that is open to the surface at both ends. A tunnel (as opposed to an adit) must pass completely through a hill or mountain.	*Mining*
Tunnel Claims	Gold bearing earth taken out of tunnels and subsequently washed.	*Mining*
Tunnel-boring-machine	A machine used to excavate a tunnel through soil or rock by mechanical means as opposed to drilling and blasting.	*Mining*
Tunnels	Ground-effect-generating venturi underneath the side pods of a Champ Car. See Aerodynamics.	*NASCAR*
Tunphy	coaly fireclay. (Scot.).	*Mining*
Tup	In early times there used to be a fortnight's holiday at the end of the year, when stock used to be taken and no coals drawn. It was the custom to cover with lighted candles the last corf of coals sent to bank, which was called "sending away the tup." (N. East)	*Mining*
Turbidity	The interference to light transmission caused by suspended solids usually colloidal in nature.	*Chemical Engineering*
Turbine	A propeller-like device that is turned by a stream of hot gas (steam in a conventional thermal power station), water (in a hydro plant), gas (in a gas power plant - here the gas burns in the turbine and exhaust gases cause it to rotate); or wind (as in a wind farm). The rotation of the turbine drives the generator that converts the mechanical rotation into electrical power. (See also Generator.)	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Turbine Oil	A top-quality rust- and oxidation-inhibited (R&O) oil that meets the rigid requirements traditionally imposed on steam-turbine lubrication. Quality turbine oils are also distinguished by good demulsibility, a requisite of effective oil-water separation. Turbine oils are widely used in other exacting applications for which long service life and dependable lubrication are mandatory. Such compressors, hydraulic systems, gear drives, and other equipment. Turbine oils can also be used as heat transfer fluids in open systems, where oxidation stability is of primary importance.	*Lubrication*
turbine wheel	a rotor designed to convert fluid energy into rotational energy. Hydraulic turbines are used to extract energy from water as the water velocity increases due to a change in head or kinetic energy at the expense of the potential energy as the water flows from a higher elevation to a lower elevation. The fluid velocity tangential component contributes to the rotation of the rotor in a turbomachine.	*Chemical*
Turbinizing	Mechanical removal of scale from the inside of the pipe by means of air-driven centrifugal rotating cleaners. The operation is performed on steel pipe bends after hot bending to remove loose scale and sand.	*Maintenance and Repair*
Turbocharger	An air compressor that is used to boost the oxygen intake of a motor. In an internal combustion engine, a mixture of fuel and air is pumped into the confined space of a piston cylinder and ignited by a spark. When it ignites, the fuel burns, using the oxygen in the air, and the remaining gasses expand almost instantly, releasing a huge amount of energy. This expansion pushes the piston out, turning the crankshaft that drives the engine. The amount of fuel that can be ignited in the cylinder, and therefore the power generated, is limited by the amount of oxygen present. If there is too little oxygen, not all the fuel will burn. By compressing the air that is fed into the cylinder, more oxygen is made available for the combustion process, allowing more fuel to be burned, more completely, leading to more power obtained at higher efficiency and "cleaner" exhaust-emissions.	*Electrical*
TURBOCHARGER	A mechanical device on the engine for boosting the intake air volume and therefore the power output of the engine.	*Mechanical, Process, and Operations*
Turbogenerator	a collective term referring to a turbine and the generator to which it is connected.	*Electrical*
Turbulent Flow	When forces due to inertia are more significant than forces due to viscosity. This typically occurs with a Reynolds number in excess of 4000.	*General*
Turbulent Flow	Flow in which the velocity at any point varies on an erratic basic. It occurs when flow velocity exceeds a limiting value or when tube configuration irregularities preclude laminar flow.	*Lubrication*
TURBULENT FLOW (TURBULENCE)	A condition where the fluid particles move in random paths rather than in continuous parallel paths.	*Mechanical, Process, and Operations*
Turbulent flow sampler	A sampler that contains a flow path in which turbulence is induced in the main stream by abruptly changing the direction of the fluid.	*Oil Analysis*
Turn	another term for a curve in a rail track.	*Mining*
Turn again	a change in the direction of the dip of the strata (N. Staffs.).	*Mining*
Turn In	As a car reaches a corner, this is the moment at which a driver actually begins to turn the wheel. The timing of this action and the car's response to it are crucial for setting fast lap times.	*NASCAR*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Turn Of The Nut Method	See Angle Controlled Tightening	*Maintenance*
Turn pulley	the return wheel or pulley for an endless haulage or tail-rope on a haulage road. (Mids.).	*Mining*
Turnaround	A stop, or full or substantial interruption of plant production. Generally turn-around is considered to be a period longer than 24 hours.	*Maintenance*
Turnbuckle	A link with a screw thread at both ends, used for tightening the rod, normally used in cross-bracing.	*Manufacturing*
Turndown	A term used to describe the ratio between the minimum and maximum flow conditions seen in a particular system. For example, if the minimum flow were 10 G.P.M. and the maximum flow were 100 G.P.M. the turndown would be 10:1. See rangeability.	*Industrial Engineering*
Turning Wheel	Wheel mounted on an adjustable bracket to help insure proper package orientation.	*Manufacturing*
Turnkey project	A turnkey project is one in which the contractor will design, engineer, deliver and commission an installation, taking responsibility for all aspects of the work. A lump-sum turnkey project is one in which the contractor undertakes a turn-key project for a set fee, agreed by the contractor and the customer before the work has begun.	*Electrical*
Turnover	moving the conveyors on the face from one track to another as the seam is worked out forwards, taking off the belts and pans then moving the engine to the new track (S. Staffs.)—see also Web.	*Mining*
Turns to operate	The number of complete revolutions of a handwheel or the pinion shaft of a gear operator required to stroke a valve from fully open to fully closed or vice versa.	*General Mechanical*
Turntable	Horizontal, rotatable conveyor mechanism used for transferring objects between conveyors which are in angular relation to one another.	*Equipment*
Turpentine	An oil obtained by distilling the extracted sap obtained by wounding living pine trees used as a solvent for paints and varnishes.	*Material Process*
Tut	a drinking vessel (S. Staffs.).	*Mining*
TUV	Technischer überwachungs Verien	*Petro-Chemical Abbreviations*
TVA	See Tennessee Valley Authority	*Energy*
t-value, t	A statistic from the t-test. It is a ratio of a systematic error component divided by a random error component [bias/(sdiff/N1/2)].	*Quality*
TVD	Refers to True Vertical Depth, or the actual depth of any part of the wellbore. (TVD is usually measured from the rig's RKB or rotary kelly bushing elevation.)	*Petroleum Drilling*
TVD*	planned well bore True Vertical Depth Cartesian coordinate at MD*. (feet or meters)	*Petroleum Drilling*
TVL	temporary viscosity loss	*Petro-Chemical Abbreviations*
TWD	total weighted demerit	*Petro-Chemical Abbreviations*
TWh	See Terawatt hour	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Twin boundary	A planar defect separating two crystalline regions that are, structurally, mirror images of each other.	*Material Process*
Twinway	two branch roads running on either side, out of a main road to the stalls on a stall face through which the 'twin boys' pushed the trams (S. West).	*Mining*
TWO INCH SQUARE OPERATING NUT	A nut attached to the valve stem or to the pinion shaft of a gear operator. Valves so equipped are usually situated below grade in road boxes and are operated by long handled "T" wrenches.	*Mechanical*
Two sided	See Two-tailed	*Quality Engineering*
Two stage process	Method of making phenol-formaldehyde resins in which less than the required amount of aldehyde is reacted with phenol in the first stage, more being added later.	*Material Process*
Two-, Three-, Four-, or Six-Way Valve	A valve having 2,3, 4, or 6 ports for direction of oil flow.	*Mechanical, Process, and Operations*
Two-by-Two (2x2) Table	A contingency table with two rows and two columns. It arises in clinical trials that compare dichotomous outcomes, such as death, for an intervention and control group or two intervention groups.	*Manufacturing*
Two-Platoon System	similar to a two-shift operation.	*Industrial Relations*
Two-Pulley Hitch	A special transition section for moving product from horizontal to incline.	*Manufacturing*
Two-Stage Injection	The two-stage plasticator injector unit utilizes two separate stages to perform its function. The first, or plasticating stage, is devoted to the melting and mixing of the plastic melt by utilizing long, rotating screws. This screw conveys the processed plastic forward where, by means of a diverter valve, it is transferred into the injection or holding cylinder. When a sufficient quantity of melt has been plasticated and transferred into the injection cylinder, the diverter valve shifts to create a flow path from the injection cylinder to the mold runner system, and the second stage or injection stage, now begins. The melted plastic is forced out of the injection cylinder by a hydraulically driven piston or plunger. After injecting the melt into the mold, the diverter valve again shifts to connect the flow path from the rotating screw to the injection cylinder to transfer more plasticated material into the cylinder for the next cycle. During injection the plasticating screw continues to rotate and reciprocate to build up a change in front of it for the next cycle.	*Engineering Physics*
Two-tailed	A hypothesis test in which the values for which we can reject the null hypothesis are located entirely in both tails of the probability distribution. Testing whether one treatment is either better or worse than another (rather than testing whether one treatment is only better than another) would be a two-tailed test. See also: One-tailed test Also called: Two sided	*Quality Engineering*
Two-Thousand Hour Clause	same as the thousand hour clause under th Fair Labor Standards Act, except that under the two thousand hour clause, overtime provisions do not apply up to 12 hours per day and 56 hours per week.	*Industrial Relations*
Two-tone	Two shades of its nominal color more or less entirely covering adjacent areas on a molding with a more or less sharp line demarcation between.	*Material Process*
Two-tone	Two shades of its nominal color more or less entirely covering adjacent areas on a molding with a more or less sharp line demarcation between.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
TWO-WAY SPHERE-LOK	A Sphere-Lok with two ports. See "Sphere-Lok."	*Mechanical*
Two-Year Rule	a rule established by the NLRB holding that the first two years of a collective bargaining agreement shall be considered a reasonable period during which claims by rival unions will not be generally considered.	*Industrial Relations*
TYLOSIS	Outgrowth of a cell membrane from a ray or axial parenchyma cell through a pit in a xylem vessel wall into the vessel, partially or completely blocking the lumen of the vessel.[1]	*Forestry*
Tymp	a cap or lid for the top of a prop, usually 12 to 15 inches in length.	*Mining*
Type I error	A conclusion that a treatment works, when it actually does not work. The risk of a Type I error is often called alpha. In a statistical test, it describes the chance of rejecting the null hypothesis when it is in fact true. (Also called false positive.) See also: False positive Also called: Alpha	*Quality Engineering*
Type ll error	A conclusion that there is no evidence that a treatment works, when it actually does work. The risk of a Type II error is often called beta. In a statistical test, it describes the chance of not rejecting the null hypothesis when it is in fact false. The risk of a Type II error decreases as the number of participants in a study increases. (Also called false negative.)See also: False negative Also called: Beta	*Quality Engineering*
Type of drive (vehicle)	Refers to which wheels the engine power is delivered to, the so-called "drive wheels." Rear-wheel drive has drive wheels on the rear of the vehicle. Front-wheel drive, a newer technology, has drive wheels on the front of the vehicle. Four-wheel drive uses all four wheels as drive wheels and is found mostly on Jeep-like vehicles and trucks, though it is becoming increasingly more common on station wagons and vans.	*Energy*
Typical	Error is within plus or minus one standard deviation (±1%) of the nominal specified value, as computed from the total population.	*General Engineering*
Typical	Can refer to the target value or where a range is given, represents an estimate of where 2/3 of the total population of several production runs would be.	*Electrical Engineering*
Typographical Union; International (AFL-CIO)	a union organized in 1852 which claimed jurisdiction over most of the crafts in the printing trade.	*Industrial Relations*
U	U	*Forestry*
U Bolt	A U shaped fastener threaded at both ends used primarily in suspension and related areas of vehicles.	*Maintenance*
U.S. Department of Energy (DOE)	The DOE managers programs of research, development and commercialization for various energy technologies, and associated environmental, regulatory and defense programs. DOE announces energy policies and acts as a principal advisor to the President on energy matters.	*Energy*
U.S. Environmental Protection Agency (EPA)	The EPA administers federal environmental policies, enforces environmental laws and regulations, performs research, and provides information on environmental subjects. The agency also acts as chief advisor to the President on U.S. environmental policy and issues.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
U.S. refiner acquisition cost of imported crude oil	The average price paid by U.S. refiners for imported, that is, non-U.S., crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. The refiner acquisition cost of imported crude oil includes transportation and other fees paid by the refiner.	*Energy*
U.S.S.R.	See Union of Soviet Socialist Republics (U.S.S.R.).	*Energy*
U3O8	See Uranium oxide.	*Energy*
UCC	Uniform Code Council	*Gears*
U-CUP (Ring-Packing)	A "U" cross-section ring located on the tail end of certain ball valve seats to retain the grease in an emergency seat seal system.	*Mechanical*
Udged	sounding hollow or unsound when the roof is tested by tapping with a hammer, it was said to 'knock udged'. (Derbys.).	*Mining*
UEIL	Union Européenne des Indépendants en Lubrifiants	*Petro-Chemical Abbreviations*
UEL	Upper Explosion limit.	*Material Process*
UF6	See Uranium hexafluoride.	*Energy*
UFE	Unaccounted For Energy	*Energy*
Uformite	A trade name for aqueous dispersions of urea-formaldehyde resins used as adhesive and for the manufacture of laminated material.	*Material Process*
UHF/VHF Automatic Direction Finding (U/V ADF)	An Automatic Direction Finder that determines relative bearing to a transmitter to which it is tuned, in either the UHF band or VHF band.	*Aeronautical Engineering*
UIC	Underground Injection Control	*Petroleum Drilling*
Uinta Basin	Consists of the Colorado counties of Delta, Garfield, Gunnison, Mesa, Moffat, Pitkin, Rio Blanco, Routt and the Utah counties of Carbon, Duchesne, Emery, Grand, Sanpete, Sevier, Uintah, Utah, and Wasatch.	*Energy*
UKPIA	UK Petroleum Industry Association	*Petro-Chemical Abbreviations*
UL	Underwriters Laboratories, Inc. An independent laboratory that establishes standards for commercial and industrial products.	*Electronic Process*
ULCC	Ultra Large Crude Carrier.	*Energy*
ULEV	ultra low-emission vehicle	*Petro-Chemical Abbreviations*
ULSD	ultra low sulfur diesel	*Petro-Chemical Abbreviations*
Ultimate analysis	determines the amount of carbon, hydrogen, oxygen, nitrogen, and sulfur. Heating value is determined in terms of Btu, both on an as received basis (including moisture) and on a dry basis.	*Energy*
Ultimate customer	A customer that purchases electricity for its own use and not for resale.	*Energy*
ULTIMATE STRENGTH	That stress at which a material will fail. See "Tensile Test", "Burst Pressure."	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ultimate Strength	The maximum stress developed in a tensile-compression specimen.	*Engineering Physics*
Ultimate Tensile Strength	a value calculated by dividing the maximum load on a material experienced during a tensile test by the initial cross section of the test sample. When viewed in light of the other tensile test data the ultimate tensile strength helps to provide a good indication of a material's toughness but is not by itself a useful design limit. Conversely this can be construed as the minimum stress that is necessary to ensure the failure of a material.	*Metallurgy*
Ultra Violet Degradation	The degradation caused by long time exposure of a material to sunlight or other ultraviolet rays containing radiation.	*Electrical*
Ultraclean	1 particle >10 micron per milliliter	*Lubrication*
Ultrafiltration (UF)	Membrane systems retain particles, bacteria, protozoa, viruses and organic molecules greater than their rated molecular weight cut-off. They operate at pressures between 10 and 50 psi.	*Contamination Control*
Ultrahigh voltage (UHV)	This term refers to voltages in excess of 800 kilovolts (kV). UHV transmission using alternating current (AC) has been possible for several decades, and it is now also possible to transmit power this way using direct current (DC). DC transmission has lower losses and requires fewer overhead lines than AC transmission. Ultrahigh-voltage DC links will make it viable to produce electricity in remote regions and transmit it to centers of demand via energy "superhighways." The efficient transmission of electricity at 800 kV DC power transmission is now feasible over distances as far as 3,000 km. UHVDC systems are cheaper, smaller and more efficient than comparable AC transmission systems.	*Electrical*
Ultrahigh Voltage Transmission	Transporting electricity over bulk-power lines at voltage greater than 800 kilovolts.	*Energy*
Ultra-low sulfur diesel (ULSD) fuel	Diesel fuel containing a maximum 15 parts per million (ppm) sulfur.	*Energy*
Ultrasonic	An NDE technique which relies on an ultrasonic beam passing through a coating and substrate and providing a signal from the back wall which is then detected. The height of this backwall echo depends on the discontinuity in impedance from the sprayed coating to the substrate. Bonding flaws can be easily seen by the weakening of the back wall echo.	*Paint and Coatings*
Ultrasonic Examination or Inspection	A nondestructive method in which beams of high-frequency sound waves that are introduced into the material being inspected are used to detect surface and subsurface flaws. The sound waves travel through the material with some attendant loss of energy and are reflected at interfaces. The reflected beam is detected and analyzed to define the presence and location of flaws.	*Maintenance and Repair*
Ultrasonic Extensometer	An instrument which can measure the change in length of a fastener ultrasonically as the fastener is tightened or measure the length before and after it is tightened.	*Maintenance*
Ultrasonic inspection	An inspection procedure using high frequency sound waves to detect wall thickness or flaws throughout the thickness of metal parts. Abbreviated as UT.	*General Mechanical*
ULTRASONIC INSPECTION	An inspection procedure using high frequency sound waves to detect voids and imperfections throughout the thickness of metal parts.	*Mechanical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ultrasonic testing	A type of nondestructive testing in which defects are detected using high frequency acoustical waves.	*Material Process*
Ultraviolet	Electromagnetic radiation in the wavelength range of 4 to 400 nanometers.	*Energy*
Ultraviolet light	Light having a shorter wave length than the violet rays in the spectrum. It is invisible but produces chemical changes in many plastics.	*Material Process*
Ultraviolet (UV) Stabilizer	Chemical agents which absorb or screen out radiation beyond the violet end of the spectrum of electromagnetic radiation. Such radiation has sufficient energy to initiate reactions leading to the degradation of many plastics. These agents are often combined with other additives, e.g. heat stabilizers and antioxidants, with which they act in synergistic fashion. UV stabilizers can be UV absorbers or radical scavengers.	*Engineering Physics*
UL-Underwriters Laboratory	An impartial testing laboratory concerned with the safety of electrical components. Products surviving the tests are included on a certified listing of products by manufacturer. This does not imply UL approval.	*Mechanical*
Umpire	the term is synonymous with arbitrator.	*Industrial Relations*
Umpire sample or assay	An assay made by a third party to provide a basis for settling disputes between buyers and sellers of ore.	*Mining*
UMTRA	See Uranium Mill Tailings Radiation Control Act of 1978.	*Energy*
UN	National Coarse threads, in form and pitch, but outside the Unified System (UNC), up to e.g. 1″ x 8 TPI threads fall within the UNC System, 1-1/8″ x 8 TPI threads and all larger bolts threaded 8 TPI fall outside the Unified System, and are classified under 8UN.	*Petroleum Engineering*
Unaccounted for (crude oil)	Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.	*Energy*
Unaccounted for (natural gas)	Represents differences between the sum of the components of natural gas supply and the sum of components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar-period time frames; and imbalances resulting from the merger of data reporting systems that vary in scope, format, definitions, and type of respondents.	*Energy*
Unaffiliated Union	a local or national union which is not affiliated with AFL-CIO.	*Industrial Relations*
Unapproved Wage Increase	under wartime stabilization laws, a wage increase which, although not illegal, could not be used by the employer as a basis for requesting adjustments in prices.	*Industrial Relations*
Unauthorized Strike	a strike which does not have the approval of a union and is in violation of the no-strike provision of the collective bargaining agreement.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unbalance	That condition which exists in a rotor when vibratory force or motion is imparted to its bearings as a result of centrifugal forces.	*General*
Unbalance (imbalance)	Unequal mass distribution on a rotor. The mass centerline does not coincide with the rotation or geometric centerline.	*Reliability Engineering*
Unbalance Tolerance	The unbalance tolerance with respect to a radial plane (measuring plane or correction plane) is that amount of unbalance which is specified as the maximum below which the state of unbalance is considered acceptable.	*General*
Unbalanced Seal	A mechanical seal arrangement wherein the full hydraulic pressure of the seal chamber acts to close the seal faces.	*Lubrication*
Unbundled Service	This is electric service broken down into its basic components. Each component is priced and sold separately. For example, generation, transmission and distribution could be unbundled.	*Energy*
Unbundling	Disaggregating electric utility service into its basic components and offering each component separately for sale with separate rates for each component. For example, generation, transmission and distribution could be unbundled and offered as discrete services.	*Energy*
UNC	Unified National Coarse (UNC) is a thread form with a 60 degree flank angle rounded roots and flat crests. For a given diameter it has a larger thread pitch than an equivalent diameter UNF thread. The unified thread is based on inch sizes and was first standardized in 1948 unifying the Whitworth and American standard thread forms.	*Maintenance*
Uncertainties	Uncertainties are factors over which the utility has little or no foreknowledge, and include load growth, fuel prices, or regulatory changes. Uncertainties are modeled in a probabilistic manner. However, in the Detailed Workbook, you may find it is more convenient to treat uncertainties as "unknown but bounded" variables without assuming a probabilistic structure. A specified uncertainty is a specific value taken on by an uncertainty factor (e.g. 3 percent per year for load growth). A future uncertainty is a combination of specified uncertainties (e.g. 3 percent per year load growth, 1 percent per year real coal and oil price escalation, and 2.5 percent increase in housing starts).	*Energy*
Uncompleted wells, equipment, and facilities costs	The costs incurred to (1) drill and equip wells that are not yet completed, and (2) acquire or construct equipment and facilities that are not yet completed and installed.	*Energy*
Unconfined	Conditions in which the upper surface of the zone of saturation forms a water table under atmospheric pressure.	*Petroleum Engineering*
unconfined aquifer	an aquifer in which there are no confining beds between the capillary fringe and land surface, and where the top of the saturated zone (the water table) is at atmospheric pressure.	*Chemical*
Unconfounded comparison	A comparison between two treatment groups that will give an unbiased estimate of the effect of treatment due to the study design. For a comparison to be unconfounded, the two treatment groups must be treated identically, apart from the randomized treatment. For instance, to estimate the effect of heparin in acute stroke, a trial of heparin alone versus placebo would provide an unconfounded comparison. However, a trial of heparin alone versus aspirin alone provides a confounded comparison of the effect of heparin. See also: Confounded comparison	*Quality Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unconsolidated Aquifer	An aquifer made up of loose material, such as sand or gravel, not having undergone lithification (conversion of loose sediment into solid sedimentary rock).	*Petroleum Engineering*
Unconsolidated entity	A firm directly or indirectly controlled by a parent but not consolidated with the parent for purposes of financial statements prepared in accordance with generally accepted accounting principles. An unconsolidated entity includes any firm consolidated with the unconsolidated entity for purposes of financial statements prepared in accordance with generally accepted accounting principles historically and consistently applied. An individual shall be deemed to control a firm that is directly or indirectly controlled by him or by his father, mother, spouse, children, or grandchildren.	*Energy*
Unconsolidated Entity	A firm that is affiliated with a parent entity but not consolidated with the parent entity for purposes of financial statements prepared in accordance with Generally Accepted Accounting Principles (GAAP). An individual shall be deemed to control a firm that is directly or indirectly controlled by him/her or by his/her father, mother, spouse, children, or grandchildren.	*Energy*
Uncontrolled trial	A clinical trial that has no control group.	*Quality Engineering*
Unconventional gas	Natural gas resources which require greater than industry-standard levels of technology or investment to harvest. The three most common types of unconventional gas resources are tight sands, coalbed methane (CBM), and shale gas.	*Petroleum Drilling*
Unconventional oil and natural gas production	An umbrella term for oil and natural gas that is produced by means that do not meet the criteria for conventional production. See Conventional oil and natural gas production. Note: What has qualified as "unconventional" at any particular time is a complex interactive function of resource characteristics, the available exploration and production technologies, the current economic environment, and the scale, frequency, and duration of production from the resource. Perceptions of these factors inevitably change over time and they often differ among users of the term. For these reasons, the scope of this term will be expressly stated in any EIA publication that uses it. For example, see *International Energy Outlook*, Table E4 for the list it currently uses for unconventional oil and natural gas production.	*Energy*
Uncut value	The actual assay value of a core sample as opposed to a cut value which has been reduced by some arbitrary formula.	*Mining*
Under-balanced drilling	Drilling under conditions where the pressure being exerted inside the wellbore (from the drilling fluids) is less than the pressure of the oil or gas in the formation.	*Petroleum Engineering*
Underbead Crack	A crack in the heat-affected zone or in previously deposited weld metal paralleling the underside contour of the deposited weld bead and usually not extending to the surface.	*Maintenance and Repair*
Undercast or Under-gate	an air-course or 'wind-road' carried beneath another roadway. -see also Air crossing and Air bridge.	*Mining*
Under-clays	a bed of fireclay or clunch found immediately beneath a coal seam. The underclays are the remains of the soil in which the vegetation that formed the coal seam grew and often contain the fossilized remains of plant roots.	*Mining*
Undercure	A dull surface or pale color on a thermosetting plastics piece due to insufficient resin in the molding composition.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Undercut	A condition in generated gear teeth when any part of the fillet curve lies inside of a line drawn tangent to the working profile at its lowest point. Undercut may be deliberately introduced to facilitate finishing operations, as in preshaving.	*Gears*
Undercut	An indentation or protuberance in a mold that tends to impede withdrawal of a molded part from the mold. Articles of soft materials such as flexible vinyls can be removed from molds with severe undercuts, but undercuts must be avoided in molds for rigid materials. Slight undercuts are sometimes deliberately formed in one half of a mold to cause the article to remain in a desired half until ejected.	*Engineering Physics*
Undercut	To cut below or undermine the coal face by chipping away the coal by pick or mining machine. In some localities the terms "undermine" or "underhole" are used.	*Mining*
Underemployed	a part time worker of one who is earning an income just sufficient to keep him at subsistence level, and seeking employment at a higher level of earnings, or if partially employed, seeking full time employment.	*Industrial Relations*
Underemployment	a condition sometimes existing in the economy in which there is inadequate utilization of available existing manpower.	*Industrial Relations*
Underground Injection Control (UIC)	A program required in each state by a provision of the Safe Drinking Water Act (SDWA) for the regulation of Injection Wells, including a permit system. An applicant must demonstrate that the well has no reasonable chance of adversely affecting the quality of an underground source of drinking water before a permit is issued.	*Petroleum Drilling*
Underground Injection Control	A program required in each state by a provision of the Safe Drinking Water Act (SDWA) for the regulation of Injection Wells, including a permit system. An applicant must demonstrate that the well has no reasonable chance of adversely affecting the quality of an underground source of drinking water before a permit is issued.	*Petroleum Drilling*
Underground injection well	A steel- and concrete-encased shaft into which hazardous waste is deposited by force and under pressure.	*Petroleum Drilling*
Underground mine	A mine where coal is produced by tunneling into the earth to the coalbed, which is then mined with underground mining equipment such as cutting machines and continuous, longwall, and shortwall mining machines. Underground mines are classified according to the type of opening used to reach the coal, i.e., drift (level tunnel), slope (inclined tunnel), or shaft (vertical tunnel).	*Energy*
Underground mining equipment	**Underground mining equipment:**	*Energy*
Underground mining methods	**Underground mining methods:**	*Energy*
Underground natural gas storage	The use of sub-surface facilities for storing natural gas for use at a later time. The facilities are usually hollowed-out salt domes, geological reservoirs (depleted oil or gas fields) or water-bearing sands (called aquifers) topped by an impermeable cap rock.	*Energy*
Underground natural gas storage injections	Natural gas put (injected) into underground storage reservoirs.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Underground source of drinking water (USDW)	An aquifers currently being used as a source of drinking water or capable of supplying a public water system. USDWs have a TDS content of 10,000 milligrams per liter or less, and are not "exempted aquifers."	*Petroleum Drilling*
Underground station	An enlargement of an entry, drift, or level at a shaft at which cages stop to receive and discharge cars, personnel, and material. An underground station is any location where stationary electrical equipment is installed. This includes pump rooms, compressor rooms, hoist rooms, battery-charging rooms, etc.	*Mining*
Underground storage	The storage of natural gas in underground reservoirs at a different location from which it was produced.	*Energy*
UNDERGROUND STORAGE	The storage of natural gas or other fluids underground.	*Mechanical*
Underground storage withdrawals	Natural gas removed from underground storage reservoirs.	*Energy*
Underlooker	a man employed to supervise the underground workings of a mine. He was responsible directly to the manager or the owner. (Lancs.).	*Mining*
Undermanager	usually the person in charge of underground mining operations, possessing at least a second class certificate of competency and is next in authority to a manager or deputy manager. An earlier name for such a person was 'Underviewer'.	*Mining*
Underset	props set at angles towards the face or away from the dip, i.e. other than the perpendicular. –see also Overset.	*Mining*
Undershoot	The difference in temperature between the temperature a process goes to, below the set point, after the cooling cycle is turned off and the set point temperature.	*General*
Underside Bed Cover	Sheet metal used to cover the underneath side of a conveyor.	*Manufacturing*
Underside Take-Up	A take-up section located beneath the bed of a belt conveyor.	*Manufacturing*
Undersized Shank	Equal approximately to pitch diameter of thread. Produced by roll threading a non-extruded blank. Characteristic of machine screws.	*Fastening*
UNDERSTORY	The layer formed by the crowns of smaller trees in a forest.	*Forestry*
Understudy	a form of on-the-job training where an individual acts as an assistant to the full-fledged journeyman who is engaged in the trade which the understudy is learning.	*Industrial Relations*
Undertrussing	Members forming a rigid framework underneath the conveyor, used for supporting the conveyor.	*Manufacturing*
Underviewer	see Undermanager.	*Mining*
Underwrite	A firm commitment made by a broker or other financial institution to purchase a block of shares at a specified price.	*Mining*
Underwriter's Laboratories (UL)	A non-profit organization that establishes, maintains and operates laboratories for the examination and testing of devices, systems and materials primarily for safety.	*Electrical Engineering*
Undifferentiated/ unspecified reserves and production	Reserves and production that are not separable by FERC production areas or by states. Undifferentiated and unspecified reserves consist only of company-owned gas in underground storage.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Undiscovered recoverable reserves (crude oil and natural gas)	Those economic resources of crude oil and natural gas, yet undiscovered, that are estimated to exist in favorable geologic settings.	*Energy*
Undiscovered resources (coal)	Unspecified bodies of coal surmised to exist on the basis of broad geologic knowledge and theory. Undiscovered resources include beds of bituminous coal and anthracite 14 inches or more thick and beds of sub bituminous coal and lignite 30 inches or more thick that are presumed to occur in unmapped and unexplored areas to depths of 6,000 feet. The speculative and hypothetical resource categories comprise undiscovered resources.	*Energy*
UNEF	Unified National Extra Fine (UNEF) is a Unified thread form with a very fine (small) pitch that are typically used on instruments and parts requiring a fine adjustment.	*Maintenance*
Unemployable	a term which seeks to identify individuals who cannot fit into the labor market and are unable to find employment.	*Industrial Relations*
Unemployed	a person 14 years of age or over who is without a job and is looking for work.	*Industrial Relations*
Unemployment	attempts to define "employment" and "unemployment" have proved difficult and in a report issued by the U.S. Department of Labor from the office of Manpower, Automation, and Training, it is suggested that "the definitions of unemployment and employment are to a large extent determined by the sources of data used in developing the measures."	*Industrial Relations*
Unemployment Benefits	weekly dollar amounts available to unemployed workers under state unemployment compensation laws.	*Industrial Relations*
Unemployment Compensation	payments made under state laws when individuals are unemployed through no fault of their own.	*Industrial Relations*
Unemployment Data	information dealing with the problem of unemployment.	*Industrial Relations*
Unemployment Insurance	the program set up under the Social Security Act of 1935 proving a federal-state program.	*Industrial Relations*
UNEP	United Nations Environment Programme	*Petro-Chemical Abbreviations*
UNEVEN-AGED MANAGEMENT	The practice of managing a forest by periodically selecting and harvesting individual trees or groups of trees from the stand while preserving its natural appearance.	*Forestry*
UNF	Unified National Fine (UNF) is a thread form with a 60 degree flank angle rounded roots and flat crests. For a given diameter it has a smaller thread pitch than an equivalent diameter UNC thread.	*Maintenance*
Unfair Employer	an employer who is guilty of an unfair labor practice under federal or state law or an employer who refuses to recognize a union, or emplore its members.	*Industrial Relations*
Unfair Goods	products or goods not produced under union conditions.	*Industrial Relations*
Unfair Labor Practice Proceeding	a proceeding under federal or state labor laws to determine whether an employer or union is guilty of an unfair labor practice.	*Industrial Relations*
Unfair Labor Practice Strike	a work stoppage cause or prolonged, in whole or in part, by actions of the employer which are held to be unfair labor practices under the state or federal law.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unfair Labor Practices	actions of employers or unions that are prohibited as unfair labor practices under the federal or state labor relations statuses.	*Industrial Relations*
Unfair Lists	lists of either firms or products considered by a labor organization to be unfair to the union.	*Industrial Relations*
Unfilled	Term applied to a plastics piece due to insufficient resin in the molding composition.	*Material Process*
Unfilled requirements	Requirements not covered by usage of inventory or supply contracts in existence as of January 1 of the survey year.	*Energy*
Unfinished oils	All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.	*Energy*
Unfractionated streams	Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.	*Energy*
Unfunded	a pension fund for which there has been no advance funding and from which payments are made when actual needs arise to pay the pensioners.	*Industrial Relations*
Unglazed solar collector	A solar thermal collector that has an absorber that does not have a glazed covering. Solar swimming pool heater systems usually use unglazed collectors because they circulate relatively large volumes of water through the collector and capture nearly 80 percent of the solar energy available.	*Energy*
Ungrounded Junction	A form of construction of a thermocouple probe where the hot or measuring junction is fully enclosed by and insulated from the sheath material.	*Electrical*
Unholed	boardgates or headings which come to a dead end and are not driven through or thirled into an adjoining roadway. (Yorks.). A blind heading.	*Mining*
Unidirectional conductor	Conductor constructed with a central core surrounded by more than one layer of helically laid wire, all layers having a common direction of lay, with increase in length of lay for each successive layer. (See Concentric lay Conductor.)	*Electrical*
Unidirectional Differential Pressure Sensor	A differential pressure sensor requiring the greater input pressure to be applied to a specified pressure port.	*Electrical Engineering*
Uniform Commercial Code (UCC), Article 2	A codification of law which clarifies and regulates the rights and obligations of buyer and sellers engaging in commercial transactions. It has been adopted by all states except Louisiana.	*Procurement*
Uniform corrosion	Uniform corrosion or over all general attack occurs when anodic and cathodic areas keep shifting so that corrosion takes place more or less uniformly over the entire exposed surface. The metal becomes thinner and fails.	*Material Process*
Uniform system of accounts	Prescribed financial rules and regulations established by the Federal Energy Regulatory Commission for utilities subject to its jurisdiction under the authority granted by the Federal Power Act.	*Energy*
Unilateral Action	action by one of the parties to a collective bargaining relationship independently of the desires or wishes of the other, without notice or consultation.	*Industrial Relations*
Unilay conductor	Conductor constructed with a central core surrounded by more than one layer of helically laid wires, all layers having a common length and direction of lay. (See Concentric:lay Conductor.)	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Union	A form of pipe fitting where two extension pipes are joined at a separable coupling.	*General*
Union bonnet	A type of valve construction in which the bonnet is held on by a union nut with threads on the body.	*General Mechanical*
UNION CONNECTION	A small 3-piece fitting used to join two lengths of pipe. A female piece is installed on each of the two pipe ends and the connection is mechanically sealed by an external nut.	*Mechanical*
Union Discipline	the procedures and powers unions exercise over their constituent bodies and members.	*Industrial Relations*
Union Elections	procedures established by union constitutions and bylaws to govern the election of union officials.	*Industrial Relations*
Union Housing	provision of housing accommodations by unions for their members.	*Industrial Relations*
Union Label	the emblem attached to or printed on an article to indicate that it has been made by union labor or under union conditions.	*Industrial Relations*
Union Label Agreement	a procedure used to obtain standardized agreements with a degree of uniformity in wage and other working conditions through union label agreements which permits the employer to use the label is he agrees to the working conditions prescribed in the agreement.	*Industrial Relations*
Union Label Goods	goods produced under union conditions.	*Industrial Relations*
Union Label Trades	international unions which encourage the use of the union label in their trades.	*Industrial Relations*
Union Labor	workers organized in trade unions.	*Industrial Relations*
Union Labor Party	a political organization established in 1888 consisting of various remnants of the Greenback Party, some farm groups, and labor unions to take an active part in the Presidential election of 1888.	*Industrial Relations*
Union Leadership	the individuals in th labor movement who have responsibility for guiding and directing the programs of their organizations, and give direction and inspiration to trade union enterprises and new developments generally.	*Industrial Relations*
Union Membership	all of those individuals who are members of a union.	*Industrial Relations*
Union Membership Drive	activities designed to obtain additional union members.	*Industrial Relations*
Union Membership Eligibility	the rules defining eligibility to membership in a particular union generally are spelled out in the union constitution or bylaws.	*Industrial Relations*
Union of Soviet Socialist Republics (U.S.S.R.)	A political entity that consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. The U.S.S.R. ceased to exist as of December 31, 1991	*Energy*
Union Officers	the officers of trade unions.	*Industrial Relations*
Union Participation in Management	procedures to fulfill the concept of "partners in production."	*Industrial Relations*
Unique Products And Proprietary Services	A product or service the characteristics and functions or features of which are such that only a single product, particular feature, or service will properly satisfy the University's needs and all other products or services will be unacceptable for such needs.	*Procurement*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unit	The asset the task list is written for in a preventive maintenance system. The unit is a machine, system, or component of a large machine.	*Maintenance*
Unit Cell	The basic structural unit of a crystal structure.	*Engineering Physics*
Unit cell	Structural unit that is repeated by translation in forming a crystalline structure.	*Material Process*
Unit Energy Consumption (UEC)	The annual amount of energy that is used by the electrical device or appliance.	*Energy*
Unit functions	A collection of functions used as standard test cases in control systems engineering; The primary unit functions of interest in avionics are the unit impulse, the unit step, and the unit ramp. Symbols: u sub k (t).	*Aeronautical Engineering*
Unit impulse (2)	A function used as a standard test case in control systems engineering; a spike of "area" one at time t = 0; Synonyms: impulse; See Also: unit functions; Symbols: u sub <0> (t), delta (t).	*Aeronautical Engineering*
Unit of analysis error	An error made in statistical analysis when the analysis does not take account of the unit of allocation. In some studies, the unit of allocation is not a person, but is instead a group of people, or parts of a person, such as eyes or teeth. Sometimes the data from these studies are analyzed as if people had been allocated individually. Using individuals as the unit of analysis when groups of people are allocated can result in overly narrow confidence intervals. In meta-analysis, it can result in studies receiving more weight than is appropriate.	*Quality Engineering*
Unit price	Total revenue derived from the sale of product during the reference month divided by the total volume sold; also known as the weighted average price. Total revenue should exclude all taxes but include transportation costs that were paid as part of the purchase price.	*Energy*
Unit ramp	A function used as a standard test case in control systems engineering; a line of slope 1 starting at zero at time t = 0; Synonyms: ramp; See Also: unit functions; Symbols: u sub <-2> (t).	*Aeronautical Engineering*
Unit step	A function used as a standard test case in control systems engineering; a step from zero to one at time t = 0; Synonyms: step; See Also: unit functions; Symbols: u sub<-1>(t), u(t).	*Aeronautical Engineering*
Unit train	A long train of between 60 and 150 or more hopper cars, carrying only coal between a single mine and destination.	*Mining*
Unit value, consumption	Total price per specified unit, including all taxes, at the point of consumption.	*Energy*
Unit value, wellhead	The wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas; gathering and compression charges; and state production, severance, and/or similar charges.	*Energy*
United Arab Emirates	(1967-present) and	*Energy*
United States	The 50 States and the District of Columbia. *Note*: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unitless	No units, such as ratios; a quantity with standard units of 1; a quantity with primary units of 1; Synonyms: dimensionless.	*Aeronautical Engineering*
Units	A standard quantity, such as ft or mi; Synonyms: dimension.	*Aeronautical Engineering*
Universal coal cutter	A type of coal cutting machine which is designed to make horizontal cuts in a coal face at any point between the bottom and top or to make shearing cuts at any point between the two ribs of the place. The cutter bar can be twisted to make cuts at any angle to the horizontal or vertical.	*Mining*
Universal Service	Electric service sufficient for basic needs (an evolving bundle of basic services) available to virtually all members of the population regardless of income.	*Energy*
Universal Transverse Mercator (UTM)	A system of fixed earth coordinates, sometimes used instead of latitude and longitude, accurate relative to others close by, such as ground troops.	*Aeronautical Engineering*
Unleaded midgrade gasoline	See Gasoline grades.	*Energy*
UNLOAD	To release flow (usually directly to the reservoir), to prevent pressure being imposed on the system or portion of the system.	*Mechanical, Process, and Operations*
Unloading	The release of contaminant that was initially captured by the filter medium.	*Oil Analysis*
Unloading Valve	A valve which allows a pump to operate at a minimum load by dumping the pump's excess oil at a low pressure.	*Mechanical, Process, and Operations*
Unplanned analyses	Statistical analyses that are not specified in the trial protocol, and are generally suggested by the data. In contrast to planned analyses. Also called: Data derived analyses, Post hoc analyses	*Quality Engineering*
Unplanned Maintenance	Any maintenance activity for which a pre-determined job procedure is not documented, or for which all labor, materials, tools, and equipment required to carry out the task are not estimated, and their availability assured before commencement of the task.	*Maintenance*
Unprocessed gas	Natural gas that has not gone through a processing plant.	*Energy*
UNR	Unified National (UN) thread form with a rounded root contour, applies only to external threads. (The UN thread form has a flat, or optionally, a rounded root contour.) The majority of fasteners with a Unified thread form have a rounded root contour i.e. are UNR threads.	*Maintenance*
Unregulated Entity	For the purpose of EIA's data collection efforts, entities that do not have a designated franchised service area and that do not file forms listed in the Code of Federal Regulations, Title 18, Part 141, are considered unregulated entities. This includes qualifying cogenerators, qualifying small power producers, and other generators that are not subject to rate regulation, such as independent power producers.	*Energy*
Unrevealed (Covert) Failure	A failure of a component or system that remains undetected until revealed by either proof testing or, more critically, once a demand is placed on the item to function as intended.	*Reliability Engineering*
unsaturated	the characteristic of a carbon atom in a hydrocarbon molecule that shares a double bond with another carbon atom.	*Chemical*
Unsaturated Flow	Movement of water in a porous medium, in which the pore spaces are not completely filled with water.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Unsaturated Polyester	Unsaturated Polyesters are very different from saturated thermoplastic polyester. These thermosets are found in fiberglass reinforced plastics and were first used in the United States during World War II. They are also used in fishing poles, luggage, and in electrical applications.	*Material Engineering*
unsaturated zone	the zone between land surface and the capillary fringe within which the moisture content is less than saturation and pressure is less than atmospheric. Soil pore spaces also typically contain air or other gases. The capillary fringe is not included in the unsaturated zone.	*Chemical*
Unscheduled Downtime	A period of time when the equipment is not available to perform its intended function due to unplanned downtime events. These include maintenance delay, repair, change of consumables, out-of-spec input, and facilities-related downtime.	*Maintenance*
Unscheduled Maintenance	Any maintenance work not included on an approved maintenance schedule prior to its commencement. Note: this is not necessarily a breakdown, rather a break in the schedule of maintenance.	*Maintenance*
Unscheduled outage service	Power received by a system from another system to replace power from a generating unit forced out of service.	*Energy*
Unserved or Unmet Energy	The average energy that will be demanded but not served during a specified period due to inadequate available generating capacity.	*Energy*
Unshielded Sensor	a sensor with limited side and front sensing capabilities.	*Electrical Engineering*
Up time	The amount of time a repairable unit is operating per design.	*Reliability Engineering*
Up-brow	an inclined plane worked to the rise. (Lancs.).	*Mining*
UPC	Universal Product Code; standard symbology used by the grocery and retail industries.	*Gears*
Upcast or Upcast shaft	the shaft up which the air returns to the surface after having ventilated the workings of a mine.	*Mining*
Upcast shaft	A shaft through which air leaves the mine.	*Mining*
Update	A process by which position is reset with a known better position; updates occur at the data source level or at the physical device level, depending upon specific implementation of the device and the data source (choice of implementation is transparent above the data source); all updates are operator initiated, but the new position may be derived from other sources such as FLIR, MMR, or radio navigation; a basic control to a data source from controls and displays for updating a device Compare: aiding.	*Aeronautical Engineering*
Upper yield point	Distinct break from the elastic region in the stress curve for a low carbon steel.	*Material Process*
Upgrade	Replacement or addition of electrical equipment resulting in increased generation or transmission capability.	*Energy*
upgradient	it the direction of increasing potentiometric (piezometric) head.	*Chemical*
Up-leap	an upthrow fault. (Mids.).	*Mining*
Uprate	An increase in the rating or stated measure of generation or transfer capability.	*Energy*
Upset	a short working place that is driven to the rise; or a bolthole or heading put through between two levels in steep inclined edge coal seams. (Scots.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Upstanding	a term used in stoop and room working where the pillars are sound and the roof is safe. (Scot.).	*Mining*
Upstream	The oil industry term "upstream" refers to oil and natural gas exploration and extraction activities. See also Downstream.	*Electrical*
Upstream	Activities in the oil and gas industry which take place close to the supply. This normally includes exploration and production activities.	*Petroleum Drilling*
Uptime	The time that an item of equipment is in service and can perform its intended function, assuming that the external resources, if required, are provided. Notice that uptime may not be the same as operating time, which is the time that the equipment is performing its intended function. The period of time in which a machine, production line or plant is functioning and available for use. As a metric, it is defined as Operating Time divided by Scheduled Time.	*Reliability Engineering*
Uraninite	A uranium mineral with a high uranium oxide content. Frequently found in pegmatite dykes.	*Mining*
Uranium	A radioactive, silvery-white, metallic element.	*Mining*
Uranium (U)	A heavy, naturally radioactive, metallic element (atomic number 92). Its two principally occurring isotopes are uranium-235 and uranium-238. Uranium-235 is indispensable to the nuclear industry because it is the only isotope existing in nature, to any appreciable extent, that is fissionable by thermal neutrons. Uranium-238 is also important because it absorbs neutrons to produce a radioactive isotope that subsequently decays to the isotope plutonium-239, which also is fissionable by thermal neutrons.	*Energy*
Uranium concentrate	A yellow or brown powder obtained by the milling of uranium ore, processing of in situ leach mining solutions, or as a byproduct of phosphoric acid production.	*Energy*
Uranium deposit	A discrete concentration of uranium mineralization that is of possible economic interest.	*Energy*
Uranium endowment	The uranium that is estimated to occur in rock with a grade of at least 0.01 percent U_3O_8. The estimate of the uranium endowment is made before consideration of economic availability of any associated uranium resources.	*Energy*
Uranium hexafluoride (UF_6)	A white solid obtained by chemical treatment of U_3O_8 and which forms a vapor at temperatures above 56 degrees Centigrade. UF_6 is the form of uranium required for the enrichment process.	*Energy*
Uranium importation	The actual physical movement of uranium from a location outside the United States to a location inside the United States.	*Energy*
Uranium mill	A plant where uranium is separated from ore taken from mines.	*Energy*
Uranium mill tailings	The sand-like materials left over from the separation of uranium from its ore. More than 99 percent of the ore becomes tailings.	*Energy*
Uranium Mill Tailings Radiation Control Act (UMTRA) of 1978	The act that directed the Department of Energy to provide for stabilization and control of the uranium mill tailings from in active sites in a safe and environmentally sound manner to minimize radiation health hazards to the public. It authorized the Department to undertake remedial actions at 24 designated inactive uranium-processing sites and at an estimated 5,048 vicinity properties.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Uranium ore	Rock containing uranium mineralization in concentrations that can be mined economically, typically one to four pounds of U_3O_8 per ton or 0.05 percent to 0.2 percent U_3O_8.	*Energy*
Uranium oxide	Uranium concentrate or yellowcake. Abbreviated as U_3O_8.	*Energy*
Uranium property	A specific piece of land with uranium reserves that is held for the ultimate purpose of economically recovering the uranium. The land can be developed for production or undeveloped.	*Energy*
Uranium reserves.	Estimated quantities of uranium in known mineral deposits of such size, grade, and configuration that the uranium could be recovered at or below a specified production cost with currently proven mining and processing technology and under current law and regulations. Reserves are based on direct radiometric and chemical measurements of drill holes and other types of sampling of the deposits. Mineral grades and thickness, spatial relationships, depths below the surface, mining and reclamation methods, distances to milling facilities, and amenability of ores to processing are considered in the evaluation. The amount of uranium in ore that could be exploited within the chosen forward-cost levels are estimated in accordance with conventional engineering practices.	*Energy*
Uranium resource categories (international)	Three categories of uranium resources defined by the international community to reflect differing levels of confidence in the existence of the resources. Reasonably assured resources (RAR), estimated additional resources (EAR), and speculative resources (SR) are described below.	*Energy*
Urbanization	the growth of the city into rural areas	*Agriculture*
Urea (NH2CONH2)	Colorless tetra hedral crystals. One of the principal raw materials for the light –colored thermosetting urea-formaldehyde plastics.	*Material Process*
Urea-Formaldehyde	Developed in 1929, Urea-Formaldehyde is scratch resistant, chemical resistant, heat resistant, hard, and contains good electrical qualities. The molding compounds of Urea-Formaldehyde are used in rigid decorative and electrical products, while the liquid resins are used in laminates and in chemically resistant coatings.	*Material Engineering*
Ureas	Common term for urea plastics, light colored, thermosetting resins usually filled with alpha cellulose	*Material Process*
UREDIAL STAGE (uredium)	A stage of the rust fungi; a fruiting structure usually appearing as a pustule bearing the repeating spore stage that leads to disease increase. Fin. Swe.	*Forestry*
Usable Sensing Distance	The sensing distance after temperature range tolerance and manufacturers tolerance are taken into account.	*Electrical Engineering*
USACE (sometimes shortened to USCE in EIA tables)	U.S. Army Corps of Engineers.	*Energy*
USBR	United States Bureau of Reclamation.	*Energy*
USCAR	United States Council for Automotive Research	*Petro-Chemical Abbreviations*
USDA	United States Department of Agriculture, a Federal agency involved in all phases of agriculture	*Agriculture*

Please see the Appendix for further illustration

Term	Definition	Industry
USDA	United States Department of Agriculture. Acronym may be used in first reference if readers are familiar with agriculture. It includes the following agencies and units: Foreign Agricultural Service; Food Safety and Inspection Service; Forest Service; National Resources Conservation Service; Rural Business-Cooperative; Food and Nutrition Service; Center for Nutrition Policy and Promotion; Agricultural Marketing Service; Animal & Plant Health Inspection Service; Grain Inspection, Packers and Stockyards Administration; Agricultural Research Service; Office of Community Development; Rural Housing Service; Rural Utilities Service; Cooperative State Research Education & Extension Service; Economic Research Service; and National Agricultural Statistics Service.	*Agriculture*
Use Dilution	The final concentration at which a product is used.	*Chemistry*
Usage agreement	Contracts held by enrichment customers that allow feed material to be stored at the enrichment plant site in advance of need.	*Energy*
Used and useful	A concept used by regulators to determine whether an asset should be included in the utility's rate base. This concept requires that an asset currently provide or be capable of providing a needed service to customers.	*Energy*
Used Beverage Cans (UBCS)	scrap aluminum beverage cans, although sometimes applied to steel cans as well (steel has a microscopic share of the beverage can market in America but a much larger share in Europe and elsewhere).	*Metallurgy*
Useful Life	The maximum length of time that a component is left in service before it starts to experience a rapidly increasing probability of failure. The Useful Life determines the frequency with which a Scheduled Restoration or a Scheduled Discard task should be performed. For Useful Life to hold true, components must, at some consistent point in time, experience a rapidly increasing probability of failure. Research in the airline industry shows that this is only true for 11% of the components in modern aircraft.	*Reliability Engineering*
Useful thermal output	The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.	*Energy*
User Maintenance (UM)	This is any maintenance request primarily driven by a user. It includes breakdown, routine requests, and DIN jobs.	*Maintenance*
Users of reviews	People using a review to make practical decisions about health care, and researchers conducting or considering further research.	*Quality Engineering*
USS	Uniform Symbology Specifications	*Gears*
UST	Underground storage tanks used for the storage of fuels and other liquids.	*Petroleum Engineering*
UTF	universal tractor fluid	*Petro-Chemical Abbreviations*
Utility	A regulated entity which exhibits the characteristics of a natural monopoly. For the purposes of electric industry restructuring "utility" refers to the regulated, vertically-integrated electric company. "Transmission utility" refers to the regulated owner/operator of the transmission system only. "Distribution utility" refers to the regulated owner/operator of the distribution system which serves retail customers.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Utility demand-side management costs	The costs incurred by the utility to achieve the capacity and energy savings from the Demand-Side Management (DSM) Program. Costs incurred by consumers or third parties are to be excluded. The costs are to be reported in nominal dollars in the year in which they are incurred, regardless of when the savings occur. The utility costs are all the annual expenses (labor, administrative, equipment, incentives, marketing, monitoring and evaluation, and other) incurred by the utility for operation of the DSM Program, regardless of whether the costs are expensed or capitalized. Lump-sum capital costs (typically accrued over several years prior to start up) are not to be reported. Program costs associated with strategic load growth activities are also to be excluded.	*Energy*
Utility distribution companies	The entities that will continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access. Regardless of where a consumer chooses to purchase power, the customer's current utility, also known as the utility distribution company, will deliver the power to the consumer.	*Energy*
Utility generation	Generation by electric systems engaged in selling electric energy to the public.	*Energy*
Utility or Utility Distribution Companies	The entities that continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access. Regardless of where a consumer chooses to purchase power, the customer's current utility, also known as the utility distribution company, will deliver the power to the consumer's home or business.	*Energy*
Utility-Earned Incentives	Costs paid to a utility for achieving consumer participation in DSM programs.	*Energy*
Utility-sponsored conservation program	Any program sponsored by an electric and/or natural gas utility to review equipment and construction features in buildings and advise on ways to increase the energy efficiency of buildings. Also included are utility-sponsored programs to encourage the use of more energy-efficient equipment. Included are programs to improve the energy efficiency in the lighting system or building equipment or the thermal efficiency of the building shell. Also see Demand-side management.	*Energy*
Utilization	The proportion of available time that an item of equipment is operating. Utilization is calculated by dividing equipment operating hours by equipment available hours, and is generally expressed as a percentage.	*Reliability Engineering*
Utilization Factor	The ratio of the maximum demand of a system or part of a system to the rated capacity of the system or part of the system.	*Energy*
UTTO	universal tractor transmission oil	*Petro-Chemical Abbreviations*
UUT	Acronym for unit under test	*Reliability Engineering*
V	See Volt	*Energy*
--V--	--V--	*Petroleum Drilling*
Vacancy	A normally occupied lattice site from which an atom or ion is missing.	*Engineering Physics*
Vacancy	Unoccupied atom site in a crystal structure.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Vacancy migration	Movement of vacancies in the course of atomic diffusion without significant crystal structure distortion.	*Material Process*
Vacating an Award	procedure for setting aside an arbitration award.	*Industrial Relations*
Vacation Pay	pay for specified periods of time off work, under either contract provisions or company policy.	*Industrial Relations*
Vacations	specific periods during which employees are relieved of job obligations without loss of any benefit or privilege of employment, and usually with pay.	*Industrial Relations*
Vacuum	Any pressure less than atmospheric pressure.	*General*
Vacuum Degassing	A process by which the amount of carbon in the steel is reduced by exposing liquid steel to a very low vacuum environment. Carbon combines in the process with oxygen to form carbon monoxide, which is removed in the process. The result is a steel that contains lower levels of carbon and thus, has higher formability.	*Metallurgy*
Vacuum distillation	Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.	*Energy*
Vacuum Distillation	A distillation method which involved reducing the pressure above a liquid mixture to be distilled to less than its vapor pressure (usually less than atmospheric pressure). This causes evaporation of the most volatile liquid(s) - those with the lowest boiling points. This method works on the principle that boiling occurs when a liquid's vapor pressure exceeds the ambient pressure. It can be used with or without heating the solution.	*Lubrication*
vacuum draft tube	a narrow tube lowered into an extraction well through which a strong vacuum is pulled via a suction pump at ground surface. Fluids (gas, water, and/or free product) are drawn into the draft tube and conveyed to the surface for treatment or disposal. Depending upon the configuration of the extraction system, the inlet of the draft tube may be either above or below the static level of the liquid in the well.	*Chemical*
Vacuum interrupter	A vacuum interrupter is a device that uses a vacuum to extinguish the arc formed when a circuit breaker is opened. It also insulates the contacts after the arc has been interrupted. Vacuum interruption is seen as the ideal switching technology for medium-voltage applications. Excellent switching capabilities, combined with high reliability and a compact design, provide economical switching solutions with virtually no maintenance requirements. Vacuum interruption offers the lowest environmental impact of all medium-voltage switching technologies over the entire product life cycle. Vacuum interrupters are comprised of materials that are environmentally benign and safe to handle during periodic out-of-service maintenance and at end-of-life disposal. The devices perform well in all medium-voltage switching applications required in modern power systems. They have exceptionally long life and are virtually maintenance free.	*Electrical*
Vacuum or Low Pressure Plasma Spraying	Plasma spraying carried out in a chamber which has been evacuated to a low partial pressure of oxygen. It is then usually partially backfilled with argon to avoid the possibility of forming a glow discharge.	*Paint and Coatings*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Vacuum Pump	A device that is used to extract gas or vapor from an enclosed space, leaving behind a partial vacuum in the container.	*Lubrication*
vadose zone	the zone between land surface and the water table within which the moisture content is less than saturation (except in the capillary fringe) and pressure is less than atmospheric. Soil pore spaces also typically contain air or other gases. The capillary fringe is included in the vadose zone.	*Chemical*
Valence	Electronic charge of an ion.	*Material Process*
Valence band	A range of electron energies in a solid associated with the valence electrons of an isolated atom.	*Material Process*
Valence electron	Outer orbital electron that takes part associated with the valence electrons of an isolated atom.	*Material Process*
Validation	The process of determining the degree to which a model is an accurate representation of the real world from the perspective of the intended uses of the model.	*Petroleum Engineering*
Validity	The extent to which a variable or intervention measures what it is supposed to measure or accomplishes what it is supposed to accomplish.	*Analysis*
Validity, External	Validity, External of a study refers to the appropriateness by which its results can be applied to non-study patients or populations.	*Analysis*
Validity, Internal	Validity, Internal of a study refers to the integrity of the experimental design.	*Analysis*
Valley Filling	Valley filling is a form of load management that increases or builds, off-peak loads. This load shape objective is desirable if a utility has surplus capacity in the off-peak hours. If this strategy is combined with time-or-use rates, the average rate for electricity can be lowered.	*Energy*
Valuation	The act or process of valuing or of estimating the value or worth; appraisal.	*Mining*
Value (of shipments)	The value received for the complete systems at the company's net billing price, freight-on-board factory, including charges for cooperative advertising and warranties. This does not include excise taxes, freight or transportation charges, or installation charges.	*Energy*
Value Added	The value added to a product or service at each stage of its production and distribution, based on its increased value at that stage.	*Procurement*
Value added by manufacture	A measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-progress between the beginning- and end-of-year inventories.	*Energy*
Value Engineering	A Systematic Approach To Assessing And Analyzing The User'S Requirements Of A New Asset, And Ensuring That Those Requirements Are Met, But Not Exceeded. Consists Primarily Of Eliminating Perceived "Non-Value-Adding" Features Of New Equipment.	*Plant Engineering*
Value-added per employee	Calculate by subtracting cost of purchased materials, components, and services from value of shipments divided by number of employees. See "productivity change."	*Quality*

Term	Definition	*Industry*
Valve	Pipe fittings that ensure one-way flow of steam or fluid through a pipe system., used to regulate the flow of steam. Stop valves are used to shut off, or partially shut off the flow of fluid/steam. Stop valves are controlled by the movement of the valve stem. Stop valves can be divided into four general categories: globe, gate, butterfly, and ball valves. Plug valves and needle valves may also be considered stop valves. See also Pipe Fittings.	*Industrial*
Valve	A device used to control the flow of fluid contained in a pipe line.	*Mechanical*
VALVE ACTUATOR	The valve part(s) through which force is applied to move or position flow-directing elements.	*Mechanical, Process, and Operations*
Valve Body	See body.	*Industrial Engineering*
Valve Flow Coefficient	See Cv.	*Industrial Engineering*
Valve Lifter	Sometimes called a "cam follower," a component in engine designs that use a linkage system between a cam and the valve it operates. The lifter typically translates the rotational motion of the cam to a reciprocating linear motion in the linkage system.	*Lubrication*
VALVE SIGNATURE	The graphical representation of a valve's performance. This includes, but is not limited to, friction, travel, actuator pressure, and such errors as hysteresis, overshoot and linearity.	*Mechanical*
Valve, by-pass	A valve whose primary function is to provide an alternate flow path.	*Oil Analysis*
VALVEMOUNTING	The mounting characteristic of a valve.	*Mechanical, Process, and Operations*
VALVESTACK	A series of control valves in a stack with common end plates and a common oil inlet and outlet.	*Mechanical, Process, and Operations*
van der Waals Bond	A secondary interatomic bond between adjacent molecular dipoles, which may be permanent or induced.	*Engineering Physics*
Van der Waals bonds	Atomic bonds without electron transfer or sharing.	*Material Process*
Van Der Waals Forces	Forces that exist between molecules of a substance after all of the primary valences within covalent molecules are saturated. Also called secondary valence forces or intermolecular forces.	*Engineering Physics*
Van Der Waals Forces/ Dispersion Forces	caused by temporary dipole interactions that result from momentary concentration variations in the electron clouds of adjacent molecules	*Physics*
Van Stoning	Hot upsetting of lapping pipe ends to form integral lap flanges, the lap generally being of the same diameter as that of the raised face of standard flanges.	*Maintenance and Repair*
Vane-Type Cylinder	A cylinder which uses a turning vane in a circular housing to produce rotary movement.	*Mechanical, Process, and Operations*
Vapor	As most frequently used, the term vapor describes a substance which, although present in the gaseous phase, generally exists as a liquid or solid at room temperature.	*Engineering Physics*
Vapor Pressure	The pressure exerted by the gaseous form, or vapor, of liquid. When the pressure above a liquid equals its vapor pressure, boiling occurs. If the pressure at any point in the flow of a liquid falls below the vapor pressure or becomes equal to the vapor pressure, the liquid flashes into vapor. This is called cavitation.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
	The vapor thus formed travels with the liquid and collapses where the pressure is greater than vapor pressure. This could cause damage to piping and other components.	
VAPOR	The gaseous phase of a substance that is a liquid at normal temperature and pressure.	*Petroleum Engineering*
Vapor Barrier	A layer of material through which water vapor will not pass readily or at all.	*Engineering Physics*
vapor density	the amount of mass of a vapor per unit volume of the vapor.	*Chemical*
Vapor deposition	Processing technique for semiconductor devices involving the buildup of material from the vapor phase.	*Material Process*
Vapor displacement	The release of vapors that had previously occupied space above liquid fuels stored in tanks. These releases occur when tanks are emptied and filled.	*Energy*
Vapor Pressure	Most liquids form vapors as they're heated. As temperature increases, so too does a fluid's vapor pressure. Fluids boil when their vapor pressure equals the pressure of the surrounding gas. Knowing your fluid's vapor pressure is important when specifying circulation pumps and piping. A low vapor pressure helps prevent boiling and pump cavitation. It's also an indication of how quickly a liquid evaporates; a fluid with high vapor pressure could require frequent topping up. Vapor also doesn't transfer heat as efficiently as fluid.	*Lubrication*
vapor pressure	the force per unit area exerted by a vapor in an equilibrium state with its pure solid, liquid, or solution at a given temperature. Vapor pressure is a measure of a substance's propensity to evaporate. Vapor pressure increases exponentially with an increase in temperature.	*Chemical*
Vapor Pressure-Reid (RVP)	Measure of the pressure of vapor accumulated above a sample of gasoline or other volatile fuel in a standard bomb at 100°F (37.8°C). Used to predict the vapor locking tendencies of the fuel in a vehicle's fuel system. Controlled by law in some areas to limit air pollution from hydrocarbon evaporation while dispensing.	*Oil Analysis*
Vapor Recovery Unit	A system at a drilling site to recover vapors formed inside completely sealed crude oil or condensate tanks. The vapors are sucked through a scrubber, where the liquid trapped is returned to the liquid pipeline system or to the tanks, and the vapor recovered is pumped into gas lines.	*Petroleum Drilling*
Vapor retarder	A material that retards the movement of water vapor through a building element (walls, ceilings) and prevents insulation and structural wood from becoming damp and metals from corroding. Often applied to insulation batts or separately in the form of treated papers, plastic sheets, and metallic foils.	*Energy*
Vapor-dominated geothermal system	A conceptual model of a hydrothermal system where steam pervades the rock and is the pressure-controlling fluid phase.	*Energy*
Vapor Pressure	Vapor evaporates at the surface of a liquid. The pressure it exerts is known as vapor pressure. The higher the temperature the greater the vapor pressure.	*Chemical*
Variable	Directly Controlled In a control loop that variable whose value is sensed to originate a feedback signal.	*Process Control*
Variable air volume (VAV) system on the heating and cooling system	A means of varying the amount of conditioned air to a space. A variable air volume system maintains the air flow at a constant temperature, but supplies varying quantities of conditioned air in different parts of the building according to the heating and cooling needs.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Variable Cost	A cost that varies, in total, in direct proportion to changes in the level of activity. A variable cost is constant per unit.	*Procurement*
Variable Costs	Costs, such as fuel costs, that depend upon the amount of electric energy supplied.	*Energy*
Variable Displacement Pump	A pump in which the output per cycle can be varied.	*Mechanical, Process, and Operations*
Variable Frequency Drive (VFD)	A method of controlling the rotating speed of an electric motor.	*Maintenance*
Variable fuel vehicle	See Flexible fuel vehicle.	*Energy*
Variable Length	Description of a symbology which allows bar codes of varying numbers of characters.	*Gears*
VARIABLE ORIFICE	A small variable profile valve put in a flow line and used with a pilot to restrict the flow into the pilot and make the pilot more or less sensitive to changing conditions.	*Mechanical*
Variable Price	A price that can change by the hour, day or month.	*Energy*
Variable Prices	Prices that vary frequently. Prices that are not stable.	*Energy*
Variable Speed	A drive or power transmission mechanism that includes a speed changing device.	*Manufacturing*
Variable-speed wind turbines	Turbines in which the rotor speed increases and decreases with changing wind speed, producing electricity with a variable frequency.	*Energy*
Variance	The standard deviation squared. If there are independent sources of errors, the variance of the total error is the sum of the variances due to the individual sources of error.	*Quality*
Varnish	A thin, insoluble, nonwipeable film occurring on interior engine parts. Can cause sticking and malfunction of close-clearance moving parts. Called lacquer in diesel engines. When applied to lubrication, a thin, insoluble, nonwipeable film deposit occurring on interior parts, resulting from the oxidation and polymerization of fuels and lubricants. Can cause sticking and malfunction of close-clearance moving parts. Similar to, but softer, than lacquer.	*Lubrication*
Varnish	A liquid composition which is converted to a transparent or translucent solid film after application as a thin layer.	*Material Process*
VAWT	See Vertical-Axis Wind Turbine	*Energy*
V-Belt	A belt with a trapezoidal cross section for operation in grooved sheaves permitting wedging contact between the belt sides and groove sides.	*Manufacturing*
V-Door	An opening at floor level in a side of a derrick or mast, opposite the draw works and used as an entry to bring in drill pipe, casing and other tools from the pipe rack.	*Petroleum Drilling*
VDS	Valve Data Sheet - A data sheet defining the minimum level of a valve design, including the materials, testing, inspection, and certification requirements.	*Mechanical*
Veal or Voan	a box or chest, usually mounted on wheels, for transporting water. (Scot.).	*Mining*
Vector	A mathematical entity having a magnitude and a direction in space.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Veerer	the banksman who unloaded the hudge using a crane. By using the crane he could move the hudge by veering it from side to side, hence his name. (Som.).	*Mining*
Vehicle	The liquid portion of a paint.	*Material Process*
Vehicle (paint)	Anything that is dissolved in the liquid portion of a paint is part of the vehicle.	*Material Process*
Vehicle fuel consumption	Vehicle fuel consumption is computed as the vehicle miles traveled divided by the fuel efficiency reported in miles per gallon (MPG). Vehicle fuel consumption is derived from the actual vehicle mileage collected and the assigned MPGs obtained from EPA certification files adjusted for on-road driving. The quantity of fuel used by vehicles.	*Energy*
Vehicle fuel efficiencies	See Miles per gallon.	*Energy*
Vehicle fuel expenditures	The cost, including taxes, of the gasoline, gasohol, or diesel fuel added to the vehicle's tank. Expenditures do not include the cost of oil or other items that may have been purchased at the same time as the vehicle fuel.	*Energy*
Vehicle identification number (VIN)	A set of codes, usually alphanumeric characters, assigned to a vehicle at the factory and inscribed on the vehicle. When decoded, the VIN provides vehicle characteristics. The VIN is used to help match vehicles to the EPA certification file for calculating MPGs.	*Energy*
Vehicle importer	An original vehicle manufacturer (of foreign or domestic ownership) that imports vehicles as finished products into the United States.	*Energy*
Vehicle miles traveled (VMT)	The number of miles traveled nationally by vehicles for a period of 1 year. VMT is either calculated using two odometer readings or, for vehicles with less than two odometer readings, imputed using a regression estimate.	*Energy*
VEIN	A fissure, fault or crack in a rock filled by minerals that have travelled upwards from some deep source.	*Mining*
Veize, Vees and Viese	a type of soft earth found in the line of fracture of a fault or hitch. (Scot.). -see also Leather bed.	*Mining*
Velocity	Rate of change of location, either scalar or vector, often with subscripts such as ENU or XYZ to denote the coordinate frame; time derivative of position; time integral of acceleration; Symbols: v, V; Typical Units: kt, ft/s; Dimensions: Length/Time.	*Aeronautical Engineering*
Velocity	The rate at which the position of a moving object is changing. Velocity has two characteristics: magnitude (speed) and direction.	*Electrical Engineering*
Velocity	Rate of airflow in lineal feet per minute.	*Mining*
Velocity east	Aircraft velocity in true east direction; Symbols: V sub E; Typical Units: kt, ft/s; Dimensions: Length/Time.	*Aeronautical Engineering*
Velocity east	Aircraft velocity in true east direction; Symbols - V sub E; Typical Units - kt, ft/s; Dimensions - Length/Time.	*Aeronautical Engineering*
Velocity error scale factor (KVSF)	A guidance control law parameter, generated by the longitudinal guidance modes.	*Aeronautical Engineering*
Velocity north	Aircraft velocity in true north direction; Symbols: V sub N; Typical Units: kt, ft/s; Dimensions: Length/Time.	*Aeronautical Engineering*

Term	Definition	*Industry*
Velocity, Average Interstitial	Average rate of groundwater flow in interstices expressed as the product of hydraulic conductivity and hydraulic gradient (specific discharge) divided by the effective porosity.	*Petroleum Engineering*
Velocity, Fluid	The speed, that fluid passes through the inside of a pipe, tube or valve.	*Petroleum Engineering*
Vena Contracta	The location where the cross-sectional area of the flow stream is at its minimum size, where fluid velocity is at its highest level, and where fluid pressure is at its lowest level. The vena contracta normally occurs just downstream of the actual physical restriction in a control valve.	*Industrial Engineering*
Vend	the proportion of saleable coal in the run-of-mine.	*Mining*
Vendor	A seller. In the case of mining companies, the consideration paid for properties purchased is often a block of treasury shares. These shares are termed vendor shares and are normally pooled or escrowed.	*Mining*
Vendor-managed inventory	Materials, components or subassemblies managed and replenished by on-site vendors "resident suppliers" with whom the plant has prearranged purchasing agreements. The supplier takes responsibility for the availability of supplies.	*Quality*
Veneer	A thin sheet of wood either sliced or rotary cut. Thickness may vary from 1/100 to 1/4 inch.	*Material Process*
Vent	A small hole or shallow channel in a mold which allows air or gas to exit as the stock enters.	*Engineering Physics*
Vent	**Vent** Shallow channel that permits the escape of entrapped gasses.	*Material Process*
VENT PLUG	(Vent Plug Assembly) – (Safety Vent Plug) - A special pipe plug having a small Allen-wrench operated vent valve. These special plugs are located at the bottom of most ball valves. With the line valve closed (and under pressure) the body cavity pressure can be vented thru this small valve to check tightness of seat seals or to make minor repairs. Having vented the body pressure, the vent plug may be removed to blow out debris and foreign material or to flush the body cavity. On some gate valves, the vent plug is installed on the bonnet for the sole purpose of venting the body. Such valves have separate drain valves. See "Block and Bleed"; "Drain Valve."	*Mechanical*
Vent Valve	Installed at the opposite end of the supply valve, float and thermostatic vent valves let air escape from the heating unit under pressure, but closes against the passage of steam and condensate. See also Air Vent.	*Industrial*
Vented	Natural gas that is disposed of by releasing to the atmosphere.	*Energy*
Vented Barrel	Port in extruder barrel through which volatiles can be removed.	*Engineering Physics*
Vented natural gas	See vented.	*Energy*
Vented Screw	Two-stage screw with vent in second stage to remove volatiles from the screw core.	*Engineering Physics*
Vented/Flared	Gas that is disposed of by releasing (venting) or burning (flaring).	*Energy*
Ventilation	The provision of a directed flow of fresh and return air along all underground roadways, traveling roads, workings, and service parts.	*Mining*
Ventilation door	a wooden or steel door to direct the flow of air.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Ventilation system	A method for reducing methane concentrations in coal mines to non-explosive levels by blowing air across the mine face and using large exhaust fans to remove methane while mining operations proceed.	*Energy*
Venting	The intentional controlled release of un-combusted gases directly to the atmosphere. The practice is restricted primarily to short-term testing, well workovers or exceedingly rare emergency situations.	*Petroleum Engineering*
Venting	providing holes in fabrications to be galvanized to allow entrapped, heated liquids and gases to escape as pressure increases	*Materials Process*
venturi	a short tube with a constricted throat for determining fluid pressures and velocities by measuring differential pressures generated at the throat as a fluid traverses the tube.	*Chemical*
VENTURI VALVE	A reduced bore valve. A valve having a bore smaller in diameter than the inlet or outlet. For example, an 8" x 6" x 8" ball valve has 8" inlet and outlet connections while the ball and seats are 6". The flow through a venture valve will be reduced because of the smaller port. Venturi valves can often be economically substituted for plug valves.	*Mechanical*
Verification	The examination of the numerical technique in the computer code to ascertain that it truly represents the conceptual model and there are no inherent problems with obtaining a solution.	*Petroleum Engineering*
Versatility Training	a form of training in which workers are given a wide variety of tasks and trained in a number of related jobs.	*Industrial Relations*
Vertex	The point where the two arms of an angle meet.	*Math*
Vertical	Reference to earth radial, for example, vertical velocity is velocity along earth radial.	*Aeronautical Engineering*
Vertical acceleration	Aircraft acceleration in earth vertical direction; Symbols: A sub V; Typical Units: ft/s-squared, g; Dimensions: Length/Time-squared.	*Aeronautical Engineering*
Vertical cue	A cue to control altitude; See Also: yoke cue, collective cue.	*Aeronautical Engineering*
vertical deviation	defines how "high" or "low" the actual well path is relative to the planned well path location and orientation; is easily-visualized with a sketch, and matches directional driller common sense. Same as msVD.	*Petroleum Drilling*
Vertical flash ring	The clearance between the force plug and the vertical wall of the cavity in a positive or semipositive mold. Also the ring of excess material that escapes from the cavity into the clearance.	*Material Process*
Vertical guidance	Calculations for the vertical axis, rather than the longitudinal axis. The control law vertical axis input data are: Desired Altitude, Altitude Integral, Altitude Integral Gain, Altitude Integral Limit, Altitude Error Scale Factor, Magnitude limit for delta altitudes. The major output from Vertical Guidance is the altitude error for the selected vertical guidance mode.	*Aeronautical Engineering*
Vertical Integration	An arrangement whereby the same company owns all the different aspects of making, selling, and delivering a product or service. In the electric industry, it refers to the historically common arrangement whereby a utility would own its own generating plants, transmission system, and distribution lines to provide all aspects of electric service.	*Energy*

Please see the Appendix for further illustration

Term	Definition	Industry
Vertical Movement (Promotion)	the advancement or promotion of individuals from a lower to a higher grade.	*Industrial Relations*
Vertical Opposite Angles	These are equal angles, formed when two straight lines intersect.	*Math*
Vertical Position	With respect to pipe welding, the position in which the axis of the pipe is vertical, with the welding being performed in the horizontal position. The pipe may or may not be rotated.	*Maintenance and Repair*
vertical section	the horizontal distance (departure) of a well path projected to a vertical plane of specific azimuth. The specific azimuth typically is equal to the final target azimuth.	*Petroleum Drilling*
Vertical speed hold (VERT SPD)	A basic guidance mode, providing vertical guidance to maintain an operator selected vertical speed.	*Aeronautical Engineering*
Vertical THD Log	a hole deviation log that includes the components of Technical Hole Deviation that address hole deviation in the vertical sense, namely, msVD, RCVD, msID, and RCID.	*Petroleum Drilling*
Vertical velocity	Aircraft velocity in earth vertical direction; Symbols: V sub V; Typical Units: ft/s; Dimensions: Length/Time.	*Aeronautical Engineering*
Vertical wells	Traditional gas and oil well technique (pdf link) that bores straight down into a reserve. Vertical wells may be cheaper to develop, but are considered to have a larger environmental footprint.	*Petroleum Drilling*
Vertical-axis wind turbine (VAWT)	A type of wind turbine in which the axis of rotation is perpendicular to the windstream and the ground.	*Energy*
verts	an electrical current signal to a proportional pneumatic signal for the purpose of interfacing electronic and pneumatic parts of a control system. A typical I/P transducer might convert a 4-20 milliamp signal from an electronic controller to a 20-100 kPa signal to actuate a pneumatic valve.	*Electrical Engineering*
Vessel	A ship used to transport crude oil, petroleum products, or natural gas products. Vessel categories are as follows: Ultra Large Crude Carrier (ULCC), Very Large Crude Carrier (VLCC), Other Tanker, and Specialty Ship (LPG/LNG). See Tanker and Barge.	*Energy*
Vessel bunkering	Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.	*Energy*
Vestibule Training	training done in a vestibule school.	*Industrial Relations*
Vestry	refuse, colliery waste. (N. East).	*Mining*
Veteran's Preference	advantages in employment and promotion both in the civil service and private employment to veterans of the armed forces who are honorably discharged.	*Industrial Relations*
VGO	Vacuum gas oil	*Petro-Chemical Abbreviations*
VGRA	viscosity-grade read across	*Petro-Chemical Abbreviations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
VHF Omnirange (VOR)	Equipment that determines bearing to a radio station with a VOR transmitter; VOR transmitters usually contain ILS transmitters in addition to VOR; A basic guidance mode, providing lateral guidance to a VOR station. A VOR/ILS/MB. radio receiver provides a VHF Omni-Direction Range (VOR) function and Instrument Landing System with Marker Beacon (MB) function. VOR provides bearings to a fixed point (Localizer function); ILS/MB provides course (localizer function) and glideslope deviations (Glide Slope (G/S) function) during approach to a runway, along with marker beacon indications. If VOR is collocated with a TACAN (VOR-TAC, or VORTAC), bearing and range information is provided.	*Aeronautical Engineering*
VI	viscosity index	*Petro-Chemical Abbreviations*
Vibrating	the process of removing excess zinc by rapidly shaking galvanized articles	*Materials Process*
Vibration	Mechanical oscillation or motion about a reference point of equilibrium.	*Reliability Engineering*
Vibration Analysis	A detailed study of the individual characteristics of a machine's vibrations, with the intention of diagnosing specific machinery faults, usually at an early stage of development. This is typically achieved by studying vibration data in the frequency domain (see FFT) and may also include the study of time domain (time waveform) data. Such analysis may be undertaken routinely as an integral part of a vibration based Predictive Maintenance program. It may also be undertaken for ad-hoc analysis of suspect rotating machinery, irrespective of the machine's inclusion in a formal monitoring program.	*Maintenance*
Vibration Error	The maximum change in output of a transducer when a specific amplitude and range of frequencies are applied to a specific axis at room temperature.	*General*
Vibration Error Band	The error recorded in output of a transducer when subjected to a given set of amplitudes and frequencies.	*General Engineering*
Vibration Error Band	The error recorded in output of a transducer when subjected to a given set of amplitudes and frequencies.	*Electronic Process*
Vibration machine (or *exciter* or *shaker*)	A device which produces controlled and reproducible mechanical vibration for the vibration testing of systems, components and structures.	*Reliability Engineering*
Vibration meter	An apparatus (usually an electronic amplifier, detector and readout meter) for measuring electrical signals from vibration sensors. May display displacement, velocity and/or acceleration.	*Reliability Engineering*
Vibration Monitoring	Regular monitoring of machinery vibrations undertaken as part of a Predictive Maintenance Program. Readings are compared with past levels, with significant change as an indicator of developing machinery faults. The objective is to provide valuable lead-time for maintenance planning. A comprehensive monitoring program usually includes vibration analysis.	*Maintenance*
Vibratory Feeders	Devices for conveying dry materials from storage hoppers to processing machines, comprising a tray or tube vibrated by mechanical or electrical pulses. The frequency or amplitude of the vibrations controls the rate of flow.	*Engineering Physics*
Vibromyography	Also called mechanomyography or acoustic myography. The measurement of muscle vibration when a muscle contracts.	*Reliability Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
Vicat Softening Point	The temperature at which a flat-ended needle of 1 square millimeter circular or square cross section will penetrate a thermoplastic specimen to a depth of 1mm under a specified load using a uniform rate of temperature rise. (ASTM D-1525-58T).	*Engineering Physics*
Viewer or Coal viewer	an early term for the general manager or mining engineer of one or more collieries.	*Mining*
VII	viscosity index improver	*Petro-Chemical Abbreviations*
VIN	See Vehicle Identification Number	*Energy*
VIN (vehicle identification number)	A set of about 17 codes, combining letters and numbers, assigned to a vehicle at the factory and inscribed on a small metal label attached to the dashboard and visible through the windshield. The VIN is a unique identifier for the vehicle and therefore is often found on insurance cards, vehicle registrations, vehicle titles, safety or emission certificates, insurance policies, and bills of sale. The coded information in the VIN describes characteristics of the vehicle such as engine size and weight.	*Energy*
Vinsol	A trade name for synthetic silk-like fiber, prepared from vinyl polymers.	*Material Process*
Vinyl Acetate	A colorless liquid obtained by the reaction of ethylene and acetic anhydride in the presence of a catalyst. It is the monomer for polyvinyl acetate, and a comonomer and intermediate for many members of the vinyl plastics family.	*Engineering Physics*
Vinyl acetate (CH2 CHOCOCH3)	A reaction product of acetylene and acetic acid in the presence of a catalyst. Polymerizes to a thermoplastic resin.	*Material Process*
Vinyl alcohol (CH2 CHOH)	Vinyl alcohol does not exist as such, appearing always as the keto form, acetaldehyde. For this reason polyvinyl alcohol cannot be prepared by the polymerization of the monomer, but must be made by the hydrolysis of an ester.	*Material Process*
Vinyl chloride (CH2 CHCl)	Colorless gas. The gaseous product of the reaction of acetylene with hydrochloric acid in the presence of suitable catalysts. Polymerizes to form a colorless thermoplastic resin.	*Material Process*
Vinyl Film	Vinyl resins are among the most versatile, in terms of both application and processing, of any of the major resin groups. They are equally at home on the construction site and the operating theatre. Vinyl can be compounded with a large variety of additives to form products such as flexible cable insulation. Properties: Shiny, tough and moderately strong, vinyl plastics are available in clear, translucent and opaque forms. Vinyl film has good cling. Exceptionally resistant to grease, oil and most chemicals (although not all solvents), vinyl is reasonably stable and stands up well to the weather, especially when formulated with certain additives. It is also semi-permeable to gases. Chemically inert and nonflammable, it has good UV resistance, but has a limited operational temperature range and starts to decompose at 100° C. Flexible vinyl products are available through the addition of softeners. Applications: Vinyl is used in clear, food packaging (such as the packaging of fresh red meat), adhesive tape, blood bags and medical tubing, wire and cable insulation, shower curtains, pool liners and other sheeting products, coatings, synthetic leathers and vinyl furniture covering, and many, many more product lines.	*Engineering Physics*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Vinylidene chloride or 1,1 dichlorethylene (CH2 CCl2)	Monomeric form of polyvinylidene chloride resins, which can be plasticized to form transparent, tough, elastic, rubberlike materials.	*Material Process*
Violation	The breaking of any state or federal mining law.	*Mining*
Violence in Labor Disputes	physical force applied to persons and property.	*Industrial Relations*
Virgin	Unworked; untouched; often said of areas where there has been no coal mining.	*Mining*
Virgin coal	Coal that has not been accessed by mining.	*Energy*
Virgin Material	Any plastic compound or resin that has not been subjected to use or processing other than that required for its original manufacture.	*Engineering Physics*
Virginia Railway Co. v. Systems Federation No. 40	a decision of the United States Supreme Court which upheld the provisions of the Railway Labor Act as applied to a ruling of the National Mediation Board certifying an outside union for collective bargaining.	*Industrial Relations*
Virtual Effective Diameter	The effective diameter of a thread but allowing for errors in pitch and flank angles.	*Maintenance*
Virucide	A chemical agent that kills viruses.	*Chemistry*
Viruses	Submicroscopic disease-causing organisms that grow only inside living cells.	*Petroleum Engineering*
Visbreaking	A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.	*Energy*
Viscoelastic deformation	Mechanical behavior involving both fluid like (viscous) and solid like (elastic) characteristics.	*Material Process*
Viscoelasticity	A type of deformation exhibiting the mechanical characteristics of viscous flow and elastic deformation.	*Engineering Physics*
Viscoelasticty	The tendency of plastics to respond to stress as if they were a combination of elastic solids and viscous fluids. This property possessed by all plastics to some degree, dictates that while plastics have solid-like characteristics such as elasticity, strength, and form-stability, they also have liquid-like characteristics such as flow depending upon time, temperature, rate, and amount of loading.	*Engineering Physics*
Viscometer or Viscosimeter	An apparatus for determining the viscosity of a fluid.	*Oil Analysis*
Viscose	A syrup, highly viscous, colloidal solution consisting of cellulose xanthate and dilute caustic soda, used in making rayon.	*Material Process*
viscosity	a measure of the internal friction of a fluid that provides resistance to shear within the fluid. The greater the forces of internal friction (i.e. the greater the viscosity), the less easily the fluid will flow.	*Chemical*
viscosity	at 210 deg. F(D88)-59.9 SUS (10.18centistokes) maximum;	*Energy*
Viscosity Grade	Any of a number of systems which characterize lubricants according to viscosity for particular applications, such as industrial oils, gear oils, automotive engine oils, automotive gear oils, and aircraft piston engine oils.	*Lubrication*
VISCOSITY INDEX	A measure of the viscosity temperature characteristics of a fluid as referred to that of two arbitrary reference fluids. (ASTM Designation D2270-64).	*Mechanical, Process, and Operations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Viscosity Index (VI)	Relationship of viscosity to temperature of a fluid. High viscosity index fluids tend to display less change in viscosity with temperature than low viscosity index fluids.	*Lubrication*
Viscosity Index Improvers	Additives that increase the viscosity of the fluid throughout its useful temperature range. Such additives are polymers that possess thickening power as a result of their high molecular weight and are necessary for formulation of multi-grade engine oils.	*Lubrication*
Viscosity Modifier	Lubricant additive, usually a high molecular weight polymer, that reduces the tendency of an oil's viscosity to change with temperature.	*Lubrication*
Viscosity, absolute	The ration of the shearing stress to the shear rate of a fluid. It is usually expressed in centipoise.	*Oil Analysis*
VISCOSITY, ABSOLUTE	The ratio of the shearing stress to the shear rate of a fluid. It is usually expressed in centipoise.	*Mechanical, Process, and Operations*
Viscosity, kinematic	The absolute viscosity divided by the density of the fluid. It is usually expressed in centistokes.	*Oil Analysis*
VISCOSITY, SAE NUMBER	The Society of Automotive Engineers arbitrary numbers for classifying fluids according to their viscosities. The numbers in no way indicate the viscosity index of the fluids.	*Mechanical, Process, and Operations*
VISCOSITY, SUS	Saybolt Universal Seconds (SUS) which is the time in seconds for 60 milliliters of oil to flow through a standard orifice at a given temperature (ASTM Designation D88-56). Often abbreviated SSU.	*Mechanical, Process, and Operations*
Viscosity-temperature Relationship	The manner in which the viscosity of a given fluid varies inversely with temperature. Because of the mathematical relationship that exists between these two variables, it is possible to predict graphically the viscosity of a petroleum fluid at any temperature within a limited range if the viscosities at two other temperatures are known. The charts used for this purpose are the ASTM Standard Viscosity-Temperature Charts for liquid Petroleum Products, available in 6 ranges. If two know viscosity-temperature points of a fluid are located on the chart and a straight line drawn through them, other viscosity-temperature values of the fluid will fall on this line; however, values near or below the cloud point of the oil may deviate from the straight-line relationship.	*Lubrication*
Viscous	Having resistance to flow.	*Chemical*
Viscous	Mechanical behavior associated with a polymer near its melting point.	*Material Process*
Viscous deformation	Liquid-like mechanical behavior associated with glasses and polymers above their glass transition temperatures.	*Material Process*
Viscous Flow	A type of fluid movement in which all particles of the fluid flow in a straight line parallel to the axis of a containing pipe or channel, with little or no mixing or turbidity.	*Engineering Physics*
Visibility systems	Visual systems on the plant floor and design areas and elsewhere that enable anyone familiar with the work to understand its status and condition at a glance, or to respond to work priorities. This can be done with standard layouts, signal lights, kanban systems, or other methods. The distinguishing feature is that communication is rapidly executed by line of sight.	*Quality*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Visible gold	Native gold which is discernible, in a hand specimen, to the unaided eye.	*Mining*
Visible light	The portion of the electromagnetic radiation spectrum that can be perceived by the human eye, the wavelength range of 400 to 700 nm.	*Material Process*
Vision statement	Healthcare decision-making throughout the world will be informed by high quality, timely research evidence. The Cochrane Collaboration will play a pivotal role in the production and dissemination of this evidence across all areas of health care.	*Quality Engineering*
Vision System	Vision systems digitize an object's image so that it can be understood by a computer.	*Gears*
Vistanex	A trade name for a polymerized unsaturated hydrocarbon having properties intermediate between those of rubber and those of plastics (polymerized isobutylene).	*Material Process*
Visual Aids	devices to accelerate the learning process which utilize the sense of sight.	*Industrial Relations*
Visual Inspection	Visual inspection refers to subjective inspection of machinery, and employs only the human senses. Sometimes it is referred to as "look-listen-feel" checks.	*Reliability Engineering*
Visual Workplace	A work environment that is clean, well organized and efficient. It is a key element of lean manufacturing. Organization involves the use of photographs and signage to convey information related to standard work instructions, safety instructions and maintenance procedures.	*Reliability Engineering*
Vitiated air	foul air after it has been circulated around the mine workings. Also called 'return air'.	*Mining*
Vitrain	the bright jet-like layers of coal with a high luster, which are brittle and break with a conchoidal fracture, consisting mainly of coalified woody material.	*Mining*
Vitreous silica	Commercial glass that is nearly pure SiO_2.	*Material Process*
VLCC	Very Large Crude Carrier	*Energy*
VMT	See Vehicle Miles Traveled	*Energy*
Vn	the value for the n th period.	*Energy*
VOC	See Volatile Organic Compound	*Energy*
Vocation	a person's business, profession, or occupation.	*Industrial Relations*
Vocational Counselor	an individual who helps a worker, student, or applicant for a position to choose, prepare for, and enter an occupation.	*Industrial Relations*
Vocational Diagnosis	the analysis by a vocational technician or counselor of an individual's aptitudes, experience, interests, and education in order to assist him in making a vocational choice.	*Industrial Relations*
Vocational Education	programs to teach people the fundamentals of particular skills.	*Industrial Relations*
Vocational Guidance	programs and activities designed to assist individuals and direct them toward proper vocational choice.	*Industrial Relations*
Vocational Rehabilitation	programs designed for and directed to the thousands of individuals who become physically disabled each year and who need to be retrained and prepared for new jobs.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Vocational Training	activities and programs, including curriculum and actual training and operations, to give a person the skill needed to perform a particular vocation.	*Industrial Relations*
VOCs	Volatile organic compounds, typically with a high vapor pressure and a tendency to evaporate rapidly.	*Petroleum Engineering*
VOF	volatile organic fraction	*Petro-Chemical Abbreviations*
Voice recognition/ response	Computerized systems capable of recognizing or synthesizing human voices. Such systems capture verbalized data for quality-control or inventory-tracking purposes (often when operators' hands are busy), recognize spoken commands that activate equipment, and convert computer data into audible information.	*Quality*
Void	1. An unfilled space in a cellular plastic substantially larger than the characteristic individual cells. 2. An empty space in any material or medium.	*Engineering Physics*
Void	A general term for pore space or other reopenings in rock. In addition to pore space, the term includes vesicles, solution cavities, or any openings either primary or secondary.	*Mining*
Volatile	Capable of being driven off as a vapor at room or slightly elevated temperatures.	*Engineering Physics*
Volatile Content	The percent of volatiles, which are driven off as, vapor from a plastic or impregnated reinforcement.	*Engineering Physics*
Volatile Loss	The loss in weight of substance caused by vaporization of a constituent.	*Engineering Physics*
Volatile matter	Those products, exclusive of moisture, given off by a material as gas or vapor. Volatile matter is determined by heating the coal to 950 degrees Centigrade under carefully controlled conditions and measuring the weight loss, excluding weight of moisture driven off at 105 degrees Centigrade.	*Energy*
Volatile matter	The gaseous part, mostly hydrocarbons, of coal.	*Mining*
Volatile Oil Window	Area of the Eagle Ford Shale, (located updip from deeper dry gas zone) between dry gas zone and heavy or "black oil" window of the play which is productive of "volatile oil." Light oil and condensate, which typically has an API gravity of 45-60 Degrees, is considered to be "volatile oil."	*Petroleum Drilling*
Volatile organic compounds (VOCs)	Organic compounds that participate in atmospheric photochemical reactions.	*Energy*
Volatile solids	A solid material that is readily decomposable at relatively low temperatures.	*Energy*
Volatility	The tendency or ability of a liquid to pass into the vapor phase; liquids such as alcohol or gasoline, because of their tendency to evaporate rapidly, are called volatile liquids.	*Chemical*
Volatilization	The transfer of a chemical from liquid to the gas phase.	*Petroleum Engineering*
volatilization	the process of transfer of a chemical from the aqueous or liquid phase to the gas phase. Solubility, molecular weight, and vapor pressure of the liquid and the nature of the gas-liquid interface affect the rate of volatilization.	*Chemical*
Volcanic rocks	Igneous rocks formed from magma that has flowed out or has been violently ejected from a volcano.	*Mining*
Volcanogenic	A term used to describe the volcanic origin of mineralization.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Volt	The (electrical) potential difference between two points in a circuit. The fundamental unit is derived as work per unit charge— (V = W/Q). One volt is the potential difference required to move one coulomb of charge between two points in a circuit using one joule of energy.	*Electrical*
Volt	standard unit of electrical "pressure" in a circuit. (See also Voltage.)	*Electrical*
Volt (V)	The volt is the International System of Units (SI) measure of electric potential or electromotive force. A potential of one volt appears across a resistance of one ohm when a current of one ampere flows through that resistance. Reduced to SI base units, 1 V = 1kg times m^2 times s^{-3} times A^{-1} (kilogram meter squared per second cubed per ampere).	*Energy*
Volt Unit of electromotive force	It is the difference of potential required to make a current of one ampere flow through resistance of one ohm.	*Electrical*
Voltage	An electrical potential which can be measured in volts.	*Electrical*
Voltage (potential difference)	The voltage between two points in an electrical circuit is a measure of the potential difference, or the force, that is pushing electrons between these two points. It is analogous to water pressure in a water system. Voltage is measured in volts, and is directly proportional to the current and resistance of a circuit - V=IR, where V = potential difference in volts, I = current in amperes (amps) and R = resistance in ohms. This is Ohm's law.	*Electrical*
Voltage Drop	The voltage developed between the terminals of a circuit component by the flow of current through the resistance or impedance of that part.	*Electrical*
Voltage rating	The maximum voltage that can be applied to an electronic device.	*Electrical*
Voltage Rating	The maximum voltage at which a given cable or insulated conductor may be safely maintained during continuous use in a normal manner. It is also called working voltage.	*Electrical*
Voltage reduction	Any intentional reduction of system voltage by 3 percent or greater for reasons of maintaining the continuity of service of the bulk electric power supply system.	*Energy*
Volt-amperes	The volt-amperes of an electric circuit are the mathematical products of the volts and amperes of the client.	*Energy*
Voltmeter	An instrument used to measure voltage.	*Electrical*
VOLUME	The amount of fluid flow per unit time. Usually given as gallons per minute (gmp).	*Mechanical, Process, and Operations*
Volume bulk diffusion	Atomic flow within a material's crystal structure by means of some defect mechanism.	*Material Process*
Volume Control Valve	A valve which controls the rate of flow. Includes flow control valves, flow divider valves, and bypass flow regulators.	*Mechanical, Process, and Operations*
Volume Flow Rate	Calculated using the area of the full closed conduit and the average fluid velocity in the form, Q = V x A, to arrive at the total volume quantity of flow. Q = volumetric flowrate, V = average fluid velocity, and A = cross sectional area of the pipe.	*General Engineering*
Volume resistivity	The resistance in ohms between opposite faces of a centimeter cube of the material.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Volumes of gas	withdrawn from gas storage reservoirs and native gas, which has been transferred to the storage category, are not considered production. This is not the same as marketed production, because the latter also excludes vented and flared gas, but contains plant liquids.	*Energy*
Volumetric Examination	A non-destructive method of examining the volume of Material for the purpose of detecting any internal Discontinuities that may require evaluation and Acceptance according to certain Criteria.	*Petroleum Engineering*
Volumetric wires charge	See Quantity wires charge.	*Energy*
Voluminous	having great volume, fullness, or size	*Materials Process*
Voluntarism	Hebert Harris Suggests that "voluntarism" is to labor what "laiseez-faire" is to business.	*Industrial Relations*
Voluntary Association	a group of individuals who join together to develop and extend their common interests.	*Industrial Relations*
Voluntary Check-Off	a form of check-off which requires the individual employee to authorize his employer to make such deductions from his pay.	*Industrial Relations*
Voluntary Union Membership	membership which individuals are free to undertake and free to give up.	*Industrial Relations*
VORTAC	Collocation of VOR and TACAN providing distance and bearing to station; a basic guidance mode, providing lateral guidance to a set of a VOR station and a TACAN station that are collocated.	*Aeronautical Engineering*
Vortex	An area of revolving compressed air. The most obvious examples are the vortices that are visible coming off the rear wing in humid conditions. These vortices are always there but only visible in certain conditions.	*NASCAR*
Voting Laws	with reference to employees, state laws which require employers to allow workers time off during the day in order to cast their ballots.	*Industrial Relations*
Voting Procedure (NLRB)	procedures followed by the NLRB in conducting employee elections.	*Industrial Relations*
Voting right	The stockholder's right to vote in the affairs of the company. Most common shares have one vote each. Preferred stock usually has the right to vote when preferred dividends are in default.	*Mining*
VPI	Visible Position Indicator - See "Stem Indicator"	*Mechanical*
VTEC	variable valve timing and lift electronic control	*Petro-Chemical Abbreviations*
VTWT	valve train wear test	*Petro-Chemical Abbreviations*
Vug	A small cavity in a rock, frequently lined with well-formed crystals. Amethyst commonly forms in these cavities.	*Mining*
Vulcanization	Nonreversible chemical reaction involving sulfur or other suitable agent wherein cross-links are formed between molecular chains in rubber materials.	*Engineering Physics*
Vulcanization	An irreversible process during which a rubber compound through a change in its chemical structure (for example, cross-linking), becomes less plastic and more resistant to swelling by organic liquids and elastic properties are conferred, improved, or extended over a greater range of temperature.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Vulcanized fiber	A product made by the action of zinc chloride on cellulose very resistant to mechanical action.	*Material Process*
Vulcanized rubber	Natural rubber stabilized by chemical reaction with sulfur or sulfur compounds.	*Material Process*
VVT	variable valve timing	*Petro-Chemical Abbreviations*
Vye dams	dirt dams or stoppings constructed of a barrier of fine dirt held up at the back by building up a pile of rocks or other suitable material. Fine sand is then piled up in front (S. Staffs.).	*Mining*
W	See Watt	*Energy*
--W--	--W--	*Petroleum Drilling*
W.O.	Wrench Operated - The operation of a valve by means of a handle or lever. Used on smaller size and lower pressure class valves.	*Mechanical*
WACOG	Weighted Average Cost of Gas	*Energy*
Wafer	A thin sheet of semiconductor (photovoltaic material) made by cutting it from a single crystal or ingot.	*Energy*
Waffler	an arc wall cutter that uses the chain for both cutting and loading.	*Mining*
wagon, (N. East)	wagon, (N. East).	*Mining*
Wagyu	The word Wagyu refers to all Japanese beef cattle. Wa means Japanese or Japanese-style and gyu means cattle. The Wagyu breed was developed from Brown Swiss, Shorthorn, Devon, Simmental, Ayrshire, Holstein and Angus breeds and some Korean cattle that were imported by Japan by 1887. Black Wagyu strains predominate, but red Wagyus with strong Korean breed influence are part of the breed. Wagyu first came to the United States in 1976. Both black and red lines exist in U.S.-bred Wagyus. Wagyu cattle are known for their even development of intramuscular fat marbling, which results in uncommonly tender and flavorful meat. It is in special demand for high-temperature Japanese cooking. Purebred animals are registered by the American Wagyu Association.	*Agriculture*
Wailers	boys employed in the wagons or at the pit head to pick out any stone or pyrites that had passed through the screens. (N. East).	*Mining*
Waisted Shank Bolt	A bolt whose diameter is less than the minor diameter of the thread. Frequently the shank of the bolt is 0.9 times the root diameter.	*Maintenance*
Waived tests	A specific category of tests defined by CLIA, such as dipstick tests, fecal occult blood, urine pregnancy tests, erythrocyte sedimentation rates, blood glucose monitoring devices, etc., which are subject to the lowest level of regulation. The main requirement for QC is to follow the manufacturer's directions.	*Quality*
Walk-in refrigeration units	Refrigeration/freezer units within a building that are large enough to walk into. They may be portable or permanent, such as a meat storage locker in a butcher store. Walk-in units may or may not have a door, plastic strips, or other flexible covers.	*Energy*
Walking Beam	A means of conveying steel bars, billets, slabs, etc., across a cooling bed or through a furnace. The material to be conveyed rests on a metal grid and a second grid is arranged to lift up and move forward between the stationary grid, thus lifting the material and "walking" it forward, before returning to make another stroke.	*Metallurgy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
walking dragline	A walking dragline is equipped with large outrigger platforms, or walking beams, instead of crawler tracks. It "walks" by the alternate movement of the walking beams.	*Energy*
Wall	a communication or holing cut at right angles between two bords. The wall is therefore a heading driven along the direction of the main cleat. (these were also called 'ends', or 'endways'). Several walls in a line formed a 'headways course'; or another name for a longwall face; or a rib of solid coal between two bords.	*Mining*
Wall bars	slabs of timber set against the roof, close to the face, to prevent the roof breaking along the line of the face.	*Mining*
Wall coal	the middle division of three in a coal seam, the others being the 'top coal' and the 'ground coal'. (Scot.).	*Mining*
Wall cutting	shearing or kirving a section of solid coal ready to break it down. (Scots); or trimming the sides of a sinking pit ready for putting in the tubbing, coffering or walling.	*Mining*
Wall insulation	Insulating materials within or on the walls between heated areas of the building and unheated areas or the outside. The walls may separate air-conditioned areas from areas not air-conditioned.	*Energy*
Wall rocks	Rock units on either side of an orebody. The hanging wall and footwall rocks of an orebody.	*Mining*
Wall thickness	The thickness of the wall of the pressure vessel or valve. For steel valves, minimum thickness requirements are defined in ASME B16.34, API 600, and API 602.	*Mechanical*
Walled pack	loose dirt with the sides supported by stone walls, forming a pack.	*Mining*
Walling	the built-in lining of a shaft irrespective of what material was used; or the sides of a roadway lined with stone (S. Staffs.).	*Mining*
Walling curb	a wood or metal foundation ring set in the shaft during sinking for the walling (shaft lining) to be built on and carried upwards.	*Mining*
Walling scaffold	see Walling stage.	*Mining*
Walling stage	wooden platform with a central trap door to allow the hoppit or kibble to pass through, suspended in the shaft during sinking to aid in the placement of the shaft lining. It also, acts as a protective cover for the sinkers. Also called a 'walling scaffold' or 'cradle'.	*Mining*
Wallow	a hand winch. (Mids.).	*Mining*
Walls	The sides next to the lode.	*Mining*
Wandering coal	an irregular coal seam that has been broken up by movement of the strata over an extensive area.	*Mining*
Want	the barren ground separating the seam from one side of a fault to the other.	*Mining*
Waps	tramway or tubway points.	*Mining*
Warewashing	Washing of dishes, utensils, glassware, pots, pans, etc. in the institutional market.	*Chemistry*
Wark	a road driven through the coal at an angle to the grain or cleat. Rossendale, (Lancs.).	*Mining*
Wark batch	the colliery waste tip. (Som.).	*Mining*
Warm-air furnace	See Furnace.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Warm-Up Period	The time required after energizing a device before its rated performance characteristics apply.	*Process Control*
Warners	a general term given to a variety of instruments that were used to test for firedamp in the mine atmosphere.	*Mining*
Warning	A signal which alerts the operator to a dangerous condition requiring immediate action (from MIL-STD-1472D); an annunciator that is the most critical (more than an advisory or a caution); Also, an indicator of potential failure soon; Values: none, hot, low-power, high-power, other. Warning, Caution, Advisory (WCA). See: warning, caution, advisory, annunciator, alert.	*Aeronautical Engineering*
Warning Time	Warning time is considered equivalent to the P-F interval. See P-F interval.	*Maintenance*
Warp	Dimensional distortion in a plastics object after molding or other fabrication. See also Dished, Domed.	*Material Process*
Warp	Dimensional distortion in a plastic object after molding or other fabrication due to the release of molded in stresses.	*Engineering Physics*
Warping	twisting or curving of steel originally flat or straight	*Materials Process*
Warrant	exceptionally hard rock; or the floor directly beneath the coal seam.	*Mining*
Warrant	See Rights.	*Mining*
Warranty analysis	The analysis of warranty and return data for the purpose of determining the reliability characteristics of a product.	*Reliability Engineering*
Warranty contracts	Gas purchase agreements for the sale of natural gas by a producer to a pipeline company wherein the producer warrants it will have available sufficient gas supplies to meet its commitments over the life of the contract. Generally, the producer does not dedicate gas reserves underlying any specific acreage, lease, or fields to the agreement. Substitution of various sources of gas supply may be permitted according to the terms of the contract. Warranty contracts, by their terms, may vary from the above.	*Energy*
Warranty, Express	A specific assurance made by the seller concerning the performance, quality, or character of the goods or services sold. An express warranty often delineates the rights and obligations of the parties in the event of defective items or services. The term is sometimes used interchangeably with "guarantee."	*Procurement*
Warren or Warren	earth, bind or clunch beneath the coal seam. (Lancs.).	*Mining*
Warrington	The name for a type of strand pattern that is characterized by having one of its wire layers (usually the outer) made up of an arrangement of alternately large and small wires.	*Wire Rope & Cable*
Warwick	a moveable girder set at an angle between the roof and the floor in an inclined roadway to stop any tubs which may have runaway. Also called a 'Drop Warwick'.	*Mining*
Wash	The first geological formation, being composed of earth, sand, gravel, and other mineral "washed" down from the mountains during a long series of ages.	*Mining*
Wash box	see Coal jig.	*Mining*
Wash Out	Wear of dies caused by metal flow.	*Metallurgy*
Washed smalls	see Smalls.	*Mining*
Washout	where a section of the seam has been removed and replaced by other rocks, usually sandstone, as a result of peat-scouring by river action in the original coal swamp. Also known as a 'dumb fault', 'horseback' or 'rock fault'.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wash-out filter	A filter to smooth a transition due to change of input source, such as when changing modes; See Also: transient-free switch.	*Aeronautical Engineering*
Washout period/phase	[In a cross-over trial:] The stage after the first treatment is withdrawn, but before the second treatment is started. The washout period aims to allow time for any active effects of the first treatment to wear off before the new one gets started.	*Quality Engineering*
Waste	See Biomass waste and Non-biomass waste.	*Energy*
Waste	Rock containing no ore but removed in the course of mining operations.	*Mining*
Waste coal	Usable material that is a byproduct of previous coal processing operations. Waste coal is usually composed of mixed coal, soil, and rock (mine waste). Most waste coal is burned as-is in unconventional fluidized-bed combustors. For some uses, waste coal may be partially cleaned by removing some extraneous noncombustible constituents. Examples of waste coal include fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste.	*Energy*
Waste drawing or drawing	recovering the props and bars from the waste for re-use.	*Mining*
Waste energy	Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw used as fuel.	*Energy*
Waste heat boiler	A boiler that receives all or a substantial portion of its energy input from the combustible exhaust gases from a separate fuel-burning process.	*Energy*
Waste heat recovery	Any conservation system whereby some space heating or water heating is done by actively capturing byproduct heat that would otherwise be ejected into the environment. In commercial buildings, sources of water-heat recovery include refrigeration/air-conditioner compressors, manufacturing or other processes, data processing centers, lighting fixtures, ventilation exhaust air, and the occupants themselves. Not to be considered is the passive use of radiant heat from lighting, workers, motors, ovens, etc., when there are no special systems for collecting and redistributing heat.	*Energy*
Waste materials	Otherwise discarded combustible materials that, when burned, produce energy for such purposes as space heating and electric power generation. The size of the waste may be reduced by shredders, grinders, or hammermills. Noncombustible materials, if any, may be removed. The waste may be dried and then burned, either alone or in combination with fossil fuels.	*Energy*
Waste oils and tar	Petroleum-based materials that are worthless for any purpose other than fuel use.	*Energy*
Wasteman	a man who travels all the wastes or old workings, clears away falls and attends especially to any obstructions of the ventilation. The 'Shifter' is his assistant. (N. East).	*Mining*
Waste-to-Energy	This is a technology that uses refuse to generate electricity. In mass burn plants, untreated waste is burned to produce steam, which is used to drive a steam turbine generator. In refuse-derived fuel plants, refuse is pre-treated, partially to enhance its energy content prior to burning.	*Energy*
Waste-to-energy plant	A waste-to-energy plant produces energy, either heat or electricity using waste as a fuel. Their furnaces cannot easily be ramped up or down and so the plants are not used for peak-load generation. Due to the highly variable composition of the plants' fuel, stringent environmental standards are imposed and waste-to-energy plants use sophisticated flue-gas cleaning devices and monitoring devices to ensure emission control.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wastewater	Water that has been used in homes, industries, and businesses not for reuse unless it is treated.	*Petroleum Engineering*
Wastewater - Treatment Return Flow	Water returned to the environment by wastewater-treatment facilities.	*Petroleum Engineering*
Wastewater, domestic and commercial	Wastewater (sewage) produced by domestic and commercial establishments.	*Energy*
Wastewater, industrial	Wastewater produced by industrial processes.	*Energy*
Wastings	old workings. (Scot.).	*Mining*
Watchers	experienced colliers, usually a butty, who took it in turns to go down the pit with a deputy on Sunday to examine the whole of the workings on behalf of the men. (Leics.).	*Mining*
Water absorption	Gain in weight, calculated to percentage, of a conditioned plastics test piece after immersion in distilled water at room temperature for 24h.	*Material Process*
Water Absorption	The ratio of the weight of water absorbed by a given material under specified conditions, to the weight of that material when dry. It is generally expressed as a percentage.	*Electrical*
WATER BAR	A diagonal ditch or hump in a trail that diverts surface water runoff to minimize soil erosion.	*Forestry*
Water bed heater	An appliance that uses an electric resistance coil to maintain the temperature of the water in a water bed at a comfortable level.	*Energy*
Water box	a large, usually metal, box slung under the cage to wind water from the sump with each wind. Usually self-filling and emptying.	*Mining*
Water Budget	An evaluation of all the sources of supply and corresponding discharges with respect to an aquifer or drainage basin.	*Petroleum Engineering*
Water Conditioner	A material that improves the quality of water for a given application or use.	*Chemistry*
Water conditions	The status of the water supply and associated water in pondage and reservoirs at hydroelectric plants.	*Energy*
WATER CONTROL	Management of water to maintain plant growth, water quality, wildlife habitat, and fire control.	*Forestry*
Water Cycle	The circuit of water movement from the oceans to the atmosphere, and to the earth, and return to the atmosphere through various stages or processes.	*Petroleum Engineering*
Water Gauge (standard U-tube)	Instrument that measures differential pressures in inches of water.	*Mining*
WATER GLYCOL FLUID	A fluid whose major constituents are water and one or more glycols or polyglycols.	*Mechanical, Process, and Operations*
Water Hammer	Shock waves generated in a pipework system caused by a valve closing too quickly.	*Industrial Engineering*
Water Hardness	A measure of the amount of metallic salts found in water. Hard water can inhibit the action of some surfactants and reduce the effectiveness of the cleaning process.	*Chemistry*
Water heated in furnace	Some furnaces provide hot water as well as heat the home. The water is heated by a coil that is part of the furnace. There is no separate hot water tank.	*Energy*
Water heater	An automatically controlled, thermally insulated vessel designed for heating water and storing heated water at temperatures less than 180 degrees Fahrenheit.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Water heating DSM programs	These are demand-side management (DSM) programs designed to promote increased efficiency in water heating, including water heater insulation wraps.	*Energy*
Water heating equipment	Automatically controlled, thermal insulated equipment designed for heating and storing heated water at temperatures less than 180 degrees Fahrenheit for other than space heating purposes.	*Energy*
Water kist	a water chest, usually mounted on wheels, used to transport water for spraying on dust or to soften the fireclay. Originally constructed from timber, in later years iron tubs were also used. (Scot.). -see also Goose.	*Mining*
Water lane	a term used in Lancashire, c1600, for an adit or sough.	*Mining*
Water mark	Exposed fiber, a mark caused by the presence of water, occurring specially in thermosetting plastics.	*Material Process*
Water pollution abatement equipment	Equipment used to reduce or eliminate water borne pollutants, including chlorine, phosphates, acids, bases, hydrocarbons, sewage, and other pollutants. Examples of water pollution abatement structures and equipment include those used to treat thermal pollution; cooling, boiler, and cooling tower blowdown water; coal pile runoff; and fly ash waste water. Water pollution abatement excludes expenditures for treatment of water prior to use at the plant.	*Energy*
Water pumping	Photovoltaic modules/cells used for pumping water for agricultural, land reclamation, commercial, and other similar applications where water pumping is the main use.	*Energy*
Water Quality	A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.	*Petroleum Engineering*
Water reservoir	A large inland body of water collected and stored above ground in a natural or artificial formation.	*Energy*
Water Resistance	The resistance of a lubricating grease to adverse effects due to the addition of water to the lubricant system. Water resistance is described in terms of resistance to washout due to submersion (see ASTM D 1264) or spray (see ASTM D 4049), absorption characteristics and corrosion resistance (see ASTM D 1743).	*Lubrication*
Water Softener	Substance that removes or counteracts the hardness of water.	*Chemistry*
Water source heat pump	A type of (geothermal) heat pump that uses well (ground) or surface water as a heat source. Water has a more stable seasonal temperature than air thus making for a more efficient heat source.	*Energy*
water table	the water surface in an unconfined aquifer at which the fluid pressure in the pore spaces is at atmospheric pressure.	*Chemical*
Water Table Aquifer	An aquifer in which the water table forms the upper boundary.	*Petroleum Engineering*
Water Treatment	Water treatment for feedwater and wastewater for reuse and disposal is essential. Water treatment involves chemical intervention, and treatment benefits include lower operating costs, improved reliability, lower waste and disposal costs, better environmental compliance, and increased process efficiency. See also Purification.	*Industrial*
Water Treatment Plant	A facility that treats water to remove contaminants for safe use.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Water turbine	A turbine that uses water pressure to rotate its blades; the primary types are the Pelton wheel, for high heads (pressure); the Francis turbine, for low to medium heads; and the Kaplan for a wide range of heads. Primarily used to power an electric generator.	*Energy*
Water vapor	Water in a vaporous form, especially when below boiling temperature and diffused (e.g., in the atmosphere).	*Energy*
Water Vapor Transmission	The amount of water vapor passing through a given area and thickness of a plastic sheet or film in a given time, when the sheet or film is maintained at a constant temperature and when its faces are exposed to certain different relative humidities. The result is usually expressed as grams per 24 hours per square meter.	*Engineering Physics*
Water well	A well drilled to (1) obtain a water supply to support drilling or plant operations, or (2) obtain a water supply to be used in connection with an improved recovery program.	*Energy*
Water wheel	A wheel that is designed to use the weight and/or force of moving water to turn it, primarily to operate machinery or grind grain.	*Energy*
Waterfall	A circulation of air through a mine produced by allowing water to fall down one of the shafts.	*Mining*
Waterfall plot	A series of spectral maps taken at regular intervals of time, regularly spaced shaft speeds, etc. Early maps move down the display, followed by later maps, something like the flow of a waterfall.	*Reliability Engineering*
Water-formed deposit	Any accumulation of insoluble material derived from water or formed by the reaction of water upon surfaces, including scale, sludge, foulants, sediments, corrosion products or biological deposits.	*Chemical Engineering*
Water-gate	a roadway or gate driven for the purpose of draining a mine, or the lower of two parallel main roadways connecting the workings with the shafts. Also known as a 'drain'.	*Mining*
Watershed	The land area where water drains to a particular stream, river, or lake.	*Petroleum Engineering*
WATERSHED	An area where all water running off the land drains to a specific location. Sometimes called basin.	*Forestry*
WATER-SOAKED	A dull green coloration of diseased tissues due to membrane leaking of cellular contents into intercellular spaces.	*Forestry*
Waterway	A river, channel, canal, or other navigable body of water used for travel or transport.	*Energy*
Waterways	slots across the face of the bit allowing water to remove cuttings.	*Petroleum Drilling*
Watt	A unit of electric power equal to a current of one ampere flowing across an electrical circuit with a potential of one volt. A kilowatt is a unit of power equal to 1,000 watts.	*Energy*
Watt	The electric unit of power or rate of doing work. One horsepower is equivalent to approximately 746 watts.	*Energy*
WATT	A unit of power.	*Mechanical, Process, and Operations*
Watt (W)	Standard unit of electrical power (1 watt = 1 amp at 1 volt). The watt is also a general unit of power. One watt = 1 joule per second.	*Electrical*

Please see the Appendix for further illustration

Term	Definition	Industry
Watt Density	The watts emanating from each square inch of heated surface area of a heater. Expressed in units of watts per square inch.	*Electrical*
Watt hour (Wh)	1 watt hour is the amount of electrical energy consumed by a 1 watt load over a period of one hour. For example, a 100 watt light bulb (a 100 watt load) uses 100 watt-hours of energy every hour. Rather confusingly, watt-hours are sometimes used to describe "power." This is incorrect. Watt-hours are a measure of energy transferred, i.e., the product of power (kW) x time (hours). Confusion can also arise when describing electricity generation. For example, a wind farm described as "150 MW" has a peak power output of 150 MW. If the farm was 100 percent efficient, it would transfer 150 MW x 24 hours = 3600 MWh to the electricity grid every day. Because of various inefficiencies and the fact that wind blows erratically, wind turbines are actually only about 30 percent efficient. This means that 150 MW (theoretical maximum) x 24 h (number of hours in a day) x 30 percent (efficiency) = 1080 MWh will be produced each day. Cables can also be described as, for example, 350 MW. This is the capacity of the cable, i.e., the maximum amount of power it can carry. In an hour, a 350 MW cable could (theoretically) deliver 350 MWh of electricity.	*Electrical*
Watt hour (Wh)	The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.	*Energy*
Watt-hour (Wh)	An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.	*Energy*
Watt-Hour	One watt of power expended for one hour.	*Energy*
Wattmeter	A device for measuring power consumption.	*Energy*
Wave	Nature's mechanism for transporting energy without transporting matter.	*Reliability Engineering*
Waveform	A presentation or display of the instantaneous amplitude of a signal as a function of time, as on an oscilloscope or oscillograph. In the time domain.	*Reliability Engineering*
Wavelet	as used for shock testing on shakers, are half-sine windowed (amplitude modulated) sinusoids of specific frequencies, with the window chosen so the resulting waveforms have an odd number of half cycles. Usually, ten to thirty wavelets, each with different basis frequencies, e.g., 10 Hz to 2000 Hz, and different numbers of half cycles, e.g., three to 31 or so, are superimposed to synthesize a transient oscillatory signal (pulse) with a prescribed Shock Response Spectrum that can be used as a reference waveform for a shaker shock test.	*Reliability Engineering*
Waviness, internal	An appearance of waviness seen in a transparent plastic.	*Material Process*
Waviness, surface	Wave-like unevenness, or out-of-plane, in the surface of a plastic.	*Material Process*
Wax	A solid or semi-solid material consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight-chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point (ASTM D 938) between 100 and 200 degrees Fahrenheit and a maximum oil content (ASTM D 3235) of 50 weight percent.	*Energy*
Wax	A natural protective coating for hard surfaces.	*Chemistry*
Wax dam	a wall or dam packed with clay. (Leics.).	*Mining*
Wax walls	a thin lining of puddle clay, 9 inches to 1ft thick, on the sides of roadways or for sealing pack walls to prevent spontaneous combustion. (S. Derbys.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Way	a working district underground. (N. East).	*Mining*
Way	Longitudinal surface that guides the reciprocal movement of a machine part.	*Lubrication*
Way cleaner	a boy who clears the dust etc. from the rails along which the putters push the trams. (N. East).	*Mining*
Way dirt	the slack, dust, and any odd lumps of coal that had fallen from the tubs along the roads from the workings to the shaft.	*Mining*
Way end	the junction of the coal face and the conveyor roadway (S. Staffs.).	*Mining*
Way gate	see Rolleyway.	*Mining*
Way head	the end of a gate or road at the face. (Mids.).	*Mining*
Way Lubricant	Lubricant for the sliding ways of machine tools such as planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines. A good way lubricant is formulated with special frictional characteristics designed to overcome the stick-slip motion associated with slow-moving machine parts.	*Lubrication*
Waypoint (WYPT)	A point on the ground, predefined as a point of interest for the flight; a basic guidance mode, providing lateral guidance to a waypoint, either by course or by direct (operator selectable).	*Aeronautical Engineering*
Waypoint approach	To approach a waypoint.	*Aeronautical Engineering*
Waz	a tool used by platelayers for the insertion and removal of doggins (S. Staffs.).	*Mining*
WBT	Wet bulb temperature	*Facility Engineering*
WCA	Warning, Caution, Advisory.	*Aeronautical Engineering*
WE or W.E.	Weld End - The end connection of a valve which is to be installed by welding into the line. To prepare the end bevel, it is necessary to know the wall thickness and specified minimum yield strength of the connecting pipe. See "End Bevel."	*Mechanical*
Wear	Damage resulting from the removal of materials from surfaces in relative motion. Wear is generally described as: Abrasive — removal of materials from surfaces in relative motion by a cutting or abrasive action of a hard particle (usually a contaminant) Adhesive — removal of materials from surfaces in relative motion as a result of surface contact (galling and scuffing are extreme cases). Corrosive — removal of materials by chemical action.	*Lubrication*
Wear (abrasive)	Abrasive wear (often referred to as wear) is the progressive removal of material, which results from the ingress, and presence of (foreign) particles (three-body wear). The surfaces become dull to varying degrees. In the case of very fine particles (dust), the surface may become shiny (polished).	*Maintenance*
Wear (adhesive)	Adhesive wear (also referred to as smearing, skidding, galling) is defined as the transfer of component surface material from a location on one contacting surface to a location on the other contacting surface. The process requires surface-parallel motion (sliding) in the contact, and is often accompanied with high friction heat. Little, or bad lubrication, increases the probability of adhesive wear.	*Maintenance*
Wear Bushing	A removable sacrificial and protective insert used inside a Casing Spool or Head during drilling to prevent damage to casing suspension and sealing surfaces.	*Petroleum Engineering*
Wear coefficient	Mechanical property representing the probability that an adhesive wear fragment will be formed.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wear Debris	Particles that are detached from machine surfaces as a result of wear and corrosion. Also known as wear particles.	*Lubrication*
Wear failure	Surface related damage phenomena, such as wear debris on sliding contact surfaces.	*Material Process*
Wear Inhibitor	An additive which protects the rubbing surfaces against wear, particularly from scuffing, if the hydrodynamic film is ruptured.	*Lubrication*
WEAR TEST	Verification of a components resistance under specific wear conditions.	*Mechanical*
WEATHER PROOF	Describes a valve operator or other device that is protected against intrusion of water, sand, dust, or other atmospheric contamination.	*Mechanical*
Weather stripping or caulking	Any of several kinds of crack-filling material around any windows or doors to the outside used to reduce the passage of air and moisture around moveable parts of a door or window. Weather stripping is available in strips or rolls of metal, vinyl, or foam rubber and can be applied on the inside or outside of a building.	*Energy*
weathering	the process during which a complex compound is reduced to its simpler component parts, transported via physical processes, or biodegraded over time.	*Chemical*
Weathering steel	corrosion-resistant steel that initially corrodes; the presence of corrosion products then limits the further oxidation of the metal	*Materials Process*
Weatherometer (WOM)	An instrument, which is used to subject articles to accelerated weathering conditions, e.g., rich UV source and water spray.	*Engineering Physics*
Weave Bead	A type of weld bead made with oscillation of the electrode transverse to the axis of the weld. Contrast to string bead.	*Maintenance and Repair*
Weavewire	A screen constructed of interlaced wire, yielding uniformly square pores.	*Filtration*
Weawk	an undercut road from the face to the main roadway. (Bacup Lancs).	*Mining*
Web	The thin section of metal remaining at bottom of a cavity or depression in a forging. The web may be removed by piercing or machining.	*Metallurgy*
Web	1. A thin sheet in process in a machine. In extrusion coating, the molten web is that which issues from the die, and the substrate web is the material being coated. 2. A continuous length of sheet material handled in roll form as contrasted with the same material cut into sheets.	*Engineering Physics*
Web Inspection	In the paper industry cameras are inserted to monitor the sheet for visual defects.	*Control Engineering*
Web inspection system (WIS)	Web inspection systems are used by the pulp and paper industry to inspect the surface of the paper as it is being produced. The systems can detect and report many types of defects, including holes, spots and streaks.	*Electrical*
Wedding	the accidental collision between a loaded and empty corf in the pit shaft working with a swinging bont. It was not unusual for a full corf or skip to arrive at the surface with an empty corf entangled with it. (Derbys.).	*Mining*
Wedge	A piece of wood tapering to a thin edge and used for tightening in conventional timbering.	*Mining*
WEDGE	As used in diamond drilling, refers to the placing of a wedge at some point in the hole for the purpose of deflecting the bit in another direction.	*Mining*
Wedge capel	see Capel.	*Mining*

Term	Definition	*Industry*
WEDGE GATE	A gate whose seating surfaces are inclined to the direction of closing thrust so that mechanical force on the stem produces tight contact with the inclined seat rings.	*Mechanical*
Wedge Reader	Converts bar code signal into a keyboard signal which the computer is able to read. WIDE-TO-NARROW RATIO - Ratio of the wide bars to the narrow bars in a symbology.	*Gears*
Wedge Socket	Wire rope fittings wherein the rope end is secured by a wedge.	*Wire Rope & Cable*
Wedging crib or curb	a ring of wood or iron, which encircles a shaft, bedded on the rock, and on which the tubbing rested.	*Mining*
Wedging out	a coal seam which is thinning or cropping out.	*Mining*
Weed	any unwanted plant, especially those that crowd out more desirable plants	*Agriculture*
Weepage	the leaching out of trapped liquid solutions in galvanized structures, primarily through pinholes or gaps in welds that were not sealed over by zinc	*Materials Process*
Weibull distribution	A statistical distribution frequently used in life data analysis. Developed by Swedish mathematician Waloddi Weibull, this distribution is widely used due to its versatility and the fact that the Weibull pdf can assume different shapes based on the parameter values.	*Reliability Engineering*
Weibull Distribution (or Weibull analysis)	Originally developed by Wallodi Weibull, a Swedish mathematician, Weibull analysis is a versatile distribution employed by reliability engineers. While it is called a distribution, it is actually a tool that enables the reliability engineer to first characterize the probability density function (failure frequency distribution) of a set of failure data to characterize the failures as early life, constant (exponential) or wear out (Gaussian or log normal) by plotting time to failure data on a special plotting paper with the log of the times/cycles/miles to failure plotted on a log scaled X-axis vs. the cumulative percent of the population represented by each failure on a log-log scaled Y-axis.	*Reliability Engineering*
Weight	The force on an object resulting from gravity.	*Engineering Physics*
Weight on wheels (WOW)	Indication of whether the aircraft has weight on its wheels, meaning airborne or on the ground; weight on wheels can be detected by a sensor on the wheels, computed from other state data, or a combination.	*Aeronautical Engineering*
Weight or weighting	A settling and subsidence of the roof after the coal had been worked and removed caused by the pressure exerted by the overlying strata.	*Mining*
Weight-Average Molecular Weight (MW)	The first moment of a plot of the weight of the polymer in each molecular weight range against molecular weight. The value of MW can be estimated by light scattering or sedimentation equilibrium measurements.	*Engineering Physics*
Weighted least squares regression	[In meta-analysis:] A meta-regression technique for estimating the parameters of a regression model, wherein each study's contribution to the sum of products of the measured variables (study characteristics) is weighted by the precision of that study's estimate of effect.	*Quality Engineering*
Weighted mean difference	See Mean difference	*Quality Engineering*
Weighting	Emphasis or attenuation applied to sound measurements at certain frequencies. C weighting is essentially flat. A weighting attempts to compensate for the non-constant sensitivity of human hearing at certain frequencies. See **Equal Loudness Curves.**	*Reliability Engineering*

Term	Definition	*Industry*
Weir	A dam in a waterway over which water flows and that serves to raise the water level or to direct or regulate flow.	*Energy*
Weld	A localized coalescence of material produced either by heating to suitable temperatures, with or without the application of pressure, or by application of pressure alone, with or without the use of filler material.	*Maintenance and Repair*
Weld Bead	A weld deposit resulting from a pass.	*Maintenance and Repair*
Weld beads	deposits of filler metal from a welding pass	*Materials Process*
Weld flux	material used to prevent the formation of, or to dissolve and facilitate removal of, oxides and other undesirable substances	*Materials Process*
Weld Line	A flaw on a molded plastic article or blown film caused by the incomplete fusion of two flow fronts which meet during the molding or extrusion operation.	*Engineering Physics*
Weld mark	Mark formed by the incomplete union of two or more streams of plastic flowing together.	*Material Process*
Weld Metal	That portion of a weld which has been melted during welding. The portion may be the filler metal or base metal or both.	*Maintenance and Repair*
Weld Metal Area	The area of the weld metal as measured on the cross section of a weld.	*Maintenance and Repair*
Weld Neck	An extended prolongation on a flange or fitting with a 'buttweld' bevel connection to match with mating pipe with a similar bevel.	*Petroleum Engineering*
WELD NECK FLANGE	A flanged piping element with a weld neck used in pipeline construction to provide a companion flange for installation of flanged valves. Also used to convert weld end valves to flanged valves or vice versa.	*Mechanical*
Weld Penetration	See Joint Penetration and Root Penetration.	*Maintenance and Repair*
Weld Point	The lowest applied load in kilograms at which the rotating ball in the Four Ball EP test either seizes and welds to the three stationary balls, or at which extreme scoring of the three balls results	*Lubrication*
WELD REDUCERS	A reducing fitting used on weld end piping components to adapt from a large sized pipe to a smaller diameter pipe, or vice versa.	*Mechanical*
Weld Reinforcement	Weld material in excess of the specified weld size.	*Maintenance and Repair*
Weld residue	impurities left from the welding process; weld residue will inhibit localized formation of the galvanized coating.	*Materials Process*
Weld slag	material resulting from the combination of weld material and weld flux; weld slag will inhibit localized formation of the galvanized coating	*Materials Process*
Weldability	The ability of a metal to be welded under the fabrication conditions imposed into a specific, suitably designed structure and to perform satisfactorily in the intended service.	*Maintenance and Repair*
Welded Joint	A localized union of two or more members produced by the application of a welding process.	*Maintenance and Repair*
Welder	One who is capable of performing a manual or semiautomatic welding operations. 8	*Maintenance and Repair*
Welder Performance Qualification	Demonstration of a welder's ability to produce welds in a manner described in a welding procedure specification that meets prescribed standards.	*Maintenance and Repair*
Welding	Joining of metal parts by local melting in the vicinity of the join.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Welding Contact	One of several conditions that may cause switch contacts to fail to separate at the intended point of plunger travel. As the name implies, the contacts literally are welded together as a result of the electrical and thermal effects at the contact interface	*Electrical Engineering*
Welding Current	The current which flows through the electric welding circuit during the making of a weld.	*Maintenance and Repair*
Welding Fittings	Wrought- or forged-steel elbows, tees, reducers, and similar pieces for connection by welding to one another or to pipe. In small sizes, these fittings are available with counterbored ends for connection to pipe by fillet welding and are known as socket-weld fittings. In large sizes, the fittings are supplied with ends chamfered for connection to pipe by means of butt welding and are known as butt-welding fittings.	*Maintenance and Repair*
Welding Generator	The electric generator used for supplying welding current.	*Maintenance and Repair*
Welding Machine	Equipment used to perform the welding operation.	*Maintenance and Repair*
Welding Operator	One who operates a welding machine or automatic welding equipment.8	*Maintenance and Repair*
Welding Procedure	The detailed methods and practices involved in the production of a weldment.	*Maintenance and Repair*
Welding Procedure Qualification Record	Record of welding data and test results of the welding procedure qualifications, including essential variables of the process and the test results.	*Maintenance and Repair*
Welding Procedure Specification	A (WPS) document outlining necessary parameters and specifications for field welds meeting specified requirements. Refer to Procedure Qualification Record (PQR). Reference ASME SEC. IX ART. II	*Petroleum Engineering*
Welding Procedure Specification (WPS)	The document which lists the parameters to be used in construction of weldments in accordance with the applicable code requirements.	*Maintenance and Repair*
Welding Process	The joining of materials by the application of heat or friction. Usually involves the localized fusion of both contacting surfaces.	*Paint and Coatings*
Welding Rod	Filler metal, in wire or rod form, used in gas welding and brazing procedures and those arc welding processes where the electrode does not furnish the filler metal.	*Maintenance and Repair*
Welding Sequence	The order of making the welds in a weldment.	*Maintenance and Repair*
Weldment	An assembly whose component parts are to be joined by welding.	*Maintenance and Repair*
Weld-Prober Sawing	Removal of a boat-shaped sample from a pipe weld for examination of the weld and its adjacent base-metal area. This operation is usually performed in graphitization studies.	*Maintenance and Repair*
Weldwood	Term applied by U.S. Plywood Corp. to phenolic resin bonded plywood.	*Material Process*
Well	A hole drilled in the earth for the purpose of:	*Energy*
Well	A mark formed by the incomplete union of two or more streams of plastic s material.	*Material Process*
Well	A hole drilled in the earth for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas.	*Petroleum Drilling*
Well (Water)	An artificial excavation put down by any method for the purpose of withdrawing water from the underground aquifers.	*Petroleum Engineering*
Well bore	The hole made by a drill bit.	*Petroleum Drilling*
Well casing	Steel or cement containment that is installed on the inside of the well bore intended to keep gas or oil from seeping out of the wells into the surrounding ground.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Well Closure	The process of sealing a well that is no longer being used to prevent groundwater contamination and harm to people and animals.	*Petroleum Engineering*
Well density	The concentration of wells on the land surface (per unit area).	*Petroleum Engineering*
Well Field	An area in which productive wells are drilled.	*Petroleum Engineering*
Well Interference	The condition occurring when the area of influence of a water well (the cone of depression) overlaps that	*Petroleum Engineering*
Well Log	A record of geological formation penetrated during drilling, including technical details of the operation.	*Petroleum Drilling*
Well log	A record of geological formation penetrated during drilling, including technical details of the operation.	*Petroleum Drilling*
Well logging	The practice of making a detailed record (well log) of the geologic formations penetrated by a borehole. Also known as borehole logging. Wireline logging is the practice of measuring formation properties using electrically powered instruments to infer properties and make decisions about drilling and production operations.	*Petroleum Drilling*
well path	actual or planned trajectory defined by Cartesian coordinates, and by angular orientations/properties.	*Petroleum Drilling*
Well Screen	A filtering device used to permit the flow of liquid or air but prevents the passage of sediment or backfill particles.	*Petroleum Engineering*
Well servicing	The maintenance work performed on a well to maintain or improve production levels. Examples include: repairs to pumps, valves, and tubing.	*Petroleum Engineering*
Well Siting	Location of a well placed to best protect water quality, access adequate water quality, and allow for inspection and maintenance of the well.	*Petroleum Engineering*
Well spacing	The distance between wells producing from the same reservoir. Spacing is often expressed in terms of area and is usually established by regulatory agencies.	*Petroleum Engineering*
Well water for cooling	A means of cooling that uses water from a well drilled specifically for that purpose. The subterranean temperature of the water stays at a relatively constant temperature. Where water is abundant, it provides a means of getting 55-degree Fahrenheit water with no mechanical cooling. Used usually for heat rejection in a water source heat pump.	*Energy*
Well Yield	The volume of water discharged from a well per unit time.	*Petroleum Engineering*
Wellbore	A borehole; the hole drilled by the bit.	*Petroleum Drilling*
Wellhead	The point at which the crude (and/or natural gas) exits the ground. Following historical precedent, the volume and price for crude oil production are labeled as "wellhead," even though the cost and volume are now generally measured at the lease boundary. In the context of domestic crude price data, the term "wellhead" is the generic term used to reference the production site or lease property.	*Energy*
wellhead	the area immediately surrounding the top of a well, or the top of the well casing.	*Chemical*
Wellhead price	The value at the mouth of the well. In general, the wellhead price is considered to be the sales price obtainable from a third party in an arm's length transaction. Posted prices, requested prices, or prices as defined by lease agreements, contracts, or tax regulations should be used where applicable.	*Energy*
Wellhead Protection Area	The surface and subsurface area surrounding a water well field, supplying a public water system, through which contaminants are likely to move toward and reach such water well or well field.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wellhead Revenues	The total dollar value of crude oil and natural gas at the wellhead. Wellhead revenues are calculated, based on the production volumes of crude oil and natural gas, multiplied by their respective average wellhead price.	*Petroleum Drilling*
Welsh Pony	The Welsh Pony roamed the hills and valleys of Wales before the Roman invasion. It pulled chariots in the sport arena, worked in coal mines, on ranches, and on postmen's routes. It has worked on the farms of the poor and been pampered by royalty. The Welsh Pony was imported to the United States as early as the 1880s.	*Agriculture*
West	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.	*Energy*
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota;	*Energy*
West Region	Mountain division and Pacific division	*Energy*
West South Central	Arkansas, Louisiana, Oklahoma, and Texas;	*Energy*
West Texas Intermediate (WTI - Cushing)	A crude stream produced in Texas and southern Oklahoma which serves as a reference or "marker" for pricing a number of other crude streams and which is traded in the domestic spot market at Cushing, Oklahoma.	*Energy*
West Virginia, Northern	All mines in the following counties (formerly defined as Coal-Producing Districts 1, 3): Barbour, Brooke, Braxton, Calhoun, Doddridge, Gilmer, Grant, Hancock, Harrison, Jackson, Lewis, Marion, Marshall, Mineral, Monongalia, Ohio, Pleasants, Preston, Randolph, Ritchie, Roane, Taylor, Tucker, Tyler, Upshur, Webster, Wetzel, Wirt, and Wood.	*Energy*
West Virginia, Southern	All mines in the following counties (formerly Defined as Coal-Producing Districts 7): Boone, Cabell, Clay, Fayette, Greenbrier, Kanawha, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Nicholas, Pocahontas, Putnam, Raleigh, Summers, Wayne, and Wyoming.	*Energy*
Western	Anchorage, AK, Nogales, AZ, Los Angeles, CA, San Diego, CA, San Francisco, CA, Honolulu, HI, Great Falls, MT, Portland, OR, Seattle, WA.	*Energy*
Western Region	Consists of the Northern Rocky, Southern Rocky, West Coast Coal Basins and Western Interior. The following comprise the Western Region: Alaska, Arizona, Arkansas, California, Colorado, Idaho, Iowa, Kansas, Louisiana, Missouri, Montana, New Mexico, North Dakota, Oklahoma, Oregon, Texas, South Dakota, Utah, Washington, and Wyoming.	*Energy*
Westgard rules, Westgard multi-rule control procedure	A control procedure that uses a series of control rules to test the control measurements. A 12s rule is used as a warning, followed by use of 13s, 22s, R4s, 41s, and 10x as rejection rules.	*Quality*
Westphalite	an early flameless explosive.	*Mining*
Wet bag	a waterproof bag used to keep explosives dry in wet conditions.	*Mining*
Wet bottom boiler	Slag tanks are installed usually at the furnace throat to contain and remove molten ash.	*Energy*
Wet galvanizing	using a liquid flux layer floated on top of the molten zinc; in the galvanizing process, final cleaning occurs as the material passes through the flux blanket before entering the molten zinc bath	*Materials Process*
Wet gas	Natural gas that contains natural gas liquids, which are heavier than gaseous methane. Some of these, such as propane, butane, pentane, hexane, and heptane, may come out of the well in liquid form or may need to be processed. The Marcellus shale gas in Washington County has been described as a wet gas. Natural gas liquids are considered valuable by-products of natural gas processing.	*Petroleum Drilling*

Please see the Appendix for further illustration

Term	Definition	*Industry*
WET GAS	A gas containing a relatively high proportion of hydrocarbons that are recoverable as liquid.	*Petroleum Engineering*
Wet Gas	Natural gas containing liquid hydrocarbons in solution, which may be removed by a reduction of temperature and pressure or by a relatively simple extraction process.	*Petroleum Drilling*
Wet line	a chit from the fireman that allows a man to go up the pit early because he has been working in wet conditions. (Scot.). Sometimes called a 'wet paper' or 'wet note' in other areas.	*Mining*
Wet Mopping	Applying a liberal amount of cleaning solution. Used in disinfecting, thorough cleaning, scrubbing and stripping. Requires removing excess solution.	*Chemistry*
Wet natural gas	A mixture of hydrocarbon compounds and small quantities of various non hydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentane. Typical nonhydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, hydrogen sulfide, nitrogen and trace amounts of helium. Under reservoir conditions, natural gas and its associated liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil and are not distinguishable at the time as separate substances. *Note*: The Securities and Exchange Commission and the Financial Accounting Standards Board refer to this product as **natural gas**.	*Energy*
Wet storage stain	white surface oxide and hydroxide that forms on newly galvanized steel when excessive moisture is present in poorly ventilated storage	*Materials Process*
Wetbulb temperature	The temperature indicated by the wet-bulb thermometer of standard sling psychrometer or its equivalent. Theoretically, temperature at which the atmosphere would become saturated by evaporation of water without loss or grain in total heat content of the air and vapor.	*Material Process*
Wetlands	Lands where water saturation is the dominant factor in determining the nature of soil development and the types of plant and animal communities.	*Petroleum Engineering*
Wetted	Any part of a valve or pressure control equipment that has contact with well fluid.	*Petroleum Engineering*
Wetting Agent	A substance reducing surface tension of a liquid, causing the liquid to spread across or penetrate the surface of a solid more easily.	*Petroleum Engineering*
Wetting Agent	A chemical that reduces surface tension of water, allowing it to spread more freely.	*Chemistry*
WGS72	World Geodetic Survey 1972.	*Aeronautical Engineering*
WGS94	World Geodetic Survey 1994.	*Aeronautical Engineering*
Wh See Watt hour	Wh: See Watt hour	*Energy*
Wharr or Wharl	a type of slide or sled for drawing corves in low workings (N. East).	*Mining*
Wheatstone Bridge	A network of four resistances, an emf source, and a galvanometer connected such that when the four resistances are matched, the galvanometer will show a zero deflection or "null" reading.	*Electrical*
Wheel	A flight control operated by turning with hands in fixed-wing aircraft, primarily to control roll (heading) via the ailerons; wheel is connected to yoke.	*Aeronautical Engineering*
Wheel	a brae. to operate the brake on a cousie, or self acting incline' a wheel brae. (Scot.).	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wheel clip	see Star clip.	*Mining*
Wheel cue	A lateral flight director cue for fixed-wing aircraft, primarily to control heading, by changing roll; Compare: lateral cyclic cue; Symbols: Gamma sub 'LAT' ; Typical Units: percent, in.	*Aeronautical Engineering*
Wheel holes	coal headings kept a yard or two in advance at either end of a face to allow disc coal cutting machines to start cutting.	*Mining*
Wheel machine	a colliers' name for the early disc coal-cutting machine.	*Mining*
Wheel tree	a large prop to which the pulley of the self acting incline was fastened. (Scot.). Whetstones, inferior coal, often forming the roof of the Middleton Main Coal, (Yorks.).; or a term applied to a quartzitic siltstone sometimes used as a honing material.	*Mining*
Wheel-abrading	mechanical cleaning method used to remove small amounts of residues found on steels by means of a rough, rotating wheel	*Materials Process*
Wheeling	The use of the transmission facilities of one system to transmit power for another system.	*Energy*
Wheeling charge	An amount charged by one electrical system to transmit the energy of, and for, another system or systems.	*Energy*
Wheeling service	The movement of electricity from one system to another over transmission facilities of interconnecting systems. Wheeling service contracts can be established between two or more systems.	*Energy*
Where V0	the value for the base period.	*Energy*
whereby a computer or master station provides setpoints to individual controllers which independently perform the actual control algorithms	whereby a computer or master station provides setpoints to individual controllers which independently perform the actual control algorithms.	*Electrical Engineering*
Whim	A winding machine used for hoisting ore out of a shaft.	*Mining*
Whim Gin	a horse gin consisting of a cylinder 15 – 20 feet in diameter moving horizontally on its axis having two starts or levers to which one or more horses are attached (N. East).	*Mining*
Whin	an igneous intrusion; formerly loosely used for any hard rock.	*Mining*
Whirley	a hutch or tub. (Scot.).	*Mining*
Whisker Small single	crystal fiber with a nearly perfect crystalline structure that serves as a high-strength composite reinforcing phase.	*Material Process*
White and red flag	Used by the starter, this white flag with a diagonal red stripe indicates that an emergency or service vehicle is on the track, and extreme caution should be used.	*NASCAR*
White cast iron	A hard, brittle form of cast iron with a characteristic white, crystalline fracture surface.	*Material Process*
White damp	Carbon monoxide, CO. A gas that may be present in the afterdamp of a gas- or coal-dust explosion, or in the gases given off by a mine fire; also one of the constituents of the gases produced by blasting. Rarely found in mines under other circumstances. It is absorbed by the hemoglobin of the blood to the exclusion of oxygen. One-tenth of 1% (.001) may be fatal in 10 minutes.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
White flag	When waved by the starter, this signifies the start of the last lap of the race. When waved by a corner worker, it signifies that a slow-moving vehicle is on the track.	*NASCAR*
White Oil	Highly refined lubricant stock used for specialty applications such as cosmetics and medicines.	*Lubrication*
White random vibration	That broad-band random vibration in which the PSD (ASD) is constant over a broad frequency range.	*Reliability Engineering*
White rust	white, sticky substance comprised of basic zinc carbonate; forms when galvanized surfaces are constantly covered by water or water containing sulfides or chlorides	*Materials Process*
White spirit	A highly refined distillate with a boiling point range of about 150 degrees to 200 degrees Centigrade. It is used as a paint solvent and for dry-cleaning purposes.	*Energy*
Whitedamp	another name for afterdamp.	*Mining*
Whiteware	Commercial fired ceramic with a typically white and fine grained microstructure. Examples include tile, china and pottery.	*Material Process*
Whol or Whurl	the pulleys or wheels on top of the headgear over which the winding rope passes. (Scot.).	*Mining*
Whole coal	a tract of solid coal that has not been entered by any mine workings, also known as 'virgin coal'.	*Mining*
Whole cradle	a platform or scaffold almost the same diameter as the shaft hung on chains attached to a crab rope from the surface. The platform was situated several feet above the base of a sinking shaft with a trap door in the centre to allow the kibble to pass trough. It was kept in position to protect the men working below from any falling objects.	*Mining*
Whole Depth	The total depth of a tooth space, equal to addendum plus dedendum, also equal to working depth plus clearance.	*Gears*
Whole flat	a district or panel in the whole working system. (N. East).	*Mining*
Whole or Whole mine	virgin coal being worked by driving headings. (N. East), or working the whole with headings or stall before taking out the pillars which was known as 'working the broken'.	*Mining*
Whole stalls	two or more stalls with their faces in line or on thread with one another (S. Wales).	*Mining*
Whole working	the first stage of bord and pillar working, i.e. driving the bords and headways. –see also Broken working.	*Mining*
Wholed	when the cage was over-wound and was taken into the headgear. (Scot.).	*Mining*
Whole-house cooling fan	A mechanical/electrical device used to pull air out of an interior space; usually located in the highest location of a building, in the ceiling, and venting to the attic or directly to the outside.	*Energy*
Wholesale Bulk Power	Very large electric sales for resale from generation sources to wholesale market participants and electricity marketers and brokers.	*Energy*
Wholesale Competition	A system whereby a distributor of power would have the option to buy its power from a variety of power producers, and the power producers would be able to compete to sell their power to a variety of distribution companies.	*Energy*
Wholesale Customer	Any entity that purchases electricity at the wholesale level, including municipal utilities, private utilities, rural electric cooperatives or government-owned utility districts. Wholesale customers purchase electricity from other wholesale suppliers to resell to their own retail customers.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wholesale electric power market	The purchase and sale of electricity from generators to resellers (retailers), along with the ancillary services needed to maintain reliability and power quality at the transmission level.	*Energy*
Wholesale Power Market	The purchase and sale of electricity from generators to resellers (who sell to retail customers) along with the ancillary services needed to maintain reliability and power quality at the transmission level.	*Energy*
Wholesale price	The rack sales price charged for No. 2 heating oil; that is, the price charged customers who purchase No. 2 heating oil free-on-board at a supplier's terminal and provide their own transportation for the product.	*Energy*
Wholesale sales	Energy supplied to other electric utilities, cooperatives, municipals, and Federal and state electric agencies for resale to ultimate consumers.	*Energy*
Wholesale Transition	The sale of electric power from an entity that generates electricity to a utility or other electric distribution system through a utility's transmission lines.	*Energy*
Wholesale transmission services	The transmission of electric energy sold, or to be sold, in the wholesale electric power market.	*Energy*
Wholesale Transmission Services	The transmission of electric energy sod, or to be sold, at wholesale in interstate commerce.	*Energy*
Wholesale wheeling	An arrangement in which electricity is transmitted from a generator to a utility through the transmission facilities of an intervening system.	*Energy*
Wi	Withheld to avoid disclosure of individual company data.	*Energy*
Wichet or Wicket	a working place in the form of a wide heading or board, often 60 to 70 feet wide. (N. Wales)—see also Stall.	*Mining*
Wickerbill	See Gurney Flap.	*NASCAR*
Wicket work	a pillar and stall system of working with pillars up to 15 yds. and stalls or wickets up to 24 yds. wide. Very similar to 'single road stall' working, the main difference being that two roadways were generally carried up each wicket. This method could only be used where there was a good roof (N. Wales).	*Mining*
Wicking	The vertical absorption of a liquid into a porous material by capillary forces.	*Oil Analysis*
Wid	wood, collective name for props, bars, chocks, sprags etc. (Scot.).	*Mining*
Wid road	a road used primarily for transporting materials. (Scot.).	*Mining*
Wide bank system	an old method of working used in South Yorkshire. A series of short stalls or banks, 7 to 8 yds. wide with a small pillar 3 to 4 ft. thick between each bank, would be driven to the rise. Each series of' banks would be about 60 yds. wide. Also known as 'wide work'.	*Mining*
Wide-area monitoring system (WAMS)	WAMS is an advanced early-warning technology for power grids that helps operators prevent system instabilities and overloads, as well as cascade tripping that leads to power blackouts. It comprises a series of phasor measurement units, set up in strategic positions around the grid. These monitor stresses (loads and temperatures) on the power lines and send data back to a central control station via a GPS satellite link. This allows operators to identify problems at an early stage and prevent widespread disruption of the grid (ultimately rolling blackouts). WAMS is used in conjunction with phase shifting transformers to protect and stabilize power grids.	*Electrical*
Width	Measurement of the narrowest element of a bar code. Same as "X" dimension.	*Gears*
Width	The thickness of a lode measured at right angles to the dip.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wild	as applied to coal, blackband, shale etc., means an irregular and inferior seam. (Scot.).	*Mining*
Wild fire	an old miner's term for firedamp.	*Mining*
Wildcat	Well drilled in unproven territory. Denotes definition from CAODC	*Petroleum Drilling*
Wildcat Well	A well drilled in an unproven area. Also known as an exploration well.	*Petroleum Drilling*
Wildcat Well	An exploratory well being drilled in unproven territory, that is, in a horizon from which there is no production in the general area.	*Petroleum Drilling*
Wildcat well	A well drilled in an unproven area. Also known as an "exploration well". [The term comes from exploration wells in West Texas in the 1920s. Wildcats were abundant in the locality, and those unlucky enough to be shot were hung from oil derricks.]	*Petroleum Drilling*
WILDLIFE	A broad term that includes non domesticated vertebrates, especially mammals, birds, and fish.	*Forestry*
WILDLIFE MIXTURE	A mixture of seed such as lespedeza, cowpea, and soybeans that is beneficial to wildlife.	*Forestry*
WILT	A common symptom of disease due to a loss of turgor and resulting in subsequent drooping and collapse of the foliage or succulent tissues.	*Forestry*
Wilting Point	The soil-moisture content below which plants are unable to withdraw soil moisture.	*Petroleum Engineering*
Wimble	an auger-like drilling tool used for boring in shales.	*Mining*
Win	A seam of coal is 'won' when a shaft being sunk or a drift being driven reaches the seam; or to extract coal by mining (winning the coal); or to open out a district which has been cut off by a fault or some other barrier.	*Mining*
Wind	to raise coal etc. by means of a winding engine; or a single journey of a cage in the shaft; or the ventilation current circulating in a mine.	*Mining*
Wind bearing	Symbols: B sub W; Typical Units: rad, deg.	*Aeronautical Engineering*
Wind bore	the bottom pipe of a shaft 'pumping tree', which has a rounded end perforated with holes, It rests on the ground (base of the shaft) standing in water.	*Mining*
Wind energy	Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.	*Energy*
Wind Energy Conversion	A process that uses energy from the wind and converts it into mechanical energy and then electricity.	*Energy*
Wind energy conversion system (WECS) or device	An apparatus for converting the energy available in the wind to mechanical energy that can be used to power machinery (grain mills, water pumps) and to operate an electrical generator.	*Energy*
Wind farm	See Wind power plant.	*Energy*
Wind gate or Windway	an underground roadway used specifically for ventilation.	*Mining*
Wind holes	ventilation shafts, often sunk well away from the main colliery shaft, to provide extra ventilation to the mine. (N. East).	*Mining*
Wind power plant	A group of wind turbines interconnected to a common utility system through a system of transformers, distribution lines, and (usually) one substation. Operation, control, and maintenance functions are often centralized through a network of computerized monitoring systems, supplemented by visual inspection. This is a term commonly used in the United States. In Europe, it is called a generating station.	*Energy*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wind road or wind way	a ventilation road underground.	*Mining*
Wind speed	Symbols: V sub W; Typical Units: kt, ft/s; Dimensions: Length/Time.	*Aeronautical Engineering*
Wind turbine	Wind energy conversion device that produces electricity; typically three blades rotating about a horizontal axis and positioned up-wind of the supporting tower.	*Energy*
Windblown coal	see Set Coal and Winded coal (N. Staffs.).	*Mining*
Winded coal	coal which has lost its gas.	*Mining*
Winder	the engine that raises or lowers the cage in the shaft; or the man who operates the winding engine.	*Mining*
Winders or Winding man	a person who operates the winding engine. Also called 'winding enginemen'.	*Mining*
Winding	the process of moving the cages or skips up and down in the shaft.	*Mining*
Winding rope sheave	see Sheave	*Mining*
Windlass	A device, smaller than a whim, used to raise ore from a shaft.	*Mining*
Windless	a place in the mine where the air is bad or in short supply, also airless. (Derbys.).	*Mining*
Window	In computer graphics, a defined area in a system not bounded by any limits; unlimited "space" in graphics.	*Electrical*
windrow	a low, elongated row of material left uncovered to dry. Windrows are typically arranged in parallel.	*Chemical*
WINDTHROW	Trees uprooted by excessive wind.	*Forestry*
Windy driver	the man who drives a compressed air engine. (Wales).	*Mining*
Windy pick	a compressed air operated percussive pick.	*Mining*
Wing Unions	See Hammer Unions.	*Petroleum Engineering*
Winged pillar	a pillar which has been reduced in size. (Scot.).	*Mining*
Winning	The excavation, loading, and removal of coal or ore from the ground; winning follows development.	*Mining*
Winning headings	the main arterial roadways of the mine forming the main intakes and returns, main haulage roads and main travelling roads. Also called 'Main roads'.	*Mining*
Winter Peak	The greatest load on an electric system during any prescribed demand interval in the winter season or months.	*Energy*
winter wheat	Wheat that is planted in the fall and harvested the following summer. In areas where this practice may be followed, winter wheat normally is preferred because yields are higher than for spring wheat. In some areas with mild winters, spring wheat may be planted in the fall. Although produced during the winter, it differs from winter wheat in not having a requirement for cold temperatures to produce seed.	*Agriculture*
Winze	An internal shaft.	*Mining*
Winze	Secondary or tertiary vertical or near-vertical opening sunk from a point inside a mine for the purpose of connecting with a lower level or of exploring the ground for a limited depth below a level.	*Mining*
WINZE	A vertical or inclined opening sunk from a point inside a mine. Similar to a shaft, but the latter starts at the surface.	*Mining*
Winze or Wizen	A shaft sunk from one level to the other.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
WIP Turn Rate	A measure of the speed at which work-in-process moves through a plant. Typically calculated by dividing the value of total annual shipments at plant cost (for the most recent full year) by the average WIP value at plant cost.	*Maintenance*
Wire	the haulage rope. (Wales).	*Mining*
Wire (Round)	A single, continuous length of metal, with a circular cross-section that is cold-drawn from rod.	*Wire Rope & Cable*
Wire Drawing	A form of erosion on a valve seat caused by high-velocity flow. It appears in the form of smooth grooves, as though cut by wire.	*Industrial Engineering*
Wire Gage	Any of several standard systems for designating wire sizes. As an example, see American Wire Gage.	*Electrical*
Wire Rope	A plurality of wire strands helically laid about an axis.	*Wire Rope & Cable*
Wire rope	A steel wire rope used for winding in shafts and underground haulages. Wire ropes are made from medium carbon steels. Various constructions of wire rope are designated by the number of strands in the rope and the number of wires in each strand. The following are some common terms encountered: airplane strand; cable laid rope; cane rope; elevator rope; extra-flexible hoisting rope; flat rope; flattened-strand rope; guy rope; guy strand; hand rope; haulage rope; hawser; hoisting rope; lang lay rope; lay; left lay rope; left twist; nonspinning rope; regular lay; reverse-laid rope; rheostat rope; right lay; right twist; running rope; special flexible hoisting rope; standing rope; towing hawser; transmission rope.	*Mining*
Wire Spraying	A thermal spray process whereby the supply for the coating material is fed into the gun in the form of a continuous wire.	*Paint and Coatings*
Wire Strand Core (WSC)	A wire strand used as the axial member of a wire rope. Alberts Lay: An old, rarely used term for lang lay.	*Wire Rope & Cable*
Wire Thread Insert	A threaded insert that is typically used for tapped hole repair or to improve the thread stripping strength of softer metals such as zinc and aluminum. The inserts are assembled into a previously tapped hole using a special driving tool. A thread locking compound is frequently used to secure the insert if the assembly is subject to vibration.	*Maintenance*
Wireless	In maintenance context, wireless units are defined wireless when they require neither power nor other data wiring. For example, wireless condition monitoring is applied where sensor and communication/analysis module cannot be located at the same place.	*Maintenance*
WIRELESS HART MODULE	A wireless adaptor used in conjunction with digital positioners, particularly in wired analog (4-20mA) systems. The module uses HART communication to extract from the positioner diagnostics and process data that would otherwise be trapped in a wired analog system.	*Mechanical*
Wires Charge	A broad term which refers to charges levied on power suppliers or their customers for the use of the transmission or distribution wires.	*Energy*
WITCHES' BROOM	A massed proliferation of the branches of a woody plant.	*Forestry*
with small, spirited Welsh Ponies. Ninety-five percent of all Hackneys in the United States are ponies	with small, spirited Welsh Ponies. Ninety-five percent of all Hackneys in the United States are ponies.	*Agriculture*
Withdrawal	Water removed from a surface or groundwater source for use.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Within-laboratory precision	Precision over a defined time and operators, calibration and reagents may vary within the same facility and using the same equipment. NOTE: Formerly, the term total precision was used. [CLSI EP15-A2]	*Quality*
Within-run imprecision	The random error observable within the time period of a single analytical run.	*Quality*
Witness post	A claim post placed on a claim line when it cannot be placed in the corner of a claim because of water or difficult terrain.	*Mining*
WN	'Weld Neck' the beveled neck of a Flange prepared for welding to pipe. (Refer to WNRF and UNRTJ below)	*Petroleum Engineering*
WNRF	(RFWN) when applied to flanges, this means: Weld Neck Raised Face.	*Petroleum Engineering*
WNRTJ	(RTJWN) when applied to flanges, this means: Weld Neck Ring Type Joint.	*Petroleum Engineering*
WOBBLE PLATE	A rotating canted plate in an axial type piston pump which pushes the pistons into their bores as it "wobbles."	*Mechanical, Process, and Operations*
WOG	Water-oil-gas - A rating designation generally used for small valves chiefly in low ratings. Indicates maximum working pressure at ambient + 32° F to +100° F. Also called Nonshock Rating.	*General Mechanical*
WOG	(Water – Oil – Gas) - Used in connection with a pressure rating. Thus - 100 WOG indicates the rated pressure is 100 psi in water, oil, or gas service, at normal ambient temperatures.	*Mechanical*
Wood	A natural, fiber reinforced composite.	*Material Process*
Wood and Water leaders	boys who carry props and wood to the various parts of the pit and also remove water from the horseways and other parts of the pit and assist the deputies. (N. East).	*Mining*
Wood chain	a winding chain used in South Staffordshire, which was five flat iron links in width with small blocks of hard wood filling the spaces between the links.	*Mining*
Wood coal	coal with a fibrous or woody appearance.	*Mining*
Wood conversion to Btu	Converting cords of wood into a Btu equivalent is an imprecise procedure. The number of cords each household reports having burned is in exact, even with the more precise drawings provided, because the estimate requires the respondent to add up the use of wood over a 12-month period during which wood may have been added to the supply as well as removed. Besides errors of memory inherent in this task, the estimates are subject to problems in definition and perception of what a cord is. The nominal cord as delivered to a suburban residential buyer may differ from the dimensions of the standard cord. This difference is possible because wood is most often cut in lengths that are longer than what makes a third of a cord (16 inches) and shorter than what makes a half cord (24 inches).	*Energy*
Wood energy	Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, saw dust, forest residues, charcoal, pulp waste, and spent pulping liquor.	*Energy*
Wood flour	Finely ground wood, usually spruce or pine, used as a filler in plastics molding.	*Material Process*
Wood pellets	Saw dust compressed into uniform diameter pellets to be burned in a heating stove.	*Energy*
Wood pulp	Wood from which the noncellulosic constituents have been more or less completely separated used in the manufacture of paper and as a source of cellulose for the manufacture of derivatives.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Woodmeal	Wood flour filler.	*Material Process*
Wood-rosin-colophony	An amorphous solid resin extracted from longleaf pine wood, m.p. 70°-85 °C (158°-185 °F).	*Material Process*
Wool	sandy shale or shaley flagstone with irregular curly bedding. (Lancs.).	*Mining*
Word	Number of bits treated as a single unit by the CPU. In an 8-bit machine, the word length is 8 bits; in a sixteen bit machine, it is 16 bits.	*General*
Word, Computer	A group of bits treated as a unit and capable of being stored in one computer location. Some common word lengths are 8 bits, 16 bits, and 32 bits.	*Electrical Engineering*
WORK	Exerting a force through a definite distance. Work is measured in units of force multiplied by distance; for example, pound-foot.	*Mechanical, Process, and Operations*
Work box	a box or tub for transporting coal. (Leics.).	*Mining*
Work ethic	qualities of character believed to be promoted by work	*Agriculture*
Work Hardening	The increased stiffness and brittleness accompanying plastic deformation of metal.	*Electrical*
Work home	another phrase meaning 'to work on retreat'.	*Mining*
Work Order	The Prime Document Used By The Maintenance Function To Manage Maintenance Tasks. It May Include Such Information As A Description Of The Work Required, The Task Priority, The Job Procedure To Be Followed, The Parts, Materials, Tools And Equipment Required To Complete The Job, The Labor Hours, Costs And Materials Consumed In Completing The Task, As Well As Key Information On Failure Causes, What Work Was Performed Etc.	*Management*
Work Order (WO)	Written authorization to proceed with a repair or other activity to preserve a building or asset. Sometimes referred to as a Job Card.	*Maintenance*
Work Overs	Operations on a producing well to restore or increase production. A typical work over is cleaning out a well that has sanded up.	*Petroleum Drilling*
Work Penetration	The penetration of a sample of lubricating grease immediately after it has been brought to 77F and then subjected to 60 stokes in a standard grease worker. This procedure and the standard grease worker are described in ASTM Method D 217.	*Lubrication*
Work Request	A Formal request to have work done. Work requests are usually tie/date stamped.	*Maintenance*
Worked out	a term applied to an area or mine from where all the economic coal has been extracted.	*Mining*
Working	When a coal seam is being squeezed by pressure from roof and floor, it emits creaking noises and is said to be "working". This often serves as a warning to the miners that additional support is needed.	*Mining*
Working capital	The liquid resources a company has to meet day-to-day expenses of operation; defined as the excess of current assets over current liabilities.	*Mining*
Working Depth	The depth of engagement of two gears, that is, the sum of their addendums. The standard working distance is the depth to which a tooth extends into the tooth space of a mating gear when the center distance is standard.	*Gears*
Working dust	see 'Holing Dirt' (N. Staffs.).	*Mining*
Working face	Any place in a mine where material is extracted during a mining cycle.	*Mining*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Working gas	The quantity of natural gas in the reservoir that is in addition to the cushion or base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season. Volumes of working gas are reported in thousand cubic feet at standard temperature and pressure.	*Energy*
Working gas capacity	The amount of total natural gas storage capacity that can used to store natural gas available for withdrawal.	*Energy*
Working interest	An interest in a mineral property that entitles the owner of that interest to all of share of the mineral production from the property, usually subject to a royalty. A working interest permits the owner to explore, develop, and operate the property. The working-interest owner bears the costs of exploration, development, and operation of the property and, in return, is entitled to a share of the mineral production from the property or to a share of the proceeds there from. It may be assigned to another party in whole or in part, or it may be divided into other special property interests.	*Energy*
Working place	From the outby side of the last open crosscut to the face.	*Mining*
Working pressure	The pressure (pounds per square inch) at which a valve is designed to operate.	*General Mechanical*
Working pressure	The pressure (pounds per square inch) at which a valve is designed to operate.	*Mechanical*
Working range	Temperature range in which glass product shapes are formed (corresponding to viscosity	*Material Process*
Working range	The range in which glass product shapes are formed (corresponding to viscosity range of 10^4 to 10^8 P).	*Material Process*
Working section	From the faces to the point where coal is loaded onto belts or rail cars to begin its trip to the outside.	*Mining*
Working Standard	A standard of unit measurement calibrated from either a primary or secondary standard which is used to calibrate other devices or make comparison measurements.	*General*
Working storage capacity	The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).	*Energy*
Workings	The entire system of openings in a mine for the purpose of exploitation.	*Mining*
Work-In-Process inventory (WIP)	The amount or value of all materials, components, and subassemblies representing partially completed production; anything between the raw material/purchased component stage and finished-goods stage.	*Maintenance*
Workload	The Amount Of Labor Hours Required To Carry Out Specified Maintenance Tasks.	*Management*
Workover	Remedial work to the equipment within a well, the well pipework, or relating to attempts to increase the rate of flow.	*Petroleum Drilling*
Workover	Remedial work to the equipment within a well, the well pipework, or relating to attempts to increase the rate of flow.	*Petroleum Drilling*
Workplace Safety	A responsibility for ensuring the health and well-being of the populace of a workplace. This populace includes company employees, on-site workers not employed by the company, vendors, visitors, etc.	*Reliability Engineering*
World FIP	The fieldbus adopted in France. FIP stands for factory instrument protocol. The Profibus organization is seeking to integrate this with the common European Profibus PA protocol	*Control Engineering*

Please see the Appendix for further illustration

Term	Definition	Industry
World Geodetic Survey 1972 (WGS72)	A standard model for computing earth data.	*Aeronautical Engineering*
World-class manufacturer	A somewhat arbitrary designation that can be supported by performance results related to various manufacturing metrics. (World-class metrics may vary from one industry to another.) Typically, it denotes "best-in-class" producers on a worldwide basis. In the broadest sense, world-class manufacturers are those perceived to deliver the greatest value at a given price level.	*Quality*
Worm	An inexperienced oilfield worker that is not yet a "hand".	*Petroleum Drilling*
Worm Gear	A gear that is in the form of a screw. The screw thread engages the teeth on a worm wheel. When rotated, the worm pulls or pushes the wheel, causing rotation.	*Lubrication*
WORM GEARS	Gears used to transmit motion or power between right angle shafts when a high-ratio reduction is necessary. The worm is the small gear which drives the larger ring gear. Worm threads resemble screw threads and are available in various leads and pitches.	*Mechanical*
Worm gears	A gear set in which the input shaft is offset from and perpendicular to the output shaft, and driving gear is very small and perpendicular to the driven gear. Worm gear operators are used on ball valves.	*General Mechanical*
Worm	A new oilfield employee with little or no experience under their belt.	*Petroleum Drilling*
Woven fabric	Composite reinforcing fiber configuration.	*Material Process*
WOW	Weight on wheels.	*Aeronautical Engineering*
WP	Working Pressure - The pressure (pounds per square inch) at which a valve is designed to operate. Same as "operating pressure rating."	*Mechanical*
Wrap test	A test to send data to a device having it sent back unaltered.	*Aeronautical Engineering*
Wreaths	four short lengths of hemp rope which were looped around the legs of a pony and fastened together over its back to suspend it from the winding rope when lowering or raising the animal in the shaft. (Leics.).	*Mining*
Wrench Time	A primary measure of workforce efficiency (craft utilization), and of the effectiveness of planning and scheduling functions. It represents time spent actually "performing" maintenance. Surveys consistently show that wrench time (craft utilization) within a reactive, fire fighting maintenance environment is within the range of 30 to 40 percent. A proper planning in the maintenance organization can greatly improve the efficiency of the maintenance execution, generally specified as the wrench time.	*Maintenance*
Wrinkle	A surface imperfection in plastic films that has the appearance of a crease or wrinkle.	*Engineering Physics*
Write	To record data in a storage device or on a data medium.	*Electronic Process*
Writeoffs	Amounts deducted from a company's reported profit for depreciation or preproduction costs. Writeoffs are not an out-of-pocket expense, but reduce the amount of taxable profit.	*Mining*
Wrong thing	see 'Ronk thing' (N. Staffs.).	*Mining*
Wrought alloy	Metal alloy that has been rolled or forged into a final, relatively simple shape following an initial casting operation.	*Material Process*
Wrought Iron	Iron refined in a plastic state in a puddling furnace. It is characterized by the presence of about 3 percent of slag irregularly mixed with pure iron and about 0.5 percent carbon and other elements in solution.	*Maintenance and Repair*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Wrought Pipe	The term wrought pipe refers to both wrought steel and wrought iron. Wrought in this sense means "worked," as in the process of forming furnace-welded pipe from skelp or seamless pipe from plates or billets. The expression wrought pipe is thus used as a distinction from cast pipe. Wrought pipe in this sense should not be confused with wrought-iron pipe, which is only one variety of wrought pipe. When wrought-iron pipe is referred to, it should be designated by its complete name.	*Maintenance and Repair*
Wrought process	Rolling or forging of an alloy into a final, relatively simple shape following an initial casting step.	*Material Process*
WSIM	water separation index modified	*Petro-Chemical Abbreviations*
WSPA	Western States Petroleum Association	*Petro-Chemical Abbreviations*
WSSD	World Summit on Sustainable Development	*Petro-Chemical Abbreviations*
WTI	West Texas Intermediate	*Energy*
WTI	West Texas Intermediate is a grade of crude oil, along with LLS (Light Louisiana Sweet) and Brent Crude. Eagle Ford Shale oil typically trades at a price somewhere between WTI and LLS. WTI prices do not necessarily reflect the quality of crude oil, but rather reflect the "landlocked" nature of oil which is produced in areas such as the Permian Basin, far from coastal shipping and refining areas.	*Petroleum Drilling*
WYPT	Way-point.	*Aeronautical Engineering*
X	X	*Material Process*
X Dimension	Measurement of the narrowest element of a bar code. Same as width.	*Gears*
Xanthate	Xanthogenate, a salt of xanthic acid of the general type MO CS Set or MO CSSR, where M is a metal and R an alkyl radical.	*Material Process*
Xenolith	A fragment of country rock enclosed in an intrusive rock.	*Mining*
Xeriscaping	An environmentally-friendly method of landscaping which uses a variety of indigenous and drought-tolerant plants, shrubs, and ground cover adapted to the local area.	*Petroleum Engineering*
XH	Extra Heavy. See Extra Strong (XS).	*Petroleum Engineering*
X-radiation	The portion of the electromagnetic spectrum with a wavelength on the order of 1 nanometer. X-ray photons are produced by inner orbital electron transitions.	*Material Process*
X-radiography	A type of nondestructive testing in which defects are inspected using the attenuation of x-rays.	*Material Process*
X-RAY	See "Radiographic Inspection"	*Mechanical*
X-ray diffraction	The reinforced scattering of x-ray photons by an atomic structure. Bragg's law indicates the structural information available from this phenomenon.	*Material Process*
X-ray fluoroscence (XRF)	Chemical analysis by the use of characteristic x-ray photons produced by exposure to x-ray photons.	*Material Process*

Please see the Appendix for further illustration

Term	Definition	*Industry*
X-ray photoelectron spectroscopy (XPS)	X-ray photoelectron spectroscopy (XPS)	*Material Process*
XS	Extra Strong, a designation of pipe wall thickness The same as schedule 80 up to 200NB (8″), but schedule 80 is heavier over 200NB (8″).	*Petroleum Engineering*
XTKD	Crosstrack deviation.	*Aeronautical Engineering*
XTKR	Crosstrack deviation rate	*Aeronautical Engineering*
XXH	Double Extra Heavy – See Double Extra Strong (XXS).	*Petroleum Engineering*
XXS	Double Extra Strong, a designation of pipe wall thickness	*Petroleum Engineering*
XXXH	Triple Extra Heavy. See Triple Extra Strong (XXXS).	*Petroleum Engineering*
XXXS	Triple Extra Strong, a designation of pipe wall thickness	*Petroleum Engineering*
Xylan	Fluoropolymer Coating, typically used on stud bolts – off shore specification.	*Petroleum Engineering*
Xylene (C6H4(CH3)2)	One of tree isomeric liquid hydrocarbons (o-, m-, p-) immiscible with water, occurring in coal tar, used as solvent. Colorless liquid, hydrocarbon.	*Material Process*
Xylene ($C_6H_4(CH_3)_2$)	Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.	*Energy*
Xylenol	Any of six isomeric crystalline compounds of the phenol type, (CH3)2C6H3OH, derived from the xylenes and found in coal tar.	*Material Process*
Xylol	Xylene, especially commercial.	*Material Process*
XYZ	A standard aircraft coordinate frame and sign convention, where nose, right wing, and down are positive X, Y, and Z, respectively; often used as subscripts; Compare: east-north-up.	*Aeronautical Engineering*
Y	Y	*Electronic Process*
Yakker	A pit yakker. A term once used by pitmen to describe themselves. It was also used by others in the way of an insult. Similar to calling a farm worker a country yokel.	*Mining*
Yankee bonnet	a canvas bonnet with metal lamp-holder used before the introduction of the safety helmet. (Scots.).	*Mining*
Yark	to jerk the winding or haulage rope. (Derbys.).	*Mining*
Yarn	A generic term for an assemblage of fibers or filaments, either natural or manufactured, twisted or laid together to form a continuous strand suitable for use in weaving, knitting or otherwise intertwining to form textile fabrics. Varieties include single yarn, ply yarn, cord, twine, sewing thread, etc..	*Material Process*
Yaw	Angle of heading; Symbols: psi, Psi; Typical Units: rad, deg.	*Aeronautical Engineering*
Yaw rate	Rate of change of yaw; time derivative of yaw; Symbols: r; Symbols: psi dot; Typical Units: rad/s, deg/s; Dimensions: 1/Time.	*Aeronautical Engineering*
Year Book of Labor Statistics	annual publication of the International Labour Office which contains a wide variety of statistical data.	*Industrial Relations*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Yed	a head or heading. (Mids.).	*Mining*
Yellow Dog Contract	an agreement (either written or oral) between an employer and a worker which provides that as a condition of employment that worker will refrain from joining a union, or if he is a member, will leave the organization.	*Industrial Relations*
Yellow flag	If displayed by a corner worker, this means the subsequent section of the track has a problem that requires that drivers slow down and not make any passes. Usually this is because a car has crashed and is in a dangerous position. If the starter displays two yellow flags, it signifies a full-course caution, which prompts the pace car to enter the track and lead the cars around at reduced speed.	*NASCAR*
Yellowcake	A natural uranium concentrate that takes its name from its color and texture. Yellowcake typically contains 70 to 90 percent U_3O_8 (uranium oxide) by weight. It is used as feedstock for uranium fuel enrichment and fuel pellet fabrication.	*Energy*
Yellowness Index	A measure of the tendency of plastics to turn yellow upon long-term exposure to light or heat.	*Engineering Physics*
Yep hole	the place where landsale coal was stored in the pit yard. (Bacup, Lancs.).	*Mining*
Yield	the amount of a crop produced in a given time or from a given place	*Agriculture*
Yield Controlled Tightening	A fastener tightening method which allows a fastener to be tightened to yield. The angle of rotation of the fastener is measured relative to the applied torque, yield being assessed when the slope of the relationship changes to below a certain value. Sometimes called joint controlled tightening.	*Maintenance*
Yield improvement	Defined as the percentage reduction in rejects within a five-year period. Example: If yield improves from 95% to 98%, that means rejects have been reduced by 60% - from 5% to 2%. Therefore, yield improvement equals 60%.	*Quality*
Yield point	See upper yield point.	*Material Process*
Yield Point	In tensile testing, yield point is the first point on the stress-strain curve at which an increase in strain occurs without an increase in stress. This is the point of which permanent deformation of the stressed specimen begins to take place.	*Engineering Physics*
Yield Point (Yield Value or Yield Stress)	The minimum shear stress producing flow of a plastic material.	*Lubrication*
Yield Strain	A material deformed beyond its yield strain, no longer exhibits linear elastic behavior. See yield stress.	*Engineering Physics*
Yield Strength	The stress required to produce a very slight yet specified amount of plastic strain.	*Engineering Physics*
Yield Strength	The lowest stress at which a material undergoes plastic deformation. Below this stress, the material is elastic; above it, viscous.	*Electrical*
Yield Strength 36K	36,000 psi, minimum Yield Strength for Material.	*Petroleum Engineering*
Yield Strength 45K	API Spec 6A abbreviation for 45,000 psi minimum yield strength Material. Typically used for welding flanges and fittings utilized in conjunction with carbon steel line pipe.	*Petroleum Engineering*
Yield Strength 60K	API Spec 6A abbreviation for 60,000 psi, minimum yield strength for Material, such as flanges, casing pipe, spools etc.	*Petroleum Engineering*
Yield Strength 75K	Denotes:- API Spec 6A 75,000 psi, minimum yield strength for Material.	*Petroleum Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Yield Stresses	A material loaded beyond its yield stress, no longer exhibits linear elastic behavior. Metals, particularly mild steel, generally have a very well defined yield stress compared to other materials. Yield stress is sometimes called yield strength.	*Engineering Physics*
Yield value	The lowest pressure at which a plastic will flow, at a specified temperature.	*Material Process*
Yield	The current annual dividend rate expressed as a percentage of the current market price of the stock.	*Mining*
YIG	Yttrium iron garnet, a ferromagnetic ceramic.	*Material Process*
Yoke	A flight control operated by pushing and pulling with hands in fixed-wing aircraft, primarily to control pitch (altitude) via the elevators; yoke is mounted on a column between the operator's legs, positioned much like a steering wheel in a car; yoke control is achieved by pushing and pulling the wheel to move the column (yoke) fore and aft.	*Aeronautical Engineering*
YOKE	That part of a gate valve which serves as a spacer between the bonnet and the operator or actuator	*Mechanical*
Yoke cue	A vertical flight director cue for fixed-wing aircraft, primarily to control altitude, by changing pitch; Compare: collective cue; Symbols: Gamma sub VERT; Typical Units: percent, in.	*Aeronautical Engineering*
Yokes	short lengths of timber placed in a shaft to support the pump trees. -see also Chogs.	*Mining*
Yoking	when two sets of wagons approaching each other on the same line come in to collision. (N. East).	*Mining*
Yolk coal or Yolks	a soft or free coal. Also called 'apple coal'. (Scot.).	*Mining*
Young Workers	individuals who have just entered the labor market and are either seeking employment are starting on their first jobs.	*Industrial Relations*
Young's Modulus	See Modulus of Elasticity the ratio of stress to strain when deformation is totally elastic.	*Engineering Physics*
Youngstown Sheet and Tube Company v. Sawyer	decision of the United States Supreme Court holding that the President has no power to order the seizure of the basic steel industry's plants during peacetime and in the absence of congressional authorization.	*Industrial Relations*
Youth Employment Opportunities Act of 1961	a law enacted to assist younger workers to find employment.	*Industrial Relations*
Youth Employment; President's Committee on	on November 15, 1961, the President appointed a special committee on youth employment for the purpose of formulating policies for education, training, and guidance, with particular reference to enlargement of employment opportunities for young people.	*Industrial Relations*
--Z--	--Z--	*Petroleum Drilling*
Z transform	A mathematical relationship to model a discrete function in the complex frequency domain (Z-plane); Z transforms are commonly used by systems engineers to describe avionics systems; Compare - continuous-time equation, difference equation, differential equation, discrete-time equation, Laplace transform, state-space model; See Also - first-order filter, second-order filter, unit functions.	*Aeronautical Engineering*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Zachariasen model	Visual definition of the random network theory.	*Material Process*
Zadeh, Lotfi	the inventor of Fuzzy sets; professor at the University of California, Berkeley. [Zadeh, Lotfi A. 1965. Fuzzy sets. Information and Control, vol. 8 (June): 338-353.]	*Petroleum Drilling*
Zanzibar	A very hard, fossil resin obtained from Zanzibar and formerly used extensively in the manufacture of high-grade varnishes.	*Material Process*
ZDDP	An antiwear additive found in many types of hydraulic and lubricating fluids. Zinc dialkyldithiophosphate.	*Lubrication*
ZDP/ZDTP	zinc dithiophosphate	*Petro-Chemical Abbreviations*
Zebra mule	Archaic term for offspring of a zebra and a donkey.	*Agriculture*
Zebrass	Offspring of a zebra and a donkey (ass).	*Agriculture*
Zebroid	Offspring of a zebra stallion and a horse mare.	*Agriculture*
Ze-donk	Offspring of a zebra and a donkey.	*Agriculture*
Zein	Corn protein, used to produce protein-aldehyde plastics somewhat resembling casein plastics.	*Material Process*
Zero	Elevation For an elevated-zero range, the amount the measured variable zero is above the lower range-value. It may be expressed either in units of the measured variable or in percent of span.	*Process Control*
Zero Adjustment	The ability to adjust the display of a process or strain meter so that zero on the display corresponds to a non-zero signal, such as 4 mA, 10 mA, or 1 V dc. The adjustment range is normally expressed in counts.	*Electrical*
Zero Energy Building (ZEB)	An energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy.	*Energy*
Zero Offset	(1) The difference expressed in degrees between true zero and an indication given by a measuring instrument. (2) See Zero Suppression	*General Engineering*
Zero Point	The electrical zero point where zero millivolts would be displayed. Used in conjunction with the slope control to provide a narrower range calibration.	*General*
Zero Power Resistance	The resistance of a thermistor or RTD element with no power being dissipated.	*Electrical*
Zero Pressure Accumulation Conveyor	A type of conveyor designed to eliminate build-up of pressure between adjacent packages or cartons.	*Equipment*
Zero Shift	Any parallel shift of the input-output curve.	*Process Control*
Zero Suppression	The span of an indicator or chart recorder may be offset from zero (zero suppressed) such that neither limit of the span will be zero. For example, a temperature recorder which records a 100° span from 400° to 500° is said to have 400° zero suppression.	*Electrical*
Zero Suppression	For a suppressed-zero range, the amount the measured variable zero is below the lower range-value. It may be expressed either in units of the measured variable or in percent of span.	*Process Control*

Please see the Appendix for further illustration

Term	Definition	*Industry*
Zero Voltage Switching	The making or breaking of circuit timed such that the transition occurs when the voltage wave form crosses zero voltage; typically only found in solid state switching devices. Thermocouple Type Material (ANSI Symbol), J Iron/Constantan, K CHROMEGA®/ALOMEGA®, T Copper/Constantan, E CHROMEGA/Constantan, R Platinum/Platinum 13% Rhodium, S Platinum/Platinum 10% Rhodium, B Platinum 6% Rhodium/Platinum 30% Rhodium, G* Tungsten/Tungsten 26% Rhenium, C* Tungsten 5% Rhenium/Tungsten 26% Rhenium, D* Tungsten 3% Rhenium/Tungsten 25% Rhenium, *Not ANSI symbols	*Electrical*
Zero-G drift	The amount that a sensor's no-acceleration signal shifts over some temperature range.	*Reliability Engineering*
Zero-G output	The accelerometer output that is read when the sensor is not accelerating.	*Reliability Engineering*
Zero-to-peak	See peak, as in peak value. Half of the peak-to-peak value.	*Reliability Engineering*
ZEV	zero emission vehicle	*Petro-Chemical Abbreviations*
ZF	German gear manufacturer ZF Friedrichshafen (Zed F)	*Petro-Chemical Abbreviations*
Ziegler Catalysts	A large group of catalysts made by reacting a compound of a transition metal chosen from groups IV through VII of the periodic table with an alkyl, hydride, or other compound of a metal from groups I through III. A typical example is the reaction product of an aluminum alkyl with titanium tetrachloride or titanium trichcloride. These catalysts were first developed by the German scientist Karl Ziegler for the polymerization of ethylene. Subsequent work by G. Natta showed that these and similar catalysts are useful for preparing stereoregular polyolefins. Thus, the family of catalysts is sometimes called Ziegler-Natta catalysts.	*Metallurgy*
Zinc	major element found in the galvanizing kettle that provides both barrier and cathodic protection for steel	*Materials Process*
Zinc (ZDP)	Commonly used name for zinc dithiophosphate, an antiwear/oxidation inhibitor chemical.	*Lubrication*
Zinc (Zn)	Thermal spray coatings of zinc or zinc alloys (e.g., Zn/Al, Zn/Sn) provide galvanic corrosion protection.	*Paint and Coatings*
Zinc alloy	Metal alloy composed of predominantly zinc.	*Material Process*
Zinc ammonium chloride	typical component of the flux solution used in the cleaning phase of the galvanizing process	*Materials Process*
Zinc blende	Compound crystal structure.	*Process*
Zinc carbonate patina	relatively insoluble zinc carbonate layer that forms as the galvanized coating weathers, providing added corrosion protection and abrasion resistance	*Materials Process*
Zinc Electroplating	Zinc electroplating is a common way to protect threaded fasteners from the effects of corrosion. Zinc electroplating can be completed in acid chloride, alkaline or cyanide baths. Supplemental coatings are frequently applied to zinc electroplating. These coatings, such as zinc phosphate or chromate conversion, provide a protective passivation layer on the zinc which assists in reducing the corrosion rate.	*Maintenance*

Please see the Appendix for further illustration

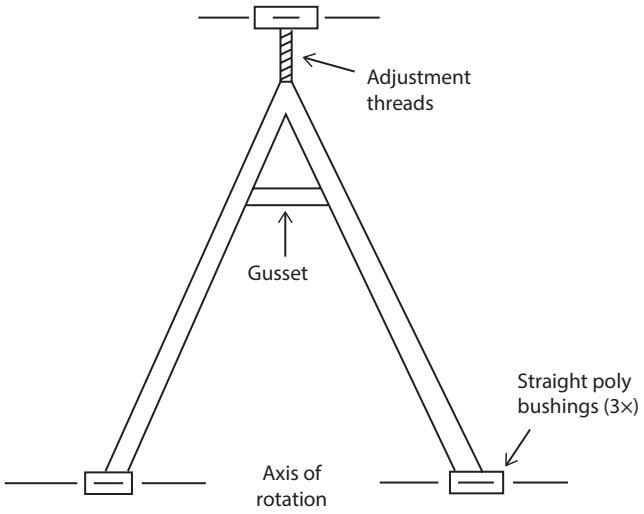
Term	Definition	*Industry*
Zinc Galvanizers' Dross	A grade of scrap that can either be top dross or bottom dross, generated at electro-galvanizing and continuous hot-dip plants serving the steel industry.	*Metallurgy*
Zinc hydroxide	corrosion product formed in response to the presence of moisture on galvanized articles	*Materials Process*
Zinc oxide	basic corrosion product formed almost instantaneously on freshly galvanized articles after withdrawal from the molten zinc metal	*Materials Process*
Zinc Oxide	An amorphous white or yellowish powder, used as a pigment in plastics. It is said to have the greatest ultra-violet light absorbing power of all commercially available pigments.	*Metallurgy*
Zinc oxide (ZnO)	White or yellowish amorphous powder. A white pigment and filler used in plastic and rubber compositions.	*Material Process*
Zinc Phosphate Conversion Coating	A zinc phosphate conversion coating is frequently added to zinc electroplated parts, such as bolt threads, to improve corrosion resistance. This type of chemical conversion coating provides a protective passivation layer on the zinc improving its corrosion resistance.	*Maintenance*
Zinc Plating	The electro-deposition of zinc or zinc alloys (e.g. Zn/Ni, Zn/Sn) to provide galvanic corrosion protection.	*Paint and Coatings*
Zinc solder	material used to touch-up and/or repair hot-dip galvanized surfaces	*Materials Process*
Zinc Stearate	A white powder used as a lubricant and antioxidant synergist.	*Metallurgy*
Zinc/Cobalt Alloy Electroplating	This coating is similar to zinc electroplating completed in an acid chloride bath - a small amount of cobalt (typically about 1%) is added to increase the plating speed.	*Maintenance*
Zinc-iron alloy layers	inner layers of the galvanized coating formed from interdiffusion reactions between iron in the base steel and molten zinc metal, (e.g. Delta, Gamma, Zeta)	*Materials Process*
Zinc-rich paint	(also called "cold galvanizing") material used to touch-up and or repair hot-dipped galvanized surfaces, providing barrier protection and some cathodic protection (if the concentration of zinc is above 94% in dry film thickness)	*Materials Process*
Zipper Frac	Also called "Simul-Frac". Adjacent wells are fraced either simultaneously or alternating, in sequence. By applying pressure on the formation in an adjacent well while the other is fraced, more impact is seen from the frac job on the desired rock.	*Petroleum Drilling*
Z-Mill	Common name for a Senzimir multiple-backup cluster mill used for cold-rolling stainless and carbon steel sheet or strip to very precise dimensions and fine finishes.	*Metallurgy*
Zone	An area of distinct mineralization.	*Mining*
ZONE LINE	Narrow brown or black lines in decayed or decaying wood.[1]	*Forestry*
Zone of Aeration	A region in the earth above the water table. Water in the zone of aeration is under atmospheric pressure and will not flow into a well.	*Petroleum Engineering*
Zone of Capture	Area surrounding a pump well encompassing all areas or features supplying groundwater recharge to the well.	*Petroleum Engineering*
Zone of confusion (ZOC)	A circular area centered at a TACAN station in which bearing is extremely noisy.	*Aeronautical Engineering*

Please see the Appendix for further illustration

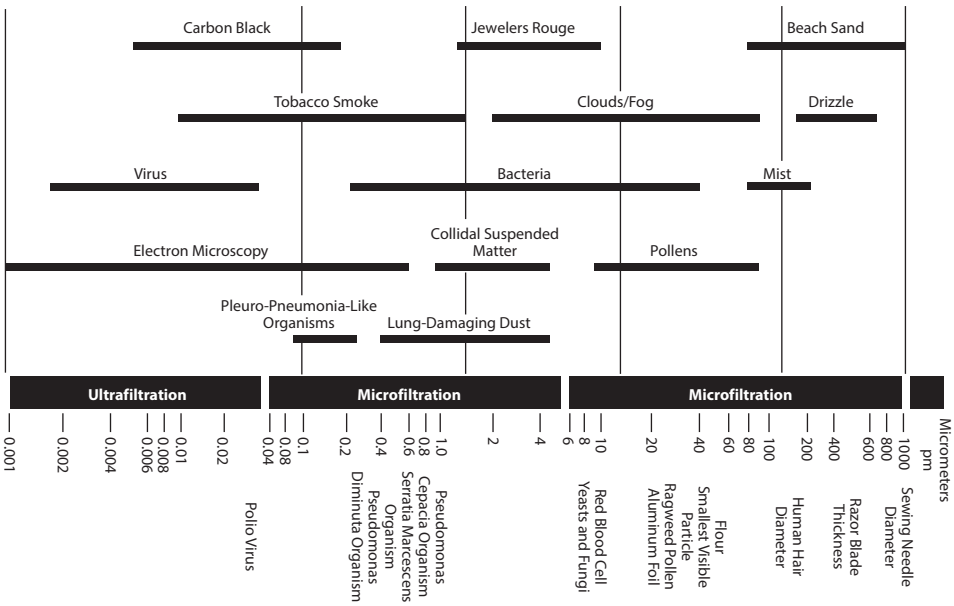
Term	Definition	*Industry*
Zone of Contribution	The area surrounding a pumping well encompassing all areas or features that supply groundwater recharge to the well.	*Petroleum Engineering*
Zone of Influence	The area surrounding a pump within which the water table or potentiometric surfaces have been changed due to groundwater withdrawal.	*Petroleum Engineering*
Zone of oxidation	The upper portion of an orebody that has been oxidized.	*Mining*
Zone of Saturation	The space below the water table in which all pore spaces are filled with water. Water in the zone of saturation is called groundwater.	*Petroleum Engineering*
Zone of Transport	The area surrounding a pump well, bounded by an isochrone and/or isoconcentration contour, through which a contaminant may travel and reach the well.	*Petroleum Engineering*
Zone refining	Technique for purifying materials by passing an induction coil along a bar of the material and using principles of phase equilibrium.	*Material Process*
Zone, Dead	A zone in which no value of the output exists.	*Process Control*
Zooming	sIn computer graphics, causing an object to appear smaller or larger by moving the window and specifying various window sizes.	*Electronic Process*
Zorse	A term sometimes applied to the offspring of a zebra stallion and a horse mare.	*Agriculture*
Z-plane	Discrete complex frequency plane; Z-plane is used in control systems engineering in the design of control laws See Also: Z transform. (Also an announcement that Tattoo would make to signal the arrival of some halfwits to Fantasy Island)	*Aeronautical Engineering*
z-score, z-value	A calculated number that tells how many standard deviations a control result is from its mean value, e.g., a control result of 112 on a material having a mean of 100 and a standard deviation of 5 has a z-score of +2.4, i.e., it is 2.4 standard deviations above its mean.	*Quality*
Zwicker loudness	A sound measurement methodology. Loudness is measured in linear units called sones as opposed to decibels.	*Reliability Engineering*

Please see the Appendix for further illustration

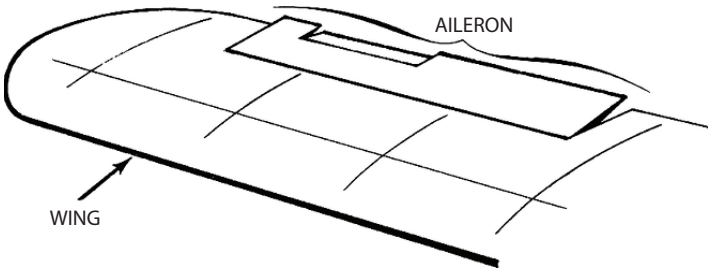
Appendices



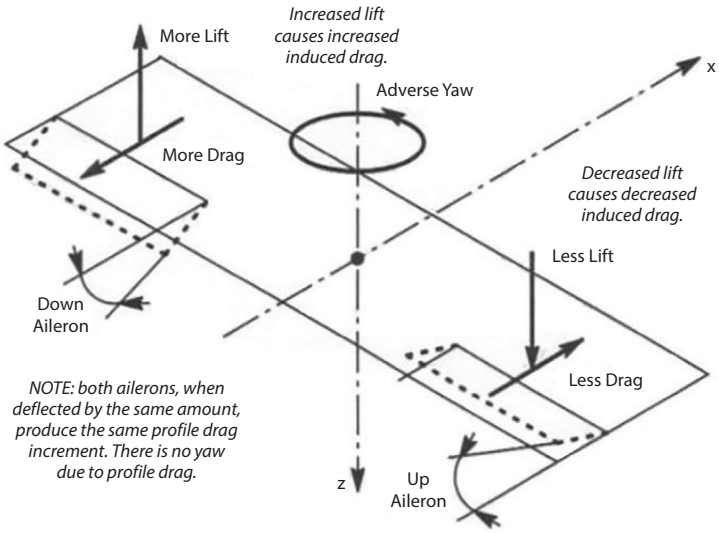
A-Arm



Absolute Filtration Rating Chart

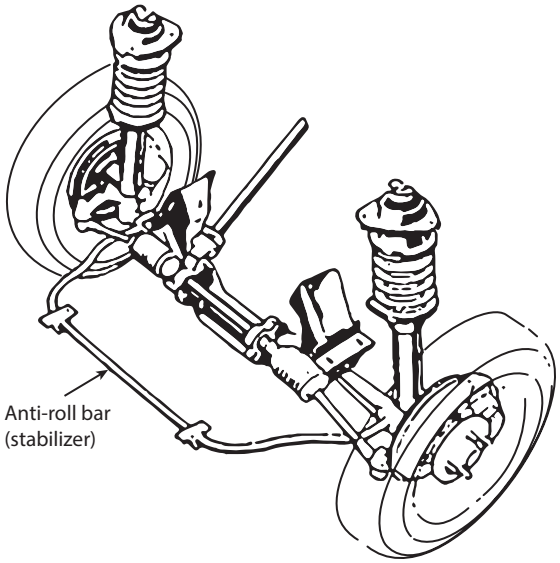


Aileron, Basic Configuration

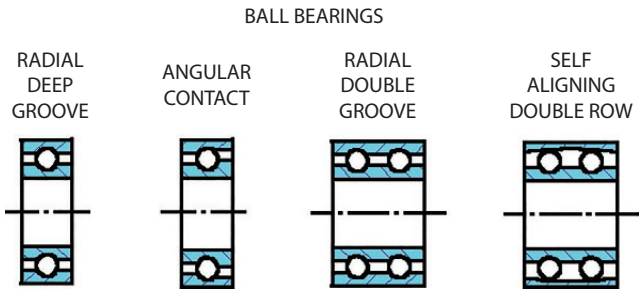


aileron

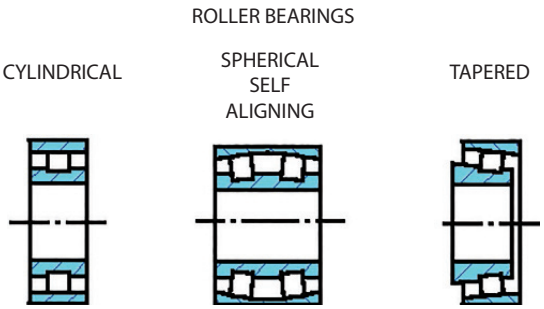
Location of a typical anti-roll bar on a McPherson strut suspension



Anti Roll Bar



bearin1



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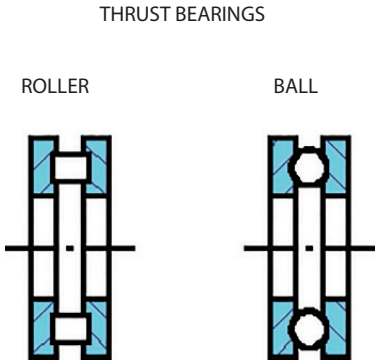

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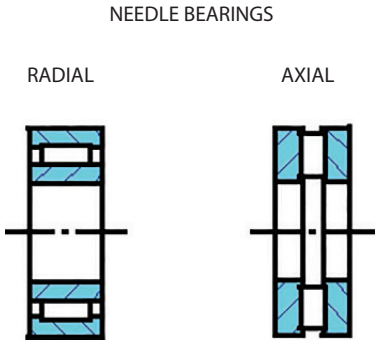

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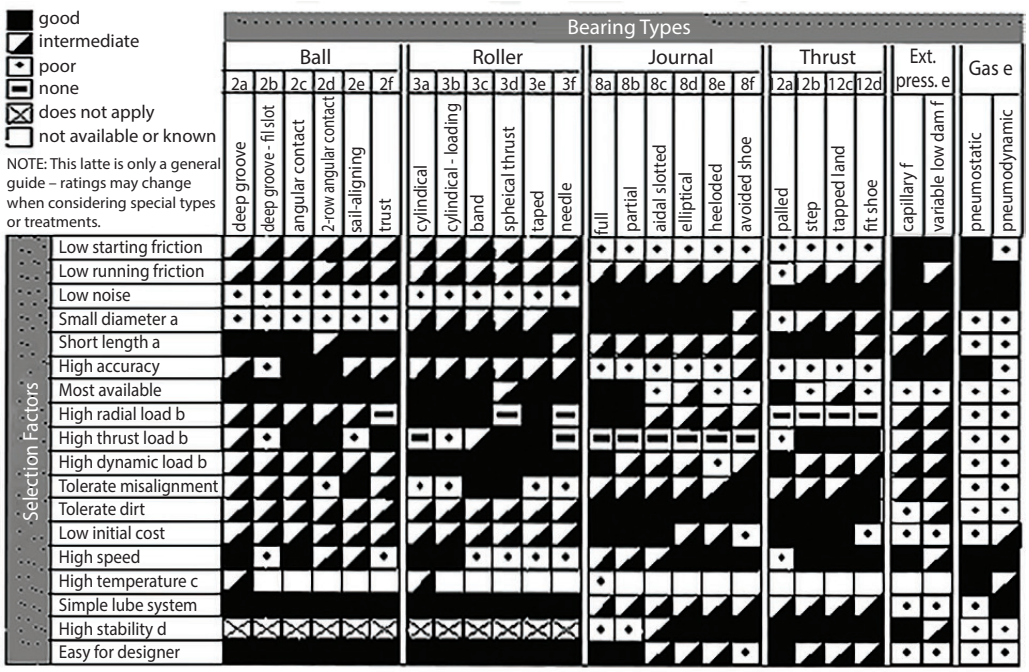
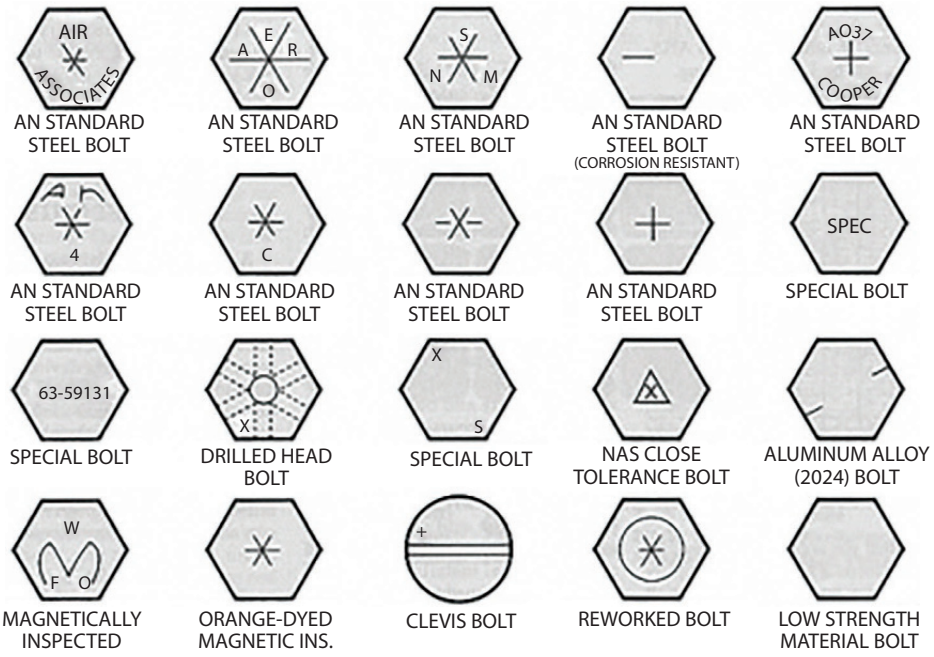


bearing_chart



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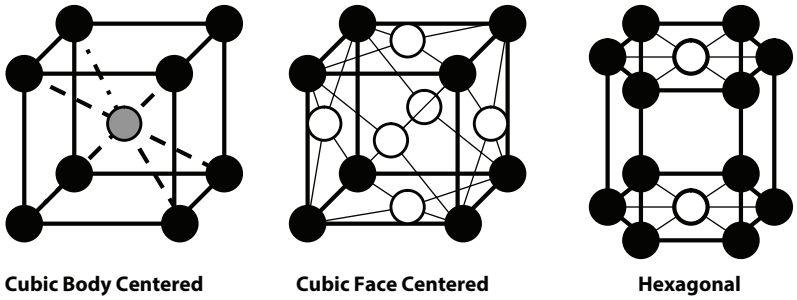
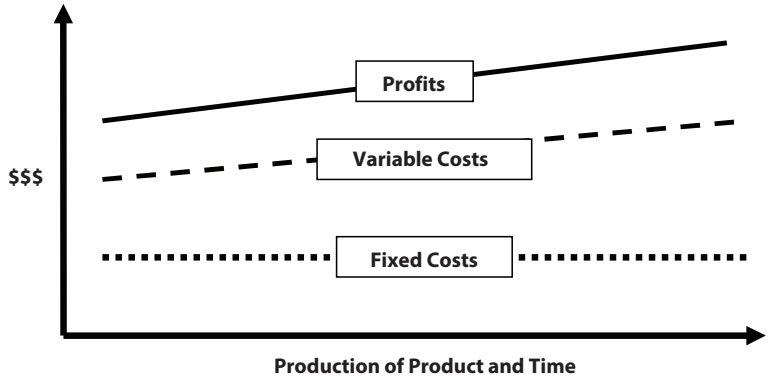
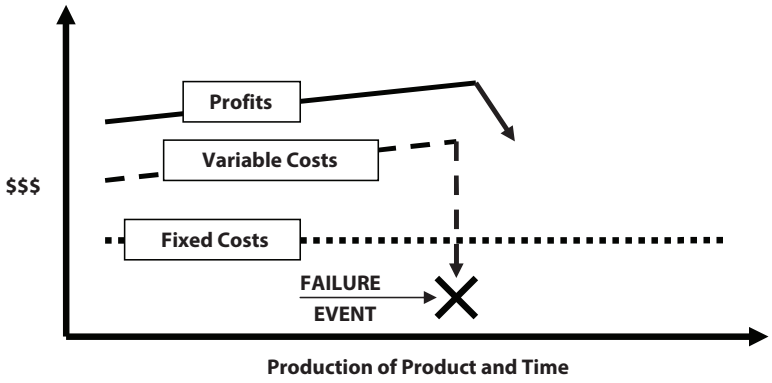


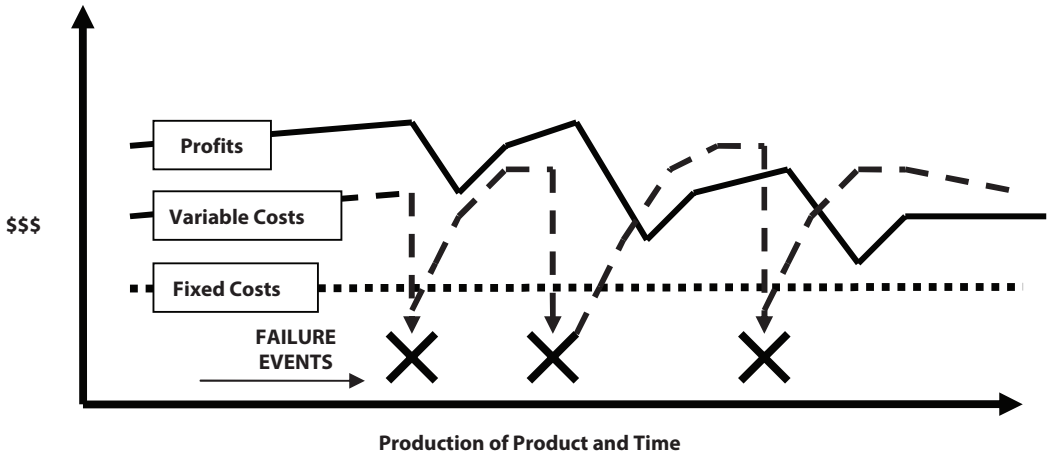
Chrystal Lattice Structures



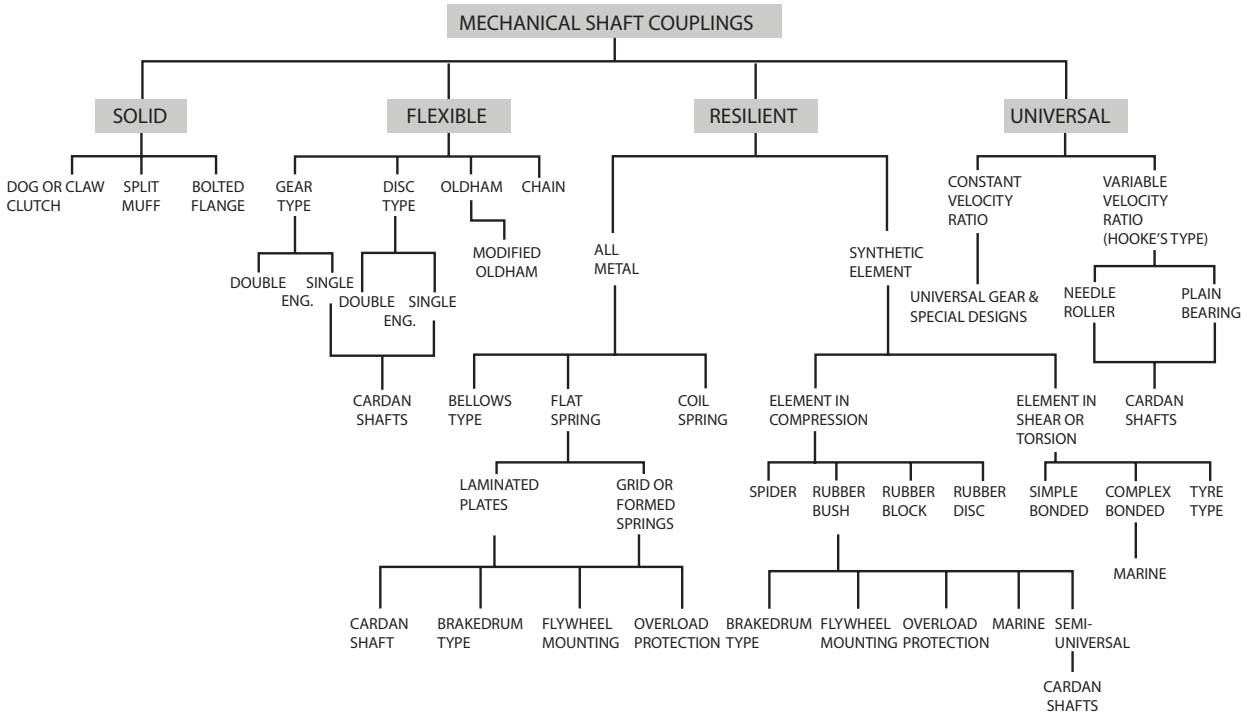
Common Cost Graph



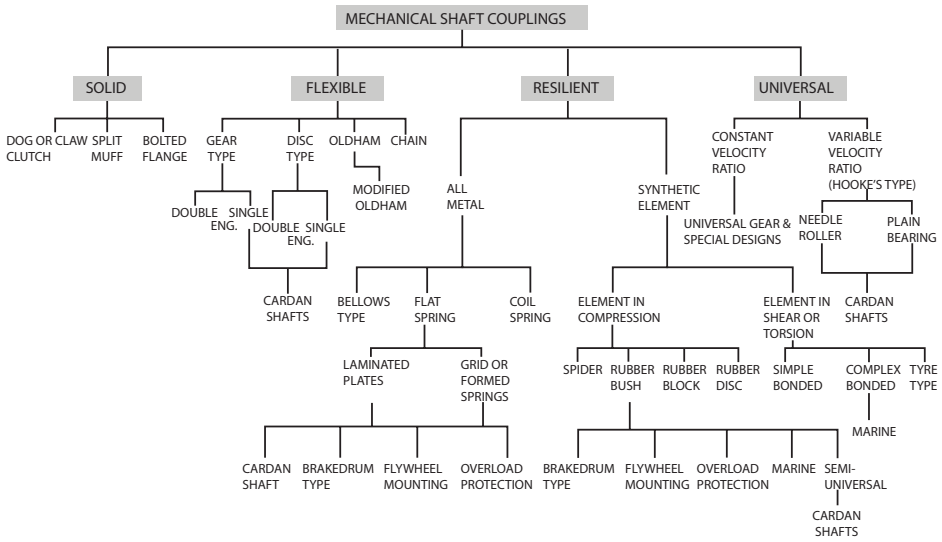
Cost of Failure



Cost of Repeated Failure



couplings



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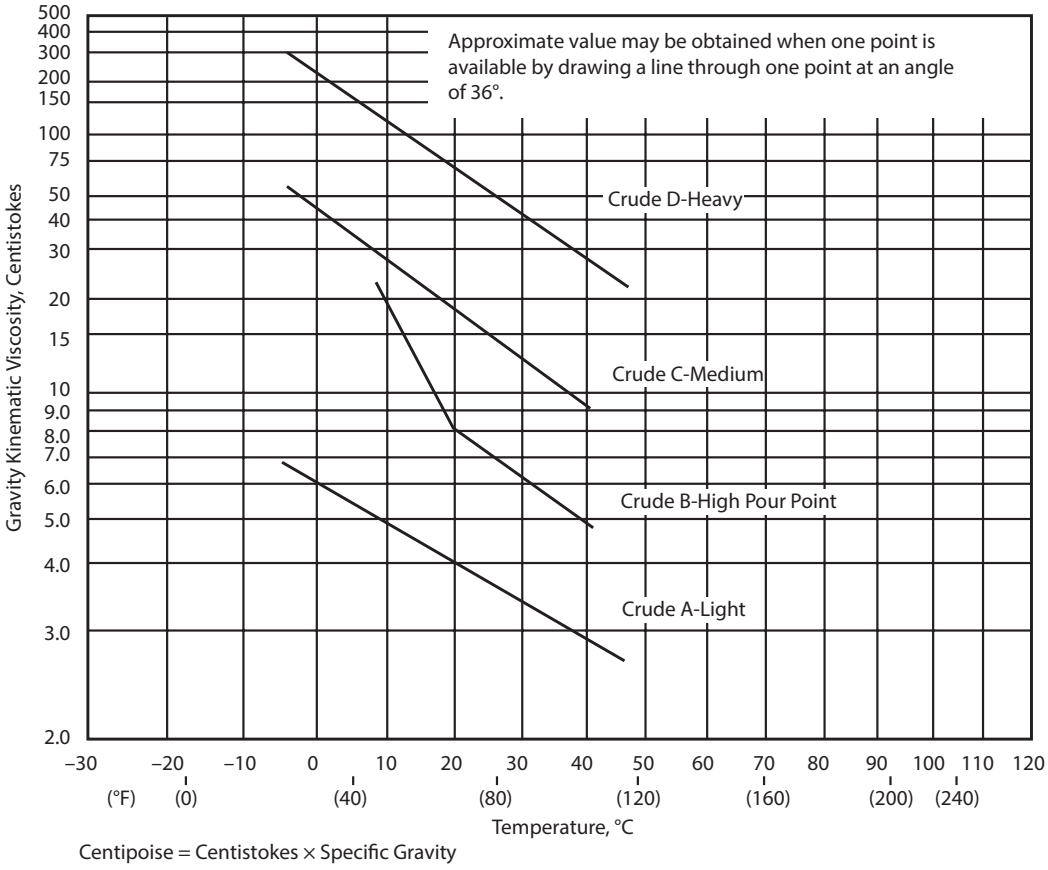
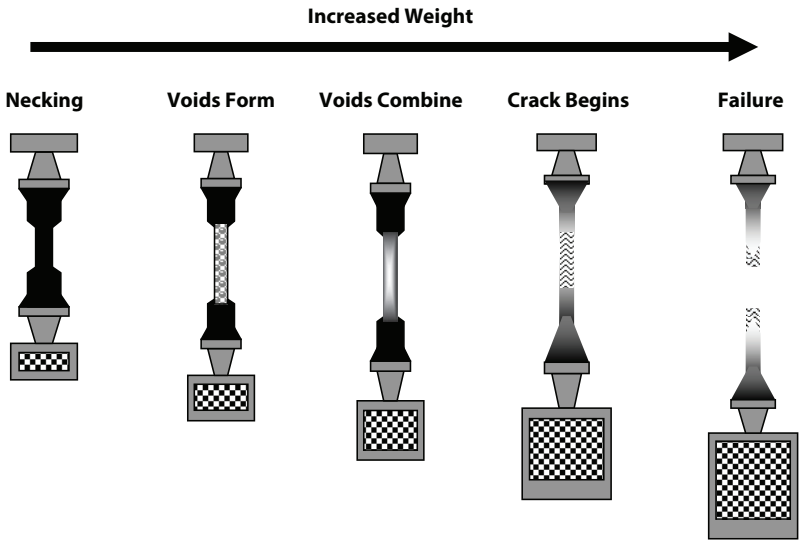


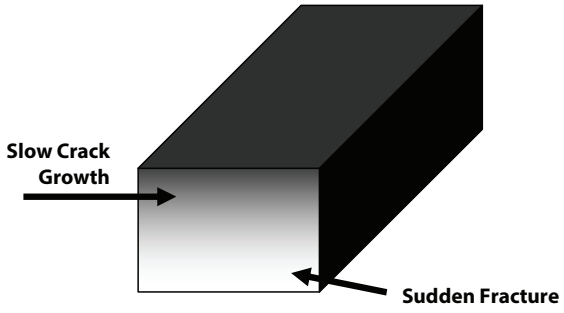
crude-viscocity-graph



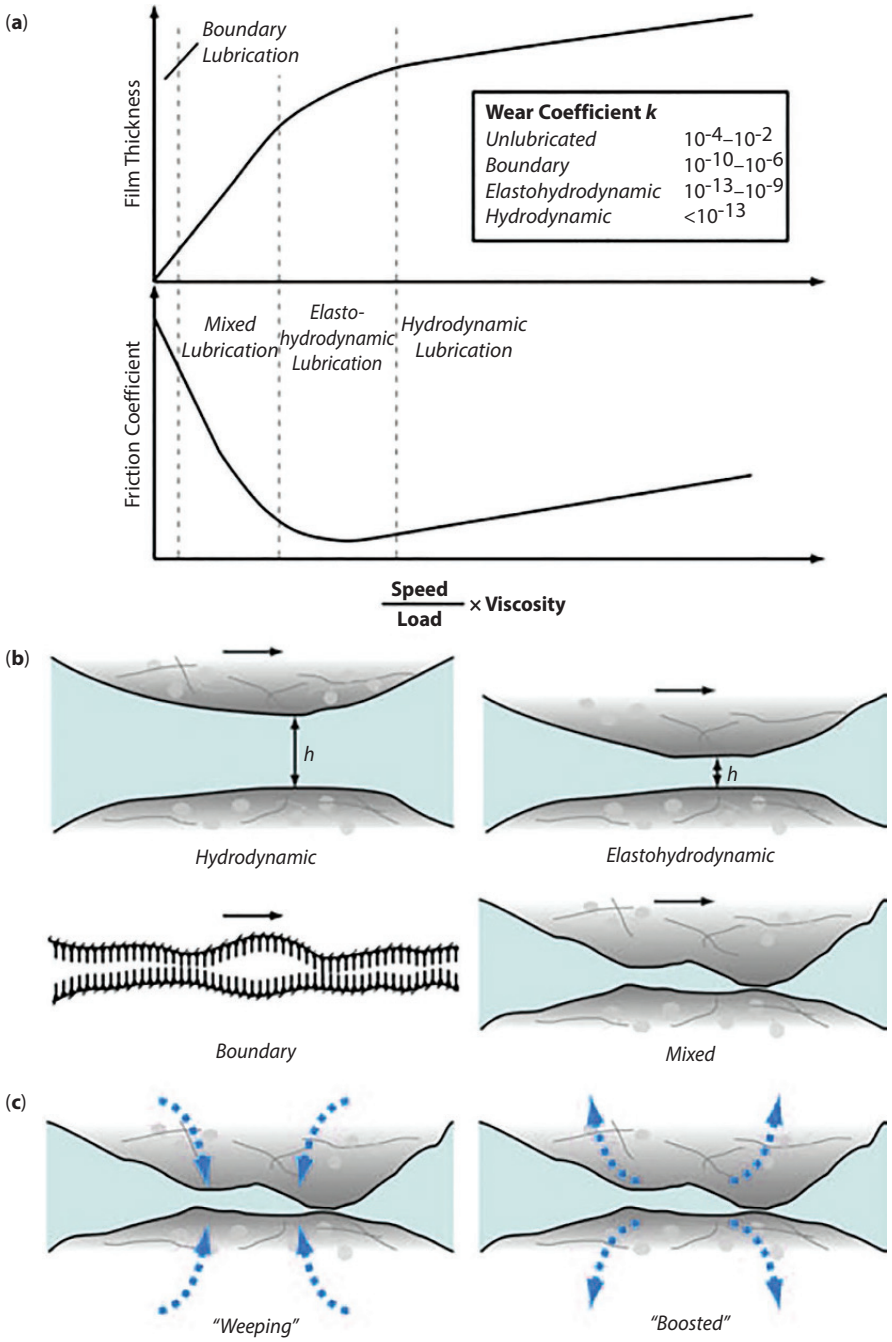
Failure Dynamics

Filter Beta Ratio and Percentage Equivalents	
β	%
2.0	50.0
2.4	58.33
3.0	66.66
4.0	75.00
5.8	82.78
16.0	93.75
20.0	95.00
32.0	96.875
50.0	98.00
75.0	98.87
100.0	99.0
200.0	99.5

Filter Beta Ratio and Percentage Equivalents



Fracture



Friction fig-5

Hardness Conversion Table

Rockwell				Superficial Rockwell			Brinell 10 m/m Ball		Vickers or Firth Diamond Hardness Number	Scleroscope	Tensile Strength
Diamond Brale			1/16" Bull	"N" Brale Penetrater			3000 kgm Load				
150 kgm C Scale	60 kgm A Scale	100 kgm D Scale	100 kgm B Scale	15 kg Load 15 N	30 kg Load 30N	45 kg Load 45N	Diam. Of Ball Impression in m/m	Hardness Number			Equivalent 1000 lb. Sq. In.
80	92	87		97	92	87			1865		
79	92	86			92	87			1787		
78	91	85		96	91	86			1710		
77	91	84			91	85			1633		
76	90	83		96	90	84			1556		
75	90	83			89	83			1478		
74	89	82		95	89	82			1400		
73	89	81			88	81			1323		
72	88	80		95	87	80			1245		
71	87	80			87	79			1160	99	
70	87	79		94	86	78			1076	98	
69	86	78		94	85	77			1004	97	
68	86	77			85	79			942	96	
67	85	76		93	84	75			894	95	
66	85	76		93	83	73			854	93	
65	84	75		92	82	72	2.25	745	820	91	
64	84	74			81	74	2.30	710	789	88	
63	83	73		92	80	70	2.30	710	763	87	
62	83	73		91	79	69	2.35	682	746	85	
61	82	72		91	79	68	2.35	682	720	83	
60	81	71		90	78	67	2.40	653	697	82	
59	81	70		90	77	66	2.45	627	674	80	326

(*Continued*)

Hardness Conversion Table. (*Continued*)

Rockwell				Superficial Rockwell			Brinell 10 m/m Ball		Vickers or Firth Diamond Hardness Number	Scleroscope	Tensile Strength
Diamond Brale			1/16" Bull	"N" Brale Penetrater			3000 kgm Load				
150 kgm C Scale	60 kgm A Scale	100 kgm D Scale	100 kgm B Scale	15 kg Load 15 N	30 kg Load 30N	45 kg Load 45N	Diam. Of Ball Impression in m/m	Hardness Number			Equivalent 1000 lb. Sq. In.
58	80	69		89	76	65	2.55	578	653	78	315
57	80	69		89	75	63	2.55	578	633	77	304
56	79	68		88	74	62	2.60	555	613	75	294
55	79	67		88	73	61	2.60	555	595	74	287
54	78	66		87	72	60	2.65	534	577	72	279
53	77	65		87	71	59	2.70	514	560	71	269
52	77	65		86	70	57	2.75	495	544	69	261
51	76	64		86	69	56	2.75	495	528	68	254
50	76	63		86	69	55	2.80	477	513	67	245
49	75	62		85	68	54	2.85	461	498	65	238
48	75	61		85	67	53	2.90	444	484	64	232
47	74	61		84	66	51	2.90	444	471	63	225
46	73	60		84	65	50	2.95	432	458	62	219
45	73	59		83	64	49	3.00	415	446	61	211
44	73	59		83	63	48	3.00	415	434	59	206
43	72	58		82	62	47	3.05	401	423	58	202
42	72	57		82	61	46	3.10	388	412	56	198
41	71	56		81	60	44	3.10	388	402	55	191
40	70	55		80	60	43	3.15	375	392	54	185
39	70	55		80	59	42	3.20	363	382	53	181
38	69	54		79	58	41	3.25	352	372	51	176
37	69	53	109	79	57	40	3.30	341	363	50	171
36	68	52	109	78	56	39	3.35	331	354	49	168
35	68	52	108	78	55	37	3.35	331	345	48	163

(*Continued*)

Hardness Conversion Table. (*Continued*)

Rockwell				Superficial Rockwell			Brinell 10 m/m Ball		Vickers or Firth Diamond Hardness Number	Scleroscope	Tensile Strength
Diamond Brale			1/16" Bull	"N" Brale Penetrater			3000 kgm Load				
150 kgm C Scale	60 kgm A Scale	100 kgm D Scale	100 kgm B Scale	15 kg Load 15 N	30 kg Load 30N	45 kg Load 45N	Diam. Of Ball Impression in m/m	Hardness Number			Equivalent 1000 lb. Sq. In.
34	67	51	108	77	54	36	3.40	321	336	46	159
33	67	50	107	77	53	38	3.45	311	327	45	154
32	66	49	106	76	52	34	3.50	302	318	44	150
31	66	48	106	76	51	33	3.55	293	310	43	146
30	65	48	105	75	50	32	3.60	285	302	42	142
29	65	47	104	75	50	30	3.65	277	294	41	138
28	64	46	103	74	49	29	3.70	269	286	40	134
27	64	45	103	73	48	28	3.75	262	279	39	131
26	63	45	102	73	47	27	3.80	255	272	38	126
25	63	44	101	72	46	26	3.80	255	266	37	124
24	62	43	100	72	45	24	3.85	248	260	37	122
23	62	42	99	71	44	23	3.90	241	254	36	118
22	62	42	99	71	43	22	3.95	235	248	35	116
21	61	41	98	70	42	21	4.00	229	243	35	113
20	61	40	97	69	42	20	4.05	23	238	34	111
18			95				4.10	217	230	33	107
16*			94				4.15	212	222	32	102
14*			92				4.25	203	213	31	98
12*			90				4.35	192	204	29	92
10*			89				4.40	187	195	28	90
8*			87				4.50	179	187	27	87
6*			85				4.60	170	180	26	83
4*			84				4.65	166	173	25	79

(*Continued*)

Hardness Conversion Table. (*Continued*)

Rockwell				Superficial Rockwell			Brinell 10 m/m Ball		Vickers or Firth Diamond Hardness Number	Scleroscope	Tensile Strength
Diamond Brale			1/16" Bull	"N" Brale Penetrater			3000 kgm Load				
150 kgm C Scale	60 kgm A Scale	100 kgm D Scale	100 kgm B Scale	15 kg Load 15 N	30 kg Load 30N	45 kg Load 45N	Diam. Of Ball Impression in m/m	Hardness Number			Equivalent 1000 lb. Sq. In.
2*			82				4.80	156	166	25	77
0*			81				4.80	156	160	25	74
			79				4.90	149	156	23	73
			77				5.00	143	150	22	70
			74				5.10	137	143	21	67
			72				5.20	131	137		65
			70				5.30	126	132	20	62
			68				5.40	121	127	19	60
			65				5.50	116	122	18	58
							5.60	112	117	15	56

LAWS OF THE NATURAL UNIVERSE

Law of Mechanical Repair:
After your hands become coated with grease, your nose will begin to itch or you'll have to pee.

Law of the Workshop:
Any tool, when dropped, will roll to the least accessible corner.

Law of Probability:
The probability of being watched is directly proportional to the stupidity of your act.

Law of the Telephone:
If you dial a wrong number, you never get a busy signal.

Law of the Alibi:
If you tell the boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.

Variation Law:
If you change lines (or traffic lanes), the one you were in will start to move faster than the one you are in now (works every time).

Law of the Bath:
When the body is fully immersed in water, the telephone rings.

Law of Close Encounters:
The probability of meeting someone you know increases when you are with someone you don't want to be seen with

Law of the Result:
When you try to prove to someone that a machine won't work, it will.

Law of Biomechanics:
The severity of the itch is inversely proportional to the reach.

Law of the Theatre:
At any event, the people whose seats are furthest from the aisle arrive last.

Law of Coffee:
As soon as you sit down to a cup of hot coffee, your boss will ask you to do something which will last until the coffee is cold.

Murphy's Law of Lockers:
If there are only two people in a locker room, they will have adjacent lockers.

Law of Rugs/Carpets:
The chances of an open-faced jelly sandwich landing face down on a floor covering are directly correlated to the newness and cost of the carpet/rug.

Law of Location:
No matter where you go, there you are.

Law of Logical Argument:
Anything is possible if you don't know what you are talking about.

Brown's Law:
If the shoe fits, it's ugly.

Oliver's Law:
A closed mouth gathers no feet.

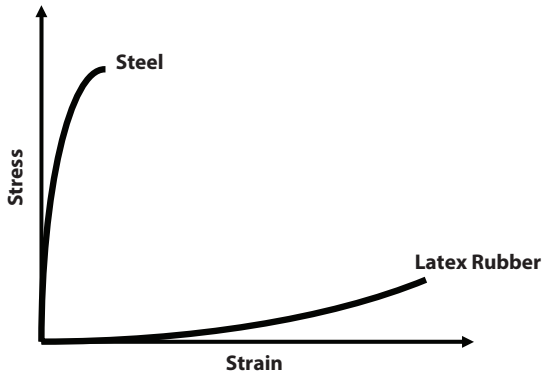
Wilson's Law:
As soon as you find a product that you really like, they will stop making it.

Machine Screw Size		Number of Threads Per Inch	Minor Dia.	Tap Drills				Clearance Hole Drills			
				Aluminum, Brass & Plastics 75% Thread		Stainless Steel, Steels & Iron 50% Thread		All Materials			
								Close Fit		Free Fit	
No. or Dia.	Major Dia.			Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.
3/4	.7500	10	.6273	21/32	.6562	11/16	.6875	49/64	.7656	25/32	.7812
		16	.6733	11/16	.6875	45/64	.7031				
		20	.6887	45/64	.7031	23/32	.7188				
13/16	.8125	20	.7512	49/64	.7656	25/32	.7812	53/64	.8281	27/32	.8438
7/8	.8750	9	.7387	49/64	.7656	51/64	.7969	57/64	.8906	29/32	.9062
		14	.7874	13/16	.8125	53/64	.8281				
		20	.8137	53/64	.8281	27/32	.8438				
15/16	.9375	20	.8762	57/64	.8906	29/32	.9062	61/64	.9531	31/32	.9688
1	1.000	8	.8466	7/8	.8750	59/64	.9219	1-1/64	1.0156	1-1/32	1.0313
		12	.8978	15/16	.9375	61/64	.9531				
		20	.9387	61/64	.9531	31/32	.9688				
1–1/16	1.0625	18	.9943	1.000	1.000	1-1/64	1.0156	1-5/64	1.0781	1-3/32	1.0938
1–1/8	1.1250	7	.9497	63/64	.9844	1-1/32	1.0313	1-9/64	1.1406	1-5/32	1.1562
		12	1.0228	1-3/64	1.0469	1-5/64	1.0781				
		18	1.0568	1-1/16	1.0625	1-5/64	1.0781				
1–3/16	1.1875	18	1.1193	1-1/8	1.1250	1-9/64	1.1406	1-13/64	1.2031	1-7/32	1.2188

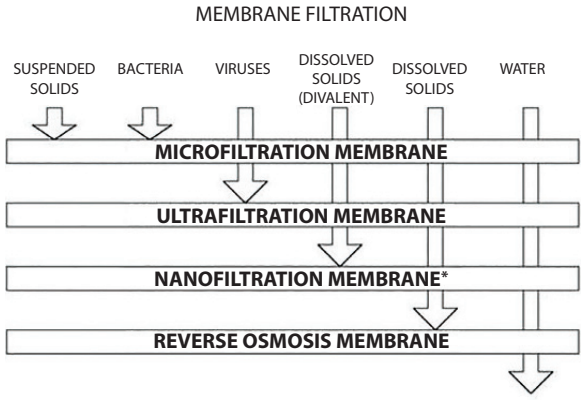
Machine_screw_tapping_chart1

Machine Screw Size		Number of Threads Per Inch	Minor Dia.	Tap Drills				Clearance Hole Drills			
				Aluminum, Brass & Plastics 75% Thread		Stainless Steel, Steels & Iron 50% Thread		All Materials			
								Close Fit		Free Fit	
No. or Dia.	Major Dia.			Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.
0	.0600	80	.0447	3/64	.0469	55	.0520	52	.0635	50	.0700
1	.0730	64	.0538	53	.0595	1/16	.0625	48	.0760	46	.0810
		72	.0560	53	.0595	52	.0635				
2	.0860	56	.0641	50	.0700	49	.0730	43	.0890	41	.0960
		64	.0668	50	.0700	48	.0760				
3	.0990	48	.0734	47	.0785	44	.0860	37	.1040	35	.1100
		56	.0771	45	.0820	43	.0890				
4	.1120	40	.0813	43	.0890	41	.0960	32	.1160	30	.1285
		48	.0864	42	.0935	40	.0980				
5	.1250	40	.0943	38	.1015	7/64	.1094	30	.1285	29	.1360
		44	.0971	37	.1040	35	.1100				
6	.1380	32	.0997	36	.1065	32	.1160	27	.1440	25	.1495
		40	.1073	33	.1130	31	.1200				

Machine_screw_tapping_chart4



Material Stress Strain



Membrane Filtration

Cast Iron

Cast iron is defined as an iron alloy with more than 2% carbon as the main alloying element. In addition to carbon, cast irons must also contain from 1 to 3% silicon which combined with the carbon give them excellent castability. Cast iron has a much lower melting temperature than steel and is more fluid and less reactive with molding materials. However, they do not have enough ductility to be rolled or forged.

The precipitation of carbon (as graphite) during solidification is the key to cast iron's distinctive properties. The graphite provides excellent machinability (even at wear-resisting hardness levels), damps vibration, and aids lubrication on wearing surfaces (even under borderline lubrication conditions).

Steels and cast irons are both primarily iron with carbon (C) as the main alloying element. Steels contain less than 2% and usually less than 1% C, while all cast irons contain more than 2% C. About 2% is the maximum C content at which iron can solidify as a single phase alloy with all of the C in solution in austenite. Thus, the cast irons by definition solidify as heterogeneous alloys and always have more than one constituent in their microstructure.

In addition to C, cast irons also must contain appreciable silicon (Si), usually from 1–3%, and thus they are actually iron-carbon-silicon alloys. The high C content and the Si in cast irons make them excellent casting alloys.

Range of Compositions for Typical Unalloyed Cast Irons (Values in Percent (%))

Type of Iron	Carbon	Silicon	Manganese	Sulfur	Phosphorus
Gray	2.5 - 4.0	1.0 - 3.0	0.2 - 1.0	0.02 - 0.25	0.02 - 1.0
Ductile	3.0 - 4.0	1.8 - 2.8	0.1 - 1.0	0.01 - 0.03	0.01 - 0.1
Compacted Graphite	2.5 - 4.0	1.0 - 3.0	0.2 - 1.0	0.01 - 0.03	0.01 - 0.1
Malleable (Cast White)	2.0 - 2.9	0.9 - 1.9	0.15 - 1.2	0.02 - 0.2	0.02 - 0.2
White	1.8 - 3.6	0.5 - 1.9	0.25 - 0.8	0.06 - 0.2	0.06 - 0.2

Carbon Steel

Carbon steel is a malleable, iron-based metal containing less than 2% carbon (usually less than 1%), small amounts of manganese, and other trace elements. Steels can either be cast to shape or wrought into various mill forms from which finished parts are formed, machined, forged, stamped, or otherwise shaped. Carbon steels are specified by chemical composition, mechanical properties, method of deoxidation, or thermal treatment.

Steel Alloy Designation System

AISI-SAE Designation Number	Type and Description
Carbon steels	
10xx	Plain Carbon (Mn. 1.00% max.)
11xx	Resulfurized
12xx	Resulfurized and rephosphorized
15xx	Plain Carbon (max. Mn. range 1.00-1.65%)

(*Continued*)

Steel Alloy Designation System (*Continued*)

AISI-SAE Designation Number	Type and Description
Manganese steels	
13xx	Mn 1.75
Nickel steels	
23xx	Ni 3.50
25xx	Ni 5.00
Nickel-chromium steels	
31xx	Ni 1.25; Cr 0.65, 0.80
32xx	Ni 1.75; Cr 1.07
33xx	Ni 3.50; Cr 1.50, 1.57
34xx	Ni 3.00; Cr 0.77
Molybdenum steels	
40xx	Mo 0.20, 0.25
44xx	Mo 0.40, 0.52
Chromium-molybdenum steels	
41xx	Cr 0.50, 0.80, 0.95; Mo 0.12, 0.20, 0.25, 0.30
Nickel-chromium-molybdenum steels	
43xx	Ni 1.82; Cr 0.50, 0.80; Mo 0.25
43BVxx	Ni 1.82; Cr 0.50; Mo 0.12, 0.25; V 0.03 min.
47xx	Ni 1.05; Cr 0.45; Mo 0.20, 0.35
81xx	Ni 0.30; Cr 0.40; Mo 0.12
86xx	Ni 0.55; Cr 0.50; Mo 0.20
87xx	Ni 0.55; Cr 0.50; Mo 0.25
88xx	Ni 0.55; Cr 0.50; Mo 0.35
93xx	Ni 3.25; Cr 1.20; Mo 0.12
94xx	Ni 0.45; Cr 0.40; Mo 0.12
97xx	Ni 1.00; Cr 0.20; Mo 0.20
98xx	Ni 1.00; Cr 0.80; Mo 0.25
Nickel-molybdenum steels	
46xx	Ni 0.85, 1.82; Mo 0.20, 0.25
48xx	Ni 3.50; Mo 0.25
Chromium steels	
50xx	Cr 0.27, 0.40, 0.50, 0.65

(*Continued*)

Steel Alloy Designation System (*Continued*)

AISI-SAE Designation Number	Type and Description
51xx	Cr 0.80, 0.87, 0.92, 0.95, 1.00, 1.05
50xxx	Cr 0.50; C 1.00 min.
51xxx	Cr 1.02; C 1.00 min.
52xxx	Cr 1.45; C 1.00 min.
Chromium-vanadium steels	
61xx	Cr 0.60, 0.80, 0.95; V 0.10, 0.15
Tungsten-chromium steels	
72xx	W 1.75; Cr 0.75
Silicon-manganese steels	
92xx	Si 1.40, 2.00; Mn 0.65, 0.82, 0.85; Cr 0.00, 0.65
High-strength low-alloy steels	
9xx	Various SAE grades
Boron steels	
xxBxx	B denotes boron steels
Leaded steels	
xxLxx	L denotes leaded steels

Alloy Steel

Steels that contain specified amounts of alloying elements -- other than carbon and the commonly accepted amounts of manganese, copper, silicon, sulfur, and phosphorus -- are known as alloy steels. Alloying elements are added to change mechanical or physical properties. A steel is considered to be an alloy when the maximum of the range given for the content of alloying elements exceeds one or more of these limits: 1.65% Mn, 0.60% Si, or 0.60% Cu; or when a definite range or minimum amount of any of the following elements is specified or required within the limits recognized for constructional alloy steels: aluminum, chromium (to 3.99%), cobalt, columbium, molybdenum, nickel, titanium, tungsten, vanadium, zirconium or other element added to obtain an alloying effect. Technically, then, tool and stainless steels are alloy steels.

Steel Alloy Designation System

AISI-SAE Designation Number	Type and Description
Carbon steels	
10xx	Plain Carbon (Mn. 1.00% max.)
11xx	Resulfurized
12xx	Resulfurized and rephosphorized
15xx	Plain Carbon (max. Mn. range 1.00-1.65%)

(*Continued*)

Steel Alloy Designation System (*Continued*)

AISI-SAE Designation Number	Type and Description
Manganese steels	
13xx	Mn 1.75
Nickel steels	
23xx	Ni 3.50
25xx	Ni 5.00
Nickel-chromium steels	
31xx	Ni 1.25; Cr 0.65, 0.80
32xx	Ni 1.75; Cr 1.07
33xx	Ni 3.50; Cr 1.50, 1.57
34xx	Ni 3.00; Cr 0.77
Molybdenum steels	
40xx	Mo 0.20, 0.25
44xx	Mo 0.40, 0.52
Chromium-molybdenum steels	
41xx	Cr 0.50, 0.80, 0.95; Mo 0.12, 0.20, 0.25, 0.30
Nickel-chromium-molybdenum steels	
43xx	Ni 1.82; Cr 0.50, 0.80; Mo 0.25
43BVxx	Ni 1.82; Cr 0.50; Mo 0.12, 0.25; V 0.03 min.
47xx	Ni 1.05; Cr 0.45; Mo 0.20, 0.35
81xx	Ni 0.30; Cr 0.40; Mo 0.12
86xx	Ni 0.55; Cr 0.50; Mo 0.20
87xx	Ni 0.55; Cr 0.50; Mo 0.25
88xx	Ni 0.55; Cr 0.50; Mo 0.35
93xx	Ni 3.25; Cr 1.20; Mo 0.12
94xx	Ni 0.45; Cr 0.40; Mo 0.12
97xx	Ni 1.00; Cr 0.20; Mo 0.20
98xx	Ni 1.00; Cr 0.80; Mo 0.25
Nickel-molybdenum steels	
46xx	Ni 0.85, 1.82; Mo 0.20, 0.25
48xx	Ni 3.50; Mo 0.25

(*Continued*)

Steel Alloy Designation System (*Continued*)

AISI-SAE Designation Number	Type and Description
Chromium steels	
50xx	Cr 0.27, 0.40, 0.50, 0.65
51xx	Cr 0.80, 0.87, 0.92, 0.95, 1.00, 1.05
50xxx	Cr 0.50; C 1.00 min.
51xxx	Cr 1.02; C 1.00 min.
52xxx	Cr 1.45; C 1.00 min.
Chromium-vanadium steels	
61xx	Cr 0.60, 0.80, 0.95; V 0.10, 0.15
Tungsten-chromium steels	
72xx	W 1.75; Cr 0.75
Silicon-manganese steels	
92xx	Si 1.40, 2.00; Mn 0.65, 0.82, 0.85; Cr 0.00, 0.65
High-strength low-alloy steels	
9xx	Various SAE grades
Boron steels	
xxBxx	B denotes boron steels
Leaded steels	
xxLxx	L denotes leaded steels

Stainless Steel

Stainless steel is the generic name for a number of different steels used primarily for their resistance to corrosion. The one key element they all share is a certain minimum percentage (by mass) of chromium: 10.5%. Although other elements, particularly nickel and molybdenum, are added to improve corrosion resistance, chromium is always the deciding factor. The vast majority of steel produced in the world is carbon and alloy steel, with the more expensive stainless steels representing a small, but valuable niche market.

Stainless steels are commonly divided into five groups:

1. martensitic stainless steels
2. ferritic stainless steels
3. austenitic stainless steels,
4. duplex (ferritic-austenitic) stainless steels
5. precipitation-hardening stainless steels

Martensitic stainless steels, typified by types 410/420/440, containing about 12Cr and 0.1C wt% as the basic composition. They are not as corrosion resistant as the other classes, but are extremely strong and tough as well as highly machineable, and can be hardened by heat treatment. They contain 11.5 to 18% chromium and significant amounts of carbon. Some grades include additional alloying elements in small quantities.

Ferritic stainless steels contain larger amounts of Cr which stabilizes the ferritic phase. Ferritic stainless steels are highly corrosion resistant, but far less durable than austenitic grades and cannot be hardened by heat treatment. They contain between 10.5% and 27% chromium and very little nickel, if any. Typical applications may include appliances, automotive and architectural trim (i.e., decorative purposes), as the cheapest stainless steels are found in this family (type 409).

Austenitic stainless steels, such as type 304 typically contain 18Cr and 8Ni wt% (aka 18/8 stainless).. Austenitic stainless steels comprise over 70% of total stainless steel production. They contain a maximum of 0.15% carbon, a minimum of 16% chromium and sufficient nickel and/or manganese to retain an austenitic structure at all temperatures from the cryogenic region to the melting point of the alloy. Other standard grades have different preferred applications; for example, type 316 which contains up to 3 wt% Mo, offers an improved general and pitting corrosion resistance, making it the material of choice for marine applications and coastal environments.

Duplex stainless steels are two-phase alloys based on the Fe-Cr-Ni system. The specific advantages offered by duplex stainless steels over conventional 300 series stainless steels are strength (approximately twice that of austenitic stainless steels), improved toughness and ductility (compared to ferritic grades), and a superior chloride SCC resistance and pitting resistance. The high yield strength offers designers the use of thin-wall material (which can lead to major reductions in weight) with adequate pressure-containing and load-bearing capacity. Duplex stainless steels have found widespread use in a range of industries, particularly the oil and gas, petrochemical, and pulp and paper industries.

Specialist grades include the precipitation hardened or oxide dispersion strengthened alloys.

Properties of Stainless Steel.

UNS Number	Processing	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation in 2 in., %	Reduction in Area, %	Brinell Hardness H_b
S20100	Annealed	55	155	55		
S20100	1/4 hard	75	125	20		
S20100	1/2 hard	110	150	10		
S20100	3/4 hard	135	175	5		
S20100	Full hard	140	185	4		
S20200	Annealed	55	110	55		
S20200	1/4 hard	75	125	12		
S30100	Annealed	40	110	60		165
S30100	1/4 hard	75	125	25		
S30100	1/2 hard	110	150	15		
S30100	3/4 hard	135	175	12		
S30100	Full hard	140	185	8		
S30200	Annealed	37	90	55	65	155
S30200	1/4 hard	75	125	12		
S30300	Annealed	35	90	50	55	160

(*Continued*)

Properties of Stainless Steel. (*Continued*)

UNS Number	Processing	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation in 2 in., %	Reduction in Area, %	Brinell Hardness H_b
S30400	Annealed	35	85	55	65	150
S31000	Annealed	40	95	45	65	170
S31400	Annealed	50	100	45	60	170
S41400	Annealed	95	120	17	55	235
S41400	Drawn 400 F	150	200	15	55	415
S41400	Drawn 600 F	145	190	15	55	400
S41400	Drawn 800 F	150	200	16	58	415
S41400	Drawn 1000 F	120	145	20	60	325
S41400	Drawn 1200 F	105	120	20	65	260
S41600	Annealed	40	75	30	65	155
S41600	Drawn 400 F	145	190	15	55	390
S41600	Drawn 600 F	140	180	15	55	375
S41600	Drawn 800 F	150	195	17	55	390
S41600	Drawn 1000 F	115	145	20	65	300
S41600	Drawn 1200 F	85	110	23	65	225
S41600	Drawn 1400 F	60	90	30	70	180
S43100	Annealed	95	125	20	60	260
S43100	Drawn 400 F	155	205	15	55	415
S43100	Drawn 600 F	150	195	15	55	400
S43100	Drawn 800 F	155	205	15	60	415
S43100	Drawn 1200 F	95	125	20	60	260

(*Continued*)

Properties of Stainless Steel. (*Continued*)

UNS Number	Processing	Yield Strength (Kpsi)	Tensile Strength (Kpsi)	Elongation in 2 in., %	Reduction in Area, %	Brinell Hardness H_b
S50100	Annealed	30	70	28	65	160
S50200	Annealed	30	70	30	75	150

(Tabulated in accordance with the Unified Numbering System for Metals and Alloys (UNS), Society of Automotive Engineers, Warrendale, Pa., 1975. This reference contains the cross reference numbers for AISI, ASTM, FED, MIL SPEC, and SAE specifications. All yield strengths are obtained using the 0.2 percent offset method. Multiply strength in kpsi be 6.89 to get strength in MPa.)

Martensitic stainless steels, typified by types 410/420/440, containing about 12Cr and 0.1C wt% as the basic composition. They are not as corrosion resistant as the other classes, but are extremely strong and tough as well as highly machineable, and can be hardened by heat treatment. They contain 11.5 to 18% chromium and significant amounts of carbon. Some grades include additional alloying elements in small quantities.

Martensitic Stainless Steels

Grade	C	Mn	Si	Cr	Ni	Mo	P	S	Comments/Applications
410	0.15	1.0	0.5	11.5-13.0	-	-	0.04	0.03	The basic composition. Used for cutlery, steam and gas turbine blades and buckets, bushings...
416	0.15	1.25	1.0	12.0-14.0	-	0.60	0.04	0.15	Addition of sulphur for machinability, used for screws, gears *etc.* 416 Se replaces sulphur by selenium.
420	0.15-0.40	1.0	1.0	12.0-14.0	-	-	0.04	0.03	Dental and surgical instruments, cutlery....
431	0.20	1.0	1.0	15.0-17.0	-	1.25-2.0	0.04	0.03	Enhanced corrosion resistance, high strength.
440A	0.60-0.75	1.0	1.0	16.0-18.0	-	0.75	0.04	0.03	Ball bearings and races, gauge blocks, molds and dies, cutlery.
440B	0.75-0.95	1.0	1.0	16.0-18.0	-	0.75	0.04	0.03	As 440A, higher hardness
440C	0.95-1.20	1.0	1.0	16.0-18.0	-	0.75	0.04	0.03	As 440B, higher hardness

Tool Steels

Tool Steels' defining properties include resistance to wear, stability during heat treatment, strength at high temperatures, and toughness. To develop these properties, tool steels are always heat treated. Because the parts may distort during heat treatment, precision parts should be semifinished, heat treated, then finished. Tool steels are classified into several broad groups, some of which are further divided into subgroups according to alloy composition, hardenability, or mechanical similarities.

- **Type W** - Water-hardening, or carbon, tool steels rely on carbon content for their useful properties.
- **Type S** - Shock-resisting tool steels are strong and tough, but not as wear resistant as many other tool steels.
- **Types O, A, and D** Cold-work tool steels include oil and air-hardened types are often more costly but can be quenched less drastically than water-hardening types. Type O steels are oil hardening; Type

A and D steels are air hardening (the least severe quench), and are best suited for applications such as machine ways, brick mold liners, and fuel-injector nozzles. The air-hardening types are specified for thin parts or parts with severe changes in cross section -- parts that are prone to crack or distort during hardening. Hardened parts from these steels have a high surface hardness; however, these steels should not be specified for service at elevated temperatures.

- **Type H** - Hot-work steels serve well at elevated temperatures.
- **Types T (tungsten alloy) and M (molybdenum alloy)** - High-speed tool steels make good cutting tools because they resist softening and maintain a sharp cutting edge at high service temperatures.
- **Type L** - A special-purpose, low-cost, low-alloy, tool steel often specified for machine parts when wear resistance combined with toughness is important.
- **Type F** - Carbon-tungsten alloys (Type F) are shallow hardening and wear resistant, but are not suited for high temperatures or for shock service.
- **Type P** - A mold steel are designed specifically for plastic-molding and zinc die-casting dies.

HSLA Steel -

High-Strength Low-Alloy (HSLA) steels have a higher strength-to-weight ratio than conventional low-carbon steels for only a modest price premium. Because HSLA alloys are stronger, they can be used in thinner sections, making them particularly attractive for transportation-equipment components where weight reduction is important. HSLA steels are usually low-carbon steels with up to 1.5% manganese, strengthened by small additions of elements, such as columbium, copper, vanadium or titanium and sometimes by special rolling and cooling techniques.

Non-Ferrous Metals

Non-ferrous metals are metals that do not contain iron. There are two groups of metals; ferrous and non-ferrous. Ferrous metals contain iron, for example carbon steel, stainless steel (both alloys; mixtures of metals) and wrought iron. Non-ferrous metals don't contain iron, for example aluminium, brass, copper (which can be remembered as ABC) and titanium. You can also get non-ferrous metals as alloys eg, brass is an alloy of copper and zinc.

Nonferrous metals are specified for structural applications requiring reduced weight, higher strength, nonmagnetic properties, higher melting points, or resistance to chemical and atmospheric corrosion. They are also specified for electrical and electronic applications.

Non-Ferrous Metals include:

Non - Ferrous Metals

Aluminum	Beryllium	Copper	Lead	Magnesium	Nickel	Precious Metals	Refractory Metals	Tin	Titanium	Zinc

Aluminum

Pure aluminum is a silvery-white metal with many desirable characteristics. It is light, nontoxic (as the metal), nonmagnetic and nonsparking. It is easily formed, machined, and cast. Pure aluminum is soft and lacks strength, but alloys with small amounts of copper, magnesium, silicon, manganese, and other elements have very useful properties. Aluminum is an abundant element in the earth's crust, but it is not found free in nature. The Bayer process is used to refine aluminum from bauxite, an aluminum ore. Because of aluminum's mechanical and physical properties, it is an extremely convenient and widely used metal.

Back to Materials Index

Aluminum and its alloys are divided into two broad classes, castings and wrought (mechanically worked products). The latter is sub-divided into heat-treatable and non-heat-treatable alloys, and into various forms produced by mechanical working.

Wrought Aluminum Alloys

Series	Main Alloy	Alloy Properties
1xxx	None (99% alu)	Unalloyed aluminum is highly corrosion resistant, low strength, workable, conductive. Non-heat-treatable.
2xxx	Copper	Gives strength, hardness, machinability. Heat-treatable.
3xxx	Manganese	Adds moderate strength, good workability. Non-heat-treatable.
4xxx	Silicon	
5xxx	Magnesium	Moderate to high strength. Corrosion resistant. Non-heat-treatable.
6xxx	Magnesium & Silicon	Increases strength, formability, corrosion resistance. Heat-treatable.
7xxx	Zinc	For greatest strength. Heat treatable. Other alloying elements such as copper, magnesium, chromium and zirconium may be specified.
8xxx	Tin, Lithium & Other elements.	Effects vary.
9xxx	N/A	(This series is unused presently).

Casting Alloys

Series	Main Alloy	Alloy Notes
1xx.x	None (99% alum.)	Unalloyed aluminum.
2xx.x	Copper	Used extensively for applications where excellent strength and hardness at high temperatures are required. Heavy-duty pistons; motorcycle, diesel and aircraft pistons; aircraft generator housings; and air-cooled cylinder heads are typical applications.
3xx.x	Silicon	Other alloying elements such as copper and magnesium are specified. Typical applications are airframe castings, machine parts, truck chassis parts, aircraft and missile components, and structural parts requiring high strength.
4xx.x	Silicon	
5xx.x	Magnesium	Alloys possess a high and stable combination of strength, shock resistance and ductility. It is ideally suited for parts in instruments and computing devices where dimensional stability is of major importance.
6xx.x	N/A	(This series is unused presently).
7xx.x	Zinc	Employed when a combination of good mechanical properties without heat treatment is needed. It also shows good shock and corrosion resistance and good machinability and dimensional stability.
8xx.x	Tin	
9xx.x	N/A	(This series is unused presently).

Aluminum Temper Designations

F	As fabricated. No control over the amount of strain hardening.
H	Strain-hardened (wrought products only) to increase strength.
H1	Strain-hardened only. Products are strain-hardened to achieve the strength desired without additional thermal treatment.
H1x,H2x,H3x	The second digit following the designations H1, H2, H3 indicate the final degree of strain hardening. The number 8 has been assigned to tempers having a final degree of strain-hardening equivalent to that resulting from approximately 75 % reduction in area. Tempers between that of the 0 Temper (annealed) and 8 (full hard) are designated by the numbers 1 through 7. A number 4 (which is halfway between 0 and 8) designation is considered half-hard; number 2 is considered quarter-hard; and the number 6 is three-quarter hard. When the number is odd, the limits of ultimate strength are exactly halfway between those of the even numbered tempers.
Hxxx	The third digit indicates a variation of the two digit H temper. It is used when the degree of temper is close to the 2 digit H temper.
H111	Applies to alloys which are strain-hardened less than the amount required for a controlled H11 temper.
H112	Applies to alloys that acquire some temper from shaping processes which do not have special control over the amount of strain-hardening or thermal treatment, but for which there are mechanical property limits.
H2	Strain-hardened and partially annealed. Applies to alloys which are strain-hardened more than the desired final amount and then reduced in strength to the desired level by partial annealing. For alloys that soften with age at room temperature, the H2 tempers have the same minimum tensile strength as the corresponding H3 tempers. For other alloys, the H2 tempers have the same minimum tensile strength as the corresponding H1 tempers and slightly higher elongation.
H3	Strain-hardened and stabilized. Applies to alloys that are strain-hardened and whose mechanical properties are stabilized by a low temperature thermal treatment that results in slightly lowered tensile strength and improved ductility. This designation is applicable only to those alloys that unless they are stabilized, will gradually soften with age at room temperature.
H311	Applies to alloys which are strain-hardened less than the amount required for a controlled H31 temper.
H321	Applies to alloys which are strain-hardened less than the amount required for a controlled H32 temper.
H323	Applies to products which are fabricated to have good resistance to stress corrosion cracking.
H343	Applies to products which are fabricated to have good resistance to stress corrosion cracking.
O	Annealed, recrystallized (wrought products only). Applies to wrought alloys which are annealed to obtain the softest temper, and to cast alloys which are annealed to improve ductility and dimensional stability.
T	Thermally treated to produce stable tempers other than F, O or H.
T1	Naturally aged. Product is cooled from an elevated temperature shaping process and naturally aged to a substantially stable condition.
T2	Annealed (cast products only). Applies to alloys which are cold worked to improve strength after cooling from an elevated temperature shaping process, or in which the effect of cold work in flattening or straightening is significant in mechanical property limits.
T3	Solution heat-treated, cold worked and naturally aged to a substantially stable condition to improve strength.
T4	Solution heat-treated and naturally aged to a substantially stable condition.
T5	Cooled from an elevated temperature shaping process and the artificially aged.

(*Continued*)

Aluminum Temper Designations (*Continued*)

T51	Stress relieved by stretching. Applies to the following products when stretched the indicated amounts after solution heat-treatment or cooled from a high temperature shaping process: Plate—1.5-3% permanent set; Rod, bar, shapes, and extruded tubes—1-3% permanent set; Drawn tubes—1.5-3% permanent set. Applies directly to plate, and rolled or cold finished rod and bar which receive no further straightening after stretching. Applies to extruded rod, bar, shapes, tubing, and to drawn tubing when designated as follows: T510 Products that receive no further straight ending after stretching; T511 Products that may receive minor straightening after stretching to comply with standard tolerances.
T52	Stress-relieved by compressing. Applies to alloys which are stress-relieved by compressing after solution heat-treatment, or cooled from a high temperature shaping process to produce a permanent set of 1 to 5%.
T54	Stress-relieved by combined stretching and compressing. Applicable to die forging which are stress-relieved by restring cold in the finish die.
T6	Solution heat-treated and then artificially aged. T62 indicates material is solution heat-treated from the O or F temper to demonstrate response to heat-treatment, and artificially aged.
T7	Solution heat-treated and then stabilized to carry them beyond the point of maximum strength to provide control of some special property.
T8	Solution heat-treated, cold worked, and then artificially aged.
T9	Solution heat-treated, artificially aged, and then cold worked.
T10	Artificially aged and then cold worked.
T42	(Wrought products only). Applicable to products solution heat-treated and naturally aged which have mechanical properties different from those of the T4 temper.
T62	(Wrought products only). Applicable to products solution heat-treated and artificially aged which have mechanical properties different from those of the T6 temper.
W	Solution heat treated. An unstable temper applied only to alloys which spontaneously age at room temperature after solution heat-treatment.

Properties of Aluminum Alloys

Tabulated in accordance with the Unified Numbering System for Metals and Alloys (UNS), Society of Automotive Engineers, Warrendale, Pa., 1975. This reference contains the cross reference numbers for AISI, ASTM, FED, MIL SPEC, and SAE specifications. These are typical properties for sizes of about 1/2 inch. A typical value may be neither the mean nor the minimum. It is a value which can be obtained when the purchase specifications are carefully written and with continuous inspection and testing. The values given for fatigue strength, S_f, correspond to 50e7 cycles of completely reversed stress. Aluminum alloys do not have an endurance limit. The yield strength is 0.2% offset value. Multiply strength in kpsi by 6.89 to get strength in MPa.

Properties of Aluminum Alloys

UNS Alloy Number	Temper	Yield Strength (kpsi)	Tensile Strength (kpsi)	Shear Modulus of Rupture (kpsi)	Fatigue Strength (kpsi)	Elongation in 2 in., %	Brinell Hardness (H_b)
A91100	-O	5	13	9.5	5	45	23
A91100	-H12	14	15.5	10	6	25	28
A91100	-H14	20	22	14	9	16	40
A91100	-H16	24	26	15	9.5	14	47
A91100	-H18	27	29	16	10	10	55
A93003	-O	6	16	11	7	40	28
A93003	-H12	17	19	12	8	20	35
A93003	-H14	20	22	14	9	16	40
A93003	-H16	24	26	15	9.5	14	47
A93003	-H18	27	29	16	10	10	55
A93004	-O	10	26	16	14	25	45
A93004	-H32	22	31	17	14.5	17	52
A93004	-H34	27	34	18	15	12	63
A93004	-H36	31	37	20	15.5	9	70
A93004	-H38	34	40	21	16	6	77
A92011	-T3	48	55	32	18	15	95
A92011	-T8	45	59	35	18	12	100
A92014	-O	14	27	18	13	18	45
A92014	-T4	40	62	38	20	20	105
A92014	-T6	60	70	42	18	13	135
A92017	-O	10	26	18	13	22	45
A92017	-T4	40	62	38	18	22	105
A92018	-T61	46	61	39	17	12	120
A92024	-O	11	27	18	13	22	47
A92024	-T3	50	70	41	20	16	120
A92024	-T4	48	68	41	20	19	120
A92024	-T36	57	73	42	18	13	130
A95052	-O	13	28	18	17	30	45
A95052	-H32	27	34	20	17.5	18	62
A95052	-H34	31	37	21	18	14	67

(*Continued*)

Properties of Aluminum Alloys (*Continued*)

UNS Alloy Number	Temper	Yield Strength (kpsi)	Tensile Strength (kpsi)	Shear Modulus of Rupture (kpsi)	Fatigue Strength (kpsi)	Elongation in 2 in., %	Brinell Hardness (H_b)
A95052	-H36	34	39	23	18.5	10	74
A95052	-H38	36	41	24	19	8	85
A95056	-O	22	42	26	20	35	
A95056	-H18	59	63	34	22	10	
A95056	-H38	50	60	32	22	15	
A96061	-O	8	18	12.5	9	30	30
A96061	-T4	21	35	24	13.5	25	65
A96061	-T6	40	45	30	13.5	17	95
A97075	-T6	72	82	49	24	11	150

PROPERTIES OF ALUMINUM DIE CASTING ALLOYS

	AA NUMBER					
	A360.0	**A380.0**	**383**	**A413.0**	**B390.0**	**384**
Ultimate Tensile Strength (ksi)	46	47	45	42	40.5	48
Tensile Yield Strength (ksi)	24	23	22	19	35	24
Elongation (% in 2" G.L.)	3.5	3.5	3.5	3.5		1.0 2.5
Hardness (HB)	75	80	80	120	85	
Shear Strength (ksi)	26	27	25	29		
Charpy Impact Strength (ft. lb.—unnotched)	4.2	3.5		2		
Fatigue Strength (ksi) (limit @ 500 million cycles)	18	20	19	20		20
Density (lb./in.^{3})	0.095	0.098	0.097	0.096	0.099	0.098
Melting Range (°F) approx.	1035-1105	1000-1100	960-1080	1065-1080	945-1200	960-1080
Specific Heat (Btu/lb.°F)	0.23	0.23	0.23			
Coefficient of Thermal Expansion (in./in./°F)	11.8	11.7	11.5	10.3	11.7	11.3
Thermal Conductivity (Btu/fthr.°F)	65.3	55.6	55.6	67.7	78.6	56
Electrical Conductivity (% IACS)	29	31	23	31	25	23
Modulus of Elasticity (10^6 psi)	10.3	10.3	10.3	10.3	11.9	10.3

Thermoplastics

Thermoplastic materials are melt processable, that is they are formed when the are in a melted or viscous phase. This generally means they are heated, formed, then cooled in their final shape. Depending upon their chemistry, thermoplastics can be very much like rubber, or as strong as aluminum. Some high temperature thermoplastic materials can withstand temperature extremes of up to 600 F, while others retain their properties at -100 F. Thermoplastics do not oxidize and some materials have no known solvents at room temperature. Most thermoplastic materials are excellent electrical and thermal insulators. On the other hand thermoplastic composites can be made to be electrically conductive with the addition of carbonor metal fibers.

In general the combination of light weight, high strength, and low processing costs make thermoplastics well suited to many applications. The most common methods of processing thermoplastics are injection molding, extrusion, and thermoforming.

Thermoplastics include:

ABS (Acrylanitrile Butadiene Styrene)
ABS Polycarbonate Alloy
Acetal
Acrylic
ASA (acrylic-styrene-acrylonitrile) Alloys
Cellulose Butyrate
ETFE (Tefzel)
EVA Ethylene Vinyl Acetate
LCP (Polyester Liquid Crystal Polymer)
Nylon 6
Nylon 4-6
Nylon 6-6
Nylon 11
Nylon 12
Nylon amorphous
Nylon impact modified
Polyallomer
PBT Polyester (Polybutylene Terepthalate)
Polycarbonate
PEEK Polyetheretherkeytone
PEI Polyetherimid (Ultem)
Polyethersulfone
Polyethylene High Density
Polyethylene Low Density
Polyethylene Medium Density
PET Polyester (Polyethylene Terepthalate)
Polyimide Thermoplastic (Aurum)
Polypropylene
PPA Polyphthalamide (Amodel)
PPO Modified Polyphenylene Oxide (Noryl)
PPS Polyphenylene Sulfide
Polystyrene Crystal
Polystyrene High Impact HIPS
Polystyrene Medium Impact MIPS
Polysulfone
Polyurethane
PVC Polyvinyl Chloride Rigid

PVC Flexible
PVDF Polyvinylidene Fluoride (Kynar)
SAN Styrene Acrylonitrile
TPE Thermoplastic Elastomers
TPR Thermoplastic Rubbers

Thermoset Plastics

Thermoset plastics such as amino, epoxy, phenolic, and unsaturated polyesters, are so named because they experience a chemical change during processing and become "set", hard solids. Thermosets are highly cross-linked polymers that have a molecular mesh or network of polymer chains like a three-dimensional version of a net. Thermosets undergo a chemical as well as a phase change when they are heated. Once cured they cannot be melted or remolded and are resistant to solvents - that is once they are formed they are 'set' (hence the name).

Thermoset plastics, because of their tightly crosslinked structure, resist higher temperatures and provide greater dimensional stability than do most thermoplastics. Thermosets are tough, durable with high temperature performance, and have found applications in a wide variety of fields including electronic chips, fibre-reinforced composites, polymeric coatings, spectacle lenses and dental fillings.

Alkyds/Polyester - Thermosetting polyester resins are commonly used as casting materials, fiberglass laminating resins, and non-metallic auto-body fillers. Polyester is used for car body panels and fender walls (SMC - sheet molding compound), tool housings (BMC - bulk molding compound) brackets, and industrial equipment housings.

Urea formaldehyde (UF) thermosets are strong, glossy, and durable. They are not affected by fats, oils esters, ether, petrol, alcohol or acetone, nor by detergents or weak acids, and they exhibit good resistance to weak alkalis. Their high mechanical strength, heat and fire resistance, and good electrical arc and tracking resistance make them an ideal plastic for numerous industrial and household applications, from doorknoobs and toilet seats to electrical components and cosmetics enclosures.

Melamine formaldehyde (MF) thermoset plastics are similar to urea molding compounds, but melamine has even better resistance to heat, chemicals, moisture, electricity and scratching.UFs and MF plastics that have high surface hardness and gloss, brilliant and precise colors, and light fastness. Melamine formaldehyde (MF) thermosets are ideal for dinnerware, kitchen utensils, bathroom accessories, and electrical components. Some uses include electrical breakers, receptacles, closures, knobs and handles, appliance components, adhesives, coatings and laminates. Melamine was formerly used for dishware.

Epoxy - excellent electrical, thermal, and chemical resistance. Their strength can be further increased with fibrous reinforcement or mineral fillers. There is a huge variety of combinations of epoxy resins and reinforcements which allows a wide range of possible properties in the finished molded parts.

Generally, parts molded from epoxy are hard, rigid, relatively brittle, and have excellent dimensional stability over a broad temperature range. The combination of high mechanical strength and excellent electrical properties make them ideal for electrostructural applications. Coatings, casting compounds, encapsulating for electrical components, laminates, and adhesives.

Phenolic (Bakelite) --
History - The first truly synthetic plastic was invented by Leo Baekeland - a Belgium chemist living in New York. Baekeland was already very rich as he had invented the first commercially successful photographic paper and sold it to George Eastman in 1898 for $1 million. With such money, Baekeland could engage himself in whatever research he decided to do.

In 1905, he found that when he combined formaldehyde and phenol, he produced a material that bound all types of powders together. He called this material Bakelite - after himself - and it was the first thermosetting plastic in the world. This was a material that once it set hard would not soften under heat. It had so many uses and so many potential uses, that it was called "the material of a thousand uses".

Bakelite was water and solvent resistant; could be used as an electrical insulator; was rock hard but could be cut by a knife and was used in 78 rpm records and telephones. It was a naturally brittle material in pure form, but it could be strengthened with fillers such as wood pulp and cellulose. PF was used in early consumer electronic products such as telephones, radios, records. Phenolics are little used in general consumer products today due to the cost and complexity of production and their brittle nature. An exception to the overall decline is the use in small precision-shaped components where their specific properties are required, such as molded disc brake cylinders, saucepan handles, electrical plugs and switches, and electrical iron parts. Today, Bakelite is manufactured under various commercial brand names such as Micarta. Micarta is produced in sheets, rods and tubes for hundreds of industrial applications in the electronics, power generation and aerospace industries.

Polyimide --
When compared to most other organic or polymeric materials, polyimides exhibit an exceptional combination of thermal stability (>500°C), mechanical toughness and chemical resistance. In addition, they have excellent dielectric properties. Used a lot in wear applications, machined gears, bushings and bearings, aerospace and aircraft parts, ring seals, thrust washers, wear strips. Also, because of their high degree of ductility and inherently low CTE, polyimides can be readily implemented into a variety of microelectronic applications. Multilayer thin and thick film applications on large silicon or ceramic substrates can be readily achieved.

Polyurethane --
Polyurethanes are widely used in flexible and rigid foams, durable elastomers and high performance adhesives and sealants, fibers, seals, gaskets, condoms, carpet underlayment, and hard plastic parts. Polyurethane products are often called "urethanes". Over three quarters of the consumption of polyurethane products is in the form of foams, with flexible and rigid types being roughly equal in market size. Polyurethane materials are also used in coatings and varnishes used in furniture manufacture, carpentry or woodworking. Polyurethane is also used as an adhesive, especially as a woodworking glue. Its main advantage over more traditional wood glues is its water resistance. It is also used in making solid tires. Modern roller blading and skateboarding became economical only with the introduction of tough, abrasion-resistant polyurethane parts.

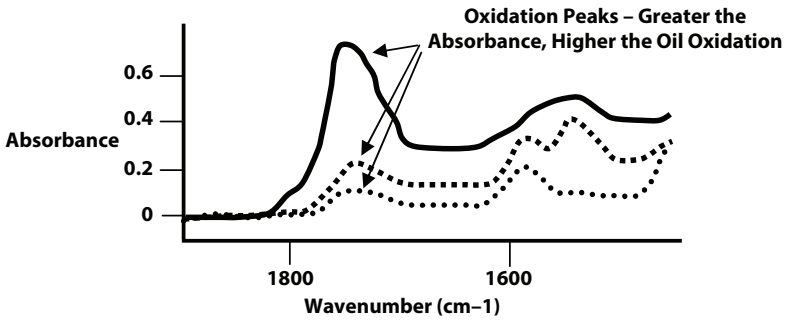
Silicone --
Silicones are odorless, colorless, water resistant, chemical resistant, oxidation resistant, stable at high temperature, and have weak forces of attraction, low surface tension, low freezing points and do not conduct electricity. They find many uses in oils, greases, and rubberlike materials. Silicone oils are very desirable since they do not decompose at high temperature and do not become viscous. Silicones are use for lubricants, adhesives, sealants, gaskets, pressure compensating diaphragms for drip irrigation emitters, dishware, Silly Putty, and many other products. Silicones have a number of medical applications (e.g. breast implants) because they are chemically inert. Other silicones are used in hydraulic fluids, electrical insulators and moisture proofing agent in fabrics.

Elastomers

Elastomers and rubber are differentiated from polymers by the mechanical property of returning to their original shape after being stretched to several times their length. The rubber industry differentiates between the terms "elastomer" and "rubber" on the bases of how long a deformed material sample requires to return to its approximate original size after a deforming force is removed, and of its extent of recovery. Synthetic materials such as neoprene, nitrile, styrene butadiene (SBR), and butadiene rubber are now grouped with natural rubber. These materials serve engineering needs in fields dealing with shock absorption, noise and vibration control, sealing, corrosion protection, abrasion protection, friction production, electrical and thermal insulation, waterproofing, confining other materials, and load bearing.

As with almost any material, selecting a rubber for an application requires consideration of many factors, including mechanical or physical service requirements, operating environment, a reasonable life cycle, manufacturability of the part, and cost.

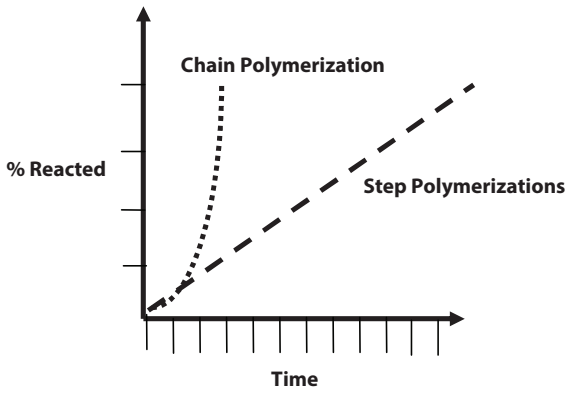
Manufacturing rubber parts is accomplished in one of three ways: transfer molding, compression molding, or injection molding. The choice of process depends on a number of factors, including the size, shape, and function of the part, as well as anticipated quantity, type, and cost of the raw material.



Oil Oxidation IR Spectra

1 PETE	Polyethylene Terephalate Ethylene PETE goes into soft drink, juice, water, detergent, and cleaner bottles. Also used for cooking and peanut butter jars.	5 PP	Polypropylene PP goes into caps, disks, syrup bottles, yogurt tubs, straws, and film packaging.
2 HDPE	High Density Polyethylene High Density Polyethylene HDPE goes into milk and water jugs, bleach bottles, detergent bottles, shampoo bottles, plastic bags and grocery sacks, motor oil bottles, household cleaners, and butter tubs.	6 PS	Polystyrene PS goes into meat trays, egg cartons, plates, cutlery, carry-out containers, and clear trays.
3 PVC	Polyvinyl Cloride PVC goes into window cleaner, cooking oils, and detergent bottles. Also used for peanut butter jars and water jugs.	7 OTHER	Other Includes resins not mentioned above or combinations of plastics.
4 LDPE	Low Density Polyethylene LDPE goes into plastic bags and grocery sacks, dry cleaning bags, flexible film packaging, and some bottles.		

Plastic Recycling Guide



Polymerization

American Chemistry Council

Plastic Packaging Resins

Resin Codes	Descriptions	Properties	Product Applications	Product Made with Recycled Content*
1 PET	**Polyethylene Terephthalate (PET, PETE).** PET is clear, tough, and has good gas and moisture barrier properties. This resin is commonly used in beverange bottles and many injection-molded consumer product containers. Cleaned, recycled PET flakes and pellets are in great demand for spinning fiber for carpet yarns, producing fiberfill and geo-textile. Nickname: Polyester.	• Clear and optically smooth surfaces for oriented films and bottles • Excellent barrier to oxygen, water, and carbon dioxide • High impact capability and shatter resistance • Excellent resistance to most solvents • Capability for hot-filling	Plastic bottles for soft drinks, water, juice, sports drinks, beer, mouthwash, catsup and salad dressing. Food jars for peanut butter, jelly, jam and pickles. Ovenable film and microwavable food trays. In addition to packaging, PET's major uses are textiles, monofilament, carpet, strapping, films, and engineering moldings.	Fiber for carpet, fleece jackets, comforter fill, and tote bags. Containers for food, beverages (bottles), and non-food items. Films and sheet. Strapping.
2 HDPE	**High Density Polyethylene (HDPE).** HDPE is used to make many types of bottles. Unpigmented bottles are translucent, have good barrier properties and stiffness, and are well suited to packaging products with a short shelf life such as milk. Because HDPE has good chemical resistance, it is used for packaging many household and industrial chemicals such as detergents and bleach. Pigmented HDPE bottles have better stress crack resistance than unpigmented HDPE.	• Excellent resistance to most solvents • Higher tensile strength compared to other forms of polyethylene • Relatively stiff material with useful temperature capabilities	Bottles for milk, water, juice, cosmetics, shampoo, dish and laundry detergents, and household cleaners. Bags for groceries and retail purchases. Cereal box liners. Reusable shipping containers. In addition to packaging, HDPE's major uses are in injection molding applications, extruded pipe and conduit, plastic wood composites, and wire and cable covering.	Bottles for non-food items, such as shampoo, conditioner, liquid laundry detergent, household cleaners, motor oil and antifreeze. Plastic lumber for outdoor decking, fencing and picnic tables. Pipe, floor tiles, buckets, crates, flower pots, garden edging, film and sheet, and recycling bins.
3 PVC	**Polyvinyl Chloride (PVC, Vinyl).** In addition to its stable physical properties, PVC has good chemical resistance, weatherability, flow characteristics and stable electrical properties. The diverse slate of vinyl products can be broadly divided into rigid and flexible materials.	• High impact strength, brilliant clarity, excellent processing performance • Resistance to grease, oil and chemicals	Rigid packaging applications include blister packs and clamshells. Flexible packaging uses include bags for bedding and medical, shrink wrap, deli and meet wrap and tamper resistance. In addition to packaging, PVC's major uses are rigid applications such as pipe, siding, window frames, fencing, decking and railing. Flexible applications include medical products such as blood bags and medical tubing, wire and cable insulation, carpet backing, and flooring.	Pipe, decking, fencing, paneling, gutters, carpet backing, floor tiles and mats resilient flooring, mud flaps, cassette trays, electrical boxes, cables, traffic cones, garden hose, and mobile home skirting. Packaging, film and sheet, and loose-leaf binders.
4 LDPE	**Low Density Polyethylene (LDPE).** LDPE is used predominately in film applications due to its toughness, flexibility and relative transparency, making it popular for use in applications where heat sealing is necessary. LDPE also is used to manufacture some flexible lids and bottles as well as in wire and cable applications. Includes Linear Low Density Polyethylene (LLDPE).	• Excellent resistance to acids, bases and vegetable oils • Toughness, flexibility and relative transparency (good combination of properties for packaging applications requiring heat-sealing)	Bags for dry cleaning, newspapers, bread, frozen foods, fresh produce, and household garbage. Shrink wrap and stretch film. Coating for paper milk cartons and hot and cold beverage cups. Container lids. Toys. Squeezable bottles (e.g., honey and mustard). In addition to packaging, LDPE's major uses are in injection molding applications, adhesives and sealants, and wire and cable coverings.	Shipping envelope, garbage can liners, floor tile, paneling, furniture, film and sheet, compost bins, trash cans, landscape timber, and outdoor lumber.
5 PP	**Polypropylene (PP).** PP has good chemical resistance, is strong, and has a high melting point making it good for hot-fill liquids. This resin is found in flexible and rigid packaging, fibers, and large molded parts for automotive and consumer products.	• Excellent optical clarity in biaxially oriented films and stretch blow molded containers • Low moisture vapor transmission • Inertness toward acids, alkalis and most solvents	Containers for yogurt, margarine, takeout meals, and deli foods. Medicine bottles. Bottle caps and closures. Bottles for catsup and syrup. In addional to packaging, PP's major uses are in fiber, appliances and consumer products, including durable applications such as automotive and carpeting.	Automobile applications, such as battery cases, signal lights, battery cables, brooms and brushes, ice scrapers, oil funnels, and bicycle racks. Garden rakes, storage bins, shipping pallets, sheeting, trays.
6 PS	**Polystyrene (PS).** PS is a versatile plastic that can be rigid or foamed. General purpose polystyrene is clear, hard and brittle. It has a relatively low melting point. Typical applications include protective packaging, foodservice packaging, bottles, and food containers. PS is often combined with rubber to make high impact polystyrene (HIPS) which is used for packaging and durable applications requiring toughness, but not clarity.	• Excellent moisture barrier for short shelf life products • Excellent optical clarity in general purpose form • Significant stiffness in both foamed and rigid forms. • Low density and high stiffness in foamed applications • Low thermal conductivity and excellent insulation properties in foamed form	Food service items, such as cups, plates, bowls, cutlery, hinged takeout containers (clamshells), meat and poultry trays, and rigid food caontainers (e.g., yogurt). These items may be made with foamed or non-foamed PS. Protective foam packaging for furniture, electronics and other delicate items. Packing peanuts, known as "loose fill." Compact disc cases and aspirin bottles. In addition to packaging, PS's major uses are in agricultural trays, electronic housings, cable spools, building insulation, video cassette cartridges, coat hangers, and medical products and toys.	Thermal insulation, thermometers, light switch plates, vents, desk trays, rules, and license plate frames. Cameras or video cassette casings. Foamed foodservice applications, such as egg shell cartons. Plastic mouldings (i.e., wood replacement products). Expandable polystyrene (EPS) foam protective packaging.
7 OTHER	**Other.** Use of this code indicates that a package is made with a resin other than the six listed above, or is made of more than one resin and used in a multi-layer combination.	Dependent on resin or combination of resins	Three- and five-gallon reusable water bottles, some citrus juiceand catsup bottles. Oven-baking bags, barrier layers, and custom packaging.	Bottles and plastic lumber applications.

***Recycling may not be available in all areas. Check to see if plastics recycling is available in your community.**

American Chemistry Council, Plastics Division
Last Updated: March 2007

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Nom Pipe Size	OD	Upper Figures - Nominal Wall Thickness Lower Figures - Weight per Foot (lb.)												
(In.)	(In.)	Sch. 10	Sch. 20	Sch. 30	Std. Weight	Sch. 40	Sch. 60	Extra Strong	Sch. 80	Sch. 100	Sch. 120	Sch. 140	Sch. 160	XXS
1/8	.405				.068 .24	.068 .24		.095 .31	.095 .31					
1/4	.540				.088 .43	.088 .43		.119 .54	.119 .54					
3/8	.675				0.91 .57	0.91 .57		.126 .74	.126 .74					
1/2	.840				.109 .85	.109 .85		.147 1.09	.147 1.09				.188 1.31	.294 1.72
3/4	1.050				.113 1.13	.113 1.13		.154 1.48	.154 1.45				.219 1.95	.308 2.44
1	**1.315**	.109 1.41			.133 1.68	.133 1.68		.179 2.17	.179 2.17				.250 2.85	.358 3.66
11/4	**1.660**	.109 1.81			.140 2.27	.140 2.27		.191 3.00	.191 3.00				.250 3.77	.382 5.82
11/2	**1.900**	.109 2.09			.145 2.72	.145 2.72		.200 3.63	.200 3.63				.281 4.86	.400 6.41
2	**2.375**	.109 2.64			.154 3.66	.154 3.66		.218 5.03	.218 5.03				.344 7.47	.436 9.04
21/2	**2.875**	.120 3.53			.203 5.80	.203 5.80		.276 7.67	.276 7.67				.375 10.02	3522 13.71
3	**3.500**	.120 4.34			.216 7.58	.216 7.58		.300 10.26	.300 10.26				.438 14.34	.600 18.60
31/2	**4.000**	.120 4.98			.226 9.12	.226 9.12		.318 12.52	.318 12.52					
4	**4.500**	.120 5.62			.237 10.80	.237 10.80		.337 15.00	.337 15.00		.438 19.02		.531 22.53	.674 27.57
5	**5.563**	.134 7.78			.258 14.63	.258 14.63		.375 20.80	.375 20.80		.500 27.06		.625 32.99	.750 38.59
6	**6.625**	.134 9.30			.280 18.99	.280 18.99		.432 28.60	.432 28.60		.562 36.43		.719 45.39	.864 53.21
8	**8.625**		.250 22.38	.277 24.72	.322 28.58	.322 28.58	.406 35.67	.500 43.43	.500 43.43	.594 51.00	.719 60.77	.812 67.82	.906 74.76	.875 72.49
10	**10.750**		.250 28.06	.307 34.27	.368 40.52	.365 40.52	.500 54.79	.500 54.79	.594 64.49	.719 77.10	.844 89.38	1.000 104.23	1.125 115.75	
12	12.750		.250 33.41	.330 43.81	.375 49.61	.406 43.57	.532 73.22	.500 65.48	.688 88.71	.844 107.42	1.00 125.61	1.125 139.81	1.312 160.42	
14	**14.00**	.250 36.75	.312 45.65	.375 54.62	.375 54.62	.438 63.50	.594 85.13	.500 72.16	.751 106.23	.938 130.98	1.094 150.93	1.250 170.37	1.406 189.29	

(*Continued*)

Nom Pipe Size	OD	Upper Figures - Nominal Wall Thickness Lower Figures - Weight per Foot (lb.)												
(In.)	(In.)	Sch. 10	Sch. 20	Sch. 30	Std. Weight	Sch. 40	Sch. 60	Extra Strong	Sch. 80	Sch. 100	Sch. 120	Sch. 140	Sch. 160	XXS
16	**16.00**	.250 42.09	.312 52.32	.375 62.64	.375 62.64	.500 82.85	.656 107.60	.500 82.85	.844 136.74	1.031 164.98	1.219 192.61	1.438 223.85	1.594 254.48	
18	**18.00**	.250 47.44	.312 58.99	.438 82.23	.375 70.65	.562 104.76	.750 138.30	.500 93.54	.938 171.08	1.156 208.15	1.375 244.37	1.562 274.48	1.781 308.79	
20	**20.00**	.250 52.78	.375 76.67	.500 104.23	.375 78.67	.594 123.23	.812 166.56	.500 104.23	1.031 209.06	1.281 256.34	1.500 296.65	1.750 341.41	1.969 379.53	
22	**22.00**	.250 58.13	.375 86.69	.500 114.92	.375 86.68		.875 197.60	.500 114.92	1.125 251.05	1.375 303.16	1.625 353.94	1.875 403.38	2.125 451.49	
24	**24.00**	.250 63.47	.375 94.71	.562 140.81	.375 94.71	.688 171.45	.969 238.57	.500 125.61	1.219 296.96	1.531 367.74	1.812 429.79	2.062 483.58	2.344 542.64	
26	**26.00**	.312 85.68	.500 136.30		.375 102.72			.500 136.30						
28	28.00	.312 92.35	.500 146.99	.625 182.90	.375 110.75			.500 146.99						
30	**30.00**	.312 99.02	.500 157.68	.625 196.26	.375 118.76			.500 157.68						
32	**32.00**	.312 105.69	.500 168.37	.625 209.62	.375 126.78	.688 230.29		.500 168.37						
34	**34.00**	.312 112.36	.500 179.06	.625 222.99	.375 134.79	.688 245.00		.500 179.06						
36	**36.00**	.312 119.03	.500 189.75	.625 236.35	.375 142.81	.750 282.62		.500 189.75						
38	38.00				.375 150.83			.500 200.44						
40	40.00				.375 158.84			.500 211.13						
42	42.00				.375 166.86			.500 221.82						
48	48.00				.375 166.86			.500 221.82						

Metal Casting Quick-Comparison Chart

	Sand Casting	Permanent Molding	Die Casting	Ceramic & Investment Casting	Resin Shell Molding CO2 Nobake Molding
Dimensional Tolerances	±.010" ±.030"	±.010" ±.050"	±.001" ±.015"	±.010" ±.020"	±.005" ±.015"
Relative Cost - High Part Quantity	Low	Low	Lowest	Highest	Med. High
Relative Cost - Low Part Quantity	Lowest	High	Highest	Medium	Med. High
Casting Weight Range	Unlimited	oz. - 100 lb	oz. - 75 lb	Ceramic - 3-350 lb. Investment - oz. - 100 lb	Shell (oz.-200 lb.) CO2 & Nobake (.5 lb-tons)
Minimum Wall Thickness	1/10"	1/8"	1/32"	1/16"	1/10"
As Cast Finish (RMS)	150 - 350	150 - 200	63 - 90	60 - 125	125 - 200
Draft Angle (Degrees)	1 - 5	2 - 4	1/2 - 2	1/4 - 1/2	1/4 - 1
Design Complexity/Detail	Fair-good	Fair	Good	Best	Good
Relative Ease of Design Changes In Production	Best	Poor	Poorest	Fair	Fair
Castable Alloys	Most Ferrous/ Non-ferrous Metals.	Al-base & Cu-base Preferred	Al-base Preferred	Most Ferrous/ Non-ferrous Metals.	Most Ferrous/ Non-ferrous Metals.

Back to Mfg

Metal Casting Processes

Foundry Process	Process	Pros/Cons
Green Sand Molding	The green sand process utilizes a mold made of compressed or compacted moist sand packed around a wood or metal pattern. A metal frame or flask is placed over the pattern to produce a cavity representing one half of the casting. The sand is compacted by either jolting or squeezing the mold. The other half of the mold is produced in like manner and the two flasks are positioned together to form the complete mold. If the casting has hollow sections, cores consisting of hardened sand (baked or chemically hardened) are used. ***High-Density Molding (High Squeeze Pressure/ Impact)*** Large air cylinders, hydraulics, and innovative explosive methods have improved the sand compaction around the pattern, improving the standards of accuracy and finish which can be achieved with certain types of castings.	**Advantages** • Most ferrous/non-ferrous metals can be used. • Low Pattern & Material costs. • Almost no limit on size, shape or weight of part. • Adaptable to large or small quantities • Used best for light, bench molding for medium-sized castings or for use with production molding machines. **Disadvantages** • Low design complexity. • Lower dimensional accuracy.
No-Bake Molding	Chemical binders (furan or urethane) are mixed with sand and placed in mold boxes surrounding the pattern halves. At room temperature, the molds become rigid with the help of catalysts. The pattern halves are removed and the mold is assembled with or without cores.	**Advantages** • Most ferrous/non-ferrous metals can be used. • Adaptable to large or small quantities • High strength mold • Better as-cast surfaces. • Improved dimensional repeatability • Less skill and labor required then in conventional sand molding. • Better dimensional control. **Disadvantages** • Sand temperatures critical. • Patterns require additional maintenance.

(*Continued*)

Metal Casting Processes (*Continued*)

Foundry Process	Process	Pros/Cons
Resin Shell Molding	Resin-bonded silica sand is placed onto a heated pattern, forming shell-like mold halves. Pattern halves are bonded together with or without cores. Probably the earliest, most automated and most rapid of mold (and coremaking) processes was the heat-curing technique known as the shell process. Ejector pins enable the mold to be released from the pattern and the entire cycle is completed in seconds depending upon the shell thickness desired. The two halves of the mold, suitably cored, are glued and clamped together prior to the pouring of the metal. Shell molds may be stored for long periods if desired. Because of pattern costs, this method is best suited to higher volume production.	**Advantages** • Adaptable to large or medium quantities • Most ferrous/non-ferrous metals can be used. • Rapid production rate. • Good dimensional casting detail and accuracy. • Shell molds are lightweight and may be stored almost indefinitely. **Disadvantages** • Since the tooling requires heat to cure the mold, pattern costs and pattern wear can be higher. • Energy costs are higher. • Material costs are higher than those for green sand molding.
Permanent Mold	Permanent molds consist of mold cavities machined into metal die blocks and designed for repetitive use. Currently, molds are usually made of cast iron or steel, although graphite, copper and aluminum have been used. Permanent mold castings can be produced from all of the metals including iron and copper alloys, but are usually light metals such as zinc-base, magnesium and aluminum. ***Gravity Permanent Mold*** -The flow of metal into a permanent mold using gravity only is referred to as a gravity permanent mold. There are two techniques in use: static pouring, where metal is introduced into the top of the mold through downsprues similar to sand casting; and tilt pouring, where metal is poured into a basin while the mold is in a horizontal position and flows into the cavity as the mold is gradually tilted to a vertical position. Normally, gravity molding is used because it is more accurate than shell molding. It is preferred almost exclusively to shell molding for light alloy components. ***Low-Pressure Permanent Mold*** - Low-pressure permanent mold is a method of producing a casting by using a minimal amount of pressure (usually 5-15 lb/sq in.) to fill the die. It is a casting process that helps to further bridge the gap between sand and pressure diecasting.	**Advantages** • Superior mechanical properties. • Produces dense, uniform castings with high dimensional accuracy. • Excellent surface finish and grain structure. • The process lends itself very well to the use of expendable cores and makes possible the production of parts that are not suitable for the pressure diecasting process. • Repeated use of molds. • Rapid production rate with low scrap loss. **Disadvantages** • Higher cost of tooling requires a higher volume of castings. • The process is generally limited to the production of somewhat small castings of simple exterior design, although complex castings such as aluminum engine blocks and heads are now commonplace.

(*Continued*)

Metal Casting Processes (*Continued*)

Foundry Process	Process	Pros/Cons
Die Casting	This process is used for producing large volumes of zinc, aluminum and magnesium castings of intricate shapes. The essential feature of diecasting is the use of permanent metal dies into which the molten metal is injected under high pressure (normally 5000 psi or more). The rate of production of diecasting depends largely on the complexity of design, the section thickness of the casting, and the properties of the cast metal. Great care must be taken with the design and gating of the mold to avoid high-pressure porosity to which this process is prone.	**Advantages** • Cost of castings is relatively low with high volumes. • High degree of design complexity and accuracy. • Excellent smooth surface finish. • Suitable for relatively low melting point metals (1600F/871C) like lead, zinc, aluminum, magnesium and some copper alloys. • High production rates. **Disadvantages** • Limits on the size of castings - most suitable for small castings up to about 75 lb. • Equipment and die costs are high.
Investment Casting (Lost Wax)	***Investment Casting*** is the process of completely investing a three-dimensional pattern in all of its dimensions to produce a one-piece destructible mold into which molten metal will be poured. A refractory slurry flows around the wax pattern, providing excellent detail. The wax patterns are assembled on a "tree" and invested with a ceramic slurry. The tree is then immersed into a fluidized bed of refractory particles to form the first layer of the ceramic shell. The mold is allowed to dry and the process repeated with coarser material until sufficient thickness has been built up to withstand the impact of hot metal. When the slurry hardens, the wax pattern is melted out and recovered and the mold or ceramic shell is oven cured prior to casting. Most materials can be cast by this process but the economics indicate that fairly high volume is necessary and the shape and complexity of the castings should be such that savings are made by eliminating machining.	**Advantages** • Excellent accuracy and flexibility of design. • Useful for casting alloys that are difficult to machine. • Exceptionally fine finish. • Suitable for large or small quantities of parts. • Almost unlimited intricacy. • Suitable for most ferrous/non-ferrous metals. • No flash to be removed or parting line tolerances. **Disadvantages** • Limitations on size of casting. • Higher casting costs make it important to take full advantage of the process to eliminate all machining operations.

(*Continued*)

Metal Casting Processes (*Continued*)

Foundry Process	Process	Pros/Cons
Expandable Pattern Casting (Lost Foam)	Also known as Expanded Polystyrene Molding or Full Mold Process, the EPC or Lost Foam process is an economical method for producing complex, close-tolerance castings using an expandable polystyrene pattern and unbonded sand. The EPC process involves attaching expandable polystyrene patterns to an expandable polystyrene gating system and applying a refractory coating to the entire assembly. After the coating has dried, the foam pattern assembly is positioned on several inches of loose dry sand in a vented flask. Additional sand is then added while the flask is vibrated until the pattern assembly is completely embedded in sand. A suitable downsprue is located above the gating system and sand is again added until it is level to the top of the sprue. Molten metal is poured into the sprue, vaporizing the foam polystyrene, perfectly reproducing the pattern. Gases formed from the vaporized pattern permeate through the coating on the pattern, the sand and finally through the flask vents. In this process, a pattern refers to the expandable polystyrene or foamed polystyrene part that is vaporized by the molten metal. A pattern is required for each casting.	**Advantages** • No cores are required. • Reduction in capital investment and operating costs. • Closer tolerances and walls as thin as 0.120 in. • No binders or other additives are required for the sand, which is reusable. • Flasks for containing the mold assembly are inexpensive, and shakeout of the castings in unbonded sand is simplified and do not require the heavy shakeout machinery required for other sand casting methods. • Need for skilled labor is greatly reduced. • Casting cleaning is minimized since there are no parting lines or core fins. **Disadvantages** • The pattern coating process is time-consuming, and pattern handling requires great care. • Good process control is required as a scrapped casting means replacement not only of the mold but the pattern as well.

(*Continued*)

Metal Casting Processes (*Continued*)

Foundry Process	Process	Pros/Cons
Vacuum ("V") Process Molding	This adaptation of vacuum forming permits molds to be made out of free-flowing, dry, unbonded sand without using high-pressure squeezing, jolting, slinging or blowing as a means of compaction. The V-process is dimensionally consistent, economical, environmentally and ecologically acceptable, energy thrifty, versatile and clean. The molding medium is clean, dry, unbonded silica sand, which is consolidated through application of a vacuum or negative pressure to the body of the sand. The patterns must be mounted on plates or boards and each board is perforated with vent holes connected to a vacuum chamber behind the board. A preheated sheet of highly flexible plastic material is draped over the pattern and board. When the vacuum is applied, the sheet clings closely to the pattern contours. Each part of the molding box is furnished with its own vacuum chamber connected to a series of hollow perforated flask bars. The pattern is stripped from the mold and the two halves assembled and cast with the vacuum on.	**Advantages** • Superb finishes. • Good dimensional accuracy. • No defects from gas holes. • All sizes and shapes of castings are possible • Most ferrous/non-ferrous metals can be used. **Disadvantages** • The V-process requires plated pattern equipment.
Centrifugal Molding	The Centrifugal Casting process consists of a metal or graphite mold that is rotated in the horizontal or vertical plane during solidification of the casting. Centrifugal force shapes and feeds the molten metal into the designed crevices and details of the mold. The centrifugal force improves both homogeneity and accuracy of the casting. This method is ideally suited to the casting of cylindrical shapes, but the outer shape may be modified with the use of special techniques.	**Advantages** • Rapid production rate. • Suitable for Ferrous/Non-ferrous parts. • Good soundness and cleanliness of castings. • Ability to produce extremely large cylindrical parts. **Disadvantages** • Limitations on shape of castings. Normally restricted to the production of cylindrical geometric shapes.

Sheet Metal Gauges

NOTE: These are **theoretical** gauge thicknesses. Actual thickness will vary depending on the mill it was rolled at, batch number, etc.

Also, note that nonferrous gauges (aluminum) are ***not*** the same as ferrous gauges (steel & stainless).

	Steel		Aluminum	
Gauge	**(inches)**	**(mm)**	**(inches)**	**(mm)**
3	.2391	6.073	.2294	5.827
4	.2242	5.695	.2043	5.189
5	.2092	5.314	.1819	4.620
6	.1943	4.935	.1620	4.115
7	.1793	4.554	.1443	3.665
8	.1644	4.176	.1285	3.264
9	.1495	3.797	.1144	2.906
10	.1345	3.416	.1019	2.588
11	.1196	3.030	.0907	2.304
12	.1046	2.657	.0808	2.052
13	.0897	2.278	.0720	1.829
14	.0747	1.897	.0641	1.628
15	.0673	1.709	.0571	1.450
16	.0598	1.519	.0508	1.290
17	.0538	1.367	.0453	1.151
18	.0478	1.214	.0403	1.024
19	.0418	1.062	.0359	0.912
20	.0359	0.912	.0320	0.813
21	.0329	0.836	.0285	0.724
22	.0299	0.759	.0253	0.643
23	.0269	0.683	.0226	0.574
24	.0239	0.607	.0201	0.511
25	.0209	0.531	.0179	0.455
26	.0179	0.455	.0159	0.404

(*Continued*)

Gauge	Steel (inches)	Steel (mm)	Aluminum (inches)	Aluminum (mm)
27	.0164	0.417	.0142	0.361
28	.0149	0.378	.0126	0.320
29	.0135	0.343	.0113	0.287
30	.0120	0.305	.0100	0.254
31	.0105	0.267	.0089	0.226
32	.0097	0.246	.0080	0.203
33	.0090	0.229	.0071	0.180
34	.0082	0.208	.0063	0.160
35	.0075	0.191	.0056	0.142

Sheet Metal Thicknesses & Weight (lb./in.^{2}) for Different Materials

Hot Rolled Steel	Cold Rolled Steel	Commercial Galvanized H.S.	Stainless Steel

Hot Rolled Steel Thickness Chart

Manufacturer's Gauge Reference	Weight (lb./in.^{2})	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
.375	.103	.362 +.028	.365	.366	.372
2	.067	.238 +.024	.240	.242	.248
3	.064	.227 +.020	.229	.230	.237
4	.061	.215 +.020	.217	.218	.225
5	.057	.200 +.020	.202	.203	.209
6	.052	.185 +.020	.187	.187	.193
7	.048	.171 +.016	.173	.173	.179
8	.044	.156 +.016	.158	.158	.164
9	.040	.142 +.016	.144	.144	.150

(*Continued*)

Hot Rolled Steel Thickness Chart (*Continued*)

Manufacturer's Gauge Reference	Weight (lb./in.^{2})	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
10	.036	.126 +.016	.128	.128	.134
11	.032	.112 +.016	.113	.114	.119
12	.027	.097 +.014	.098	.099	.104
13	.023	.081 +.014	.083	.083	.088
14	.020	.071 +.012	.072	.073	.076
15	.018	.063 +.012	.064	.064	.068
16	.016	.056 +.008	.057	.057	.061

Sheet Metal Thicknesses & Weight (lb./in.^{2}) for Different Materials

Hot Rolled Steel	Cold Rolled Steel	Commercial Galvanized H.S.	Stainless Steel

Cold Rolled Steel Thickness Chart

Manufacturer's Gauge Reference	Weight (lb./in.^{2})	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
9	.040	.142 +.012	.143	.144	.148
10	.036	.126 +.012	.127	.128	.132
11	.032	.112 +.012	.113	.114	.118
12	.027	.097 +.012	.098	.098	.102
13	.023	.081 +.010	.082	.082	.086
14	.020	.071 +.010	.072	.072	.075
15	.018	.063 +.010	.064	.064	.067
16	.016	.056 +.008	.057	.057	.060
17	.014	.050 +.008	.051	.051	.053
18	.012	.044 +.008	.045	.045	.047
19	.011	.038 +.006	.038	.039	.041
20	.009	.033 +.006	.033	.034	.035
23	.007	.024 +.006	.024	.025	.026

(*Continued*)

Cold Rolled Steel Thickness Chart. (*Continued*)

Manufacturer's Gauge Reference	Weight (lb./in.²)	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
24	.006	.021 +.006	.021	.022	.024
25	.005	.018 +.004	.018	.019	.020

Sheet Metal Thicknesses & Weight (lb./in.²) for Different Materials

Hot Rolled Steel	Cold Rolled Steel	Commercial Galvanized H.S.	Stainless Steel

Galvanized Commercial H.S. or Structural Steel Thickness Chart

Manufacturer's Gauge Reference	Weight (lb./in.²)	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
7	.045	.160 +.018	.161	.162	.167
8	.044	.156 +.018	.157	.158	.162
9	.040	.142 +.018	.143	.144	.148
10	.036	.126 +.018	.127	.128	.132
11	.032	.112 +.018	.113	.114	.118
12	.027	.097 +.016	.098	.099	.102
13	.023	.081 +.016	.082	.083	.086
14	.020	.071 +.016	.072	.073	.075
15	.018	.063 +.012	.064	.064	.067
16	.016	.056 +.010	.057	.057	.060
17	.014	.050 +.010	.051	.051	.054
18	.012	.044 +.010	.045	.045	.048
19	.011	.038 +.008	.039	.039	.042
20	.009	.033 +.008	.033	.034	.036
23	.007	.024 +.006	.024	.025	.026
24	.006	.021 +.006	.021	.022	.024
25	.005	.018 +.006	.018	.019	.020

Sheet Metal Thicknesses & Weight (lb./in.^{2}) for Different Materials

Hot Rolled Steel	Cold Rolled Steel	Commercial Galvanized H.S.	Stainless Steel

Stainless Steel Thickness Chart

Manufacturer's Gauge Reference	Weight (lb./in.^{2})	New Minimum Total Tolerance	Reference Mill Data		
			95% Min.	90% Expectancy	
			Expect.	Low	High
6	.052	.185 +.014	.187	.187	.193
7	.048	.171 +.014	.173	.173	.179
8	.044	.156 +.014	.157	.158	.164
9	.040	.142 +.012	.143	.144	.148
10	.036	.126 +.010	.127	.128	.132
11	.032	.112 +.010	.113	.114	.118
12	.027	.097 +.008	.098	.098	.102
13	.023	.081 +.008	.082	.082	.086
14	.020	.071 +.006	.072	.072	.075
15	.018	.063 +.006	.064	.064	.066
16	.016	.056 +.006	.057	.057	.059
17	.014	.050 +.006	.051	.051	.053
18	.012	.044 +.006	.045	.045	.047
19	.011	.038 +.004	.039	.039	.040
20	.009	.033 +.004	.033	.034	.035
23	.007	.024 +.003	.024	.025	.026
24	.006	.021 +.003	.021	.022	.023
25	.005	.018 +.003	.018	.019	.020

Surface Roughness Table - Shows the roughness average for different manufacturing processes in micrometers and microinches. The values are shown with a typical range and a less frequent range for each manufacturing process.

	Average Range
	Less Frequent Range

Manufacturing Process	Roughness Average Top Number - Micrometers Bottom Number - (Microinches)																									
	50 (2000)		25 (1000)		12.5 (500)		6.3 (250)		3.2 (125)		1.6 (63)		0.80 (32)		0.40 (16)		0.20 (8)		0.10 (4)		0.05 (2)		0.025 (1)		0.012 (.5)	
Flame Cutting																										
Snagging																										
Sawing																										
Planing, Shaping																										
Drilling																										
Chemical Milling																										
Elect Discharge Machining																										
Milling																										
Broaching																										
Reaming																										
Electron Beam																										
Laser																										
Electro-Chemical																										
Boring, Turning																										
Barrel Finishing																										
	50 (2000)		25 (1000)		12.5 (500)		6.3 (250)		3.2 (125)		1.6 (63)		0.80 (32)		0.40 (16)		0.20 (8)		0.10 (4)		0.05 (2)		0.025 (1)		0.012 (.5)	
Electrolytic Grinding																										
Roller Burnishing																										
Grinding																										
Honing																										
Electro-Polish																										

(*Continued*)

Manufacturing Process	Roughness Average Top Number - Micrometers Bottom Number - (Microinches)																									
	50 (2000)		**25 (1000)**		**12.5 (500)**		**6.3 (250)**		**3.2 (125)**		**1.6 (63)**		**0.80 (32)**		**0.40 (16)**		**0.20 (8)**		**0.10 (4)**		**0.05 (2)**		**0.025 (1)**		**0.012 (.5)**	
Polishing																										
Lapping																										
Super Finishing																										
Sand Casting																										
Hot Rolling																										
Forging																										
Permanent Mold Casting																										
Investment Casting																										
Extruding																										
Cold Rolling, Drawing																										
Die Casting																										
	50 (2000)		25 (1000)		12.5 (500)		6.3 (250)		3.2 (125)		1.6 (63)		0.80 (32)		0.40 (16)		0.20 (8)		0.10 (4)		0.05 (2)		0.025 (1)		0.012 (.5)	

Welding Processes

The AWS definition for a welding process is "a materials joining process which produces coalescence of materials by heating them to suitable temperatures with or without the application of pressure or by the application of pressure alone and with or without the use of filler material".

AWS has grouped the processes together according to the "mode of energy transfer" as the primary consideration. A secondary factor is the "influence of capillary attraction in effecting distribution of filler metal" in the joint. Capillary attraction distinguishes the welding processes grouped under "Brazing" and "Soldering" from "Arc Welding", "Gas Welding", "Resistance Welding", "Solid State Welding", and "Other Processes."

This table shows the official groupings and also shows the letter designation for each process. The letter designation assigned to the process can be used for identification on drawings, tables, etc.

Welding Processes and Letter Designations

Group	Welding Process	Letter Designation
Arc welding	Carbon Arc	CAW
	Flux Cored Arc	FCAW
	Gas Metal Arc	GMAW
	Gas Tungsten Arc	GTAW
	Plasma Arc	PAW
	Shielded Metal Arc	SMAW
	Stud Arc	SW
	Submerged Arc	SAW
Brazing	Diffusion Brazing	DFB
	Dip Brazing	DB
	Furnace Brazing	FB
	Induction Brazing	IB
	Infrared Brazing	IRB
	Resistance Brazing	RB
	Torch Brazing	TB
Oxyfuel Gas Welding	Oxyacetylene Welding	OAW
	Oxyhydrogen Welding	OHW
	Pressure Gas Welding	PGW

(*Continued*)

Welding Processes and Letter Designations. (*Continued*)

Group	Welding Process	Letter Designation
Resistance Welding	Flash Welding	FW
	High Frequency Resistance	HFRW
	Percussion Welding	PEW
	Projection Welding	RPW
	Resistance-Seam Welding	RSEW
	Resistance-Spot Welding	RSW
	Upset Welding	UW
Solid State Welding	Cold Welding	CW
	Diffusion Welding	DFW
	Explosion Welding	EXW
	Forge Welding	FOW
	Friction Welding	FRW
	Hot Pressure Welding	HPW
	Roll Welding	ROW
	Ultrasonic Welding	USW
Soldering	Dip Soldering	DS
	Furnace Soldering	FS
	Induction Soldering	IS
	Infrared Soldering	IRS
	Iron Soldering	INS
	Resistance Soldering	RS
	Torch Soldering	TS
	Wave Soldering	WS
Other Welding Processes	Electron Beam	EBW
	Electroslag	ESW
	Induction	IW
	Laser Beam	LBW
	Thermit	TW

Wire Gauges

Gauge	Washburn & Moen	British Imperial Standard (S.W.G.)	Birmingham or Stubs	American or Brown & Sharp
7/0	.4900”	.500”	---	---
6/0	.4615”	.464”	---	.5800”
5/0	.4305”	.432”	.500”	.5165”
4/0	.3938”	.400”	.454”	.4600”
3/0	.3625”	.372”	.425”	.4096”
2/0	.3310”	.348”	.380”	.3648”
1/0	.3065”	.324”	.340”	.3249”
1	.2830”	.300”	.300”	.2893”
2	.2625”	.276”	.284”	.2576”
3	.2437”	.252”	.259”	.2294”
4	.2253”	.232”	.238”	.2043”
5	.2070”	.212”	.220”	.1819”
6	.1920”	.192”	.203”	.1620”
7	.1770”	.176”	.180”	.1442”
8	.1620”	.160”	.165”	.1284”
9	.1483”	.144”	.148”	.1144”
10	.1350”	.128”	.134”	.1018”
11	.1205”	.116”	.120”	.0907”
12	.1055”	.104”	.109”	.0808”
13	.0915”	.092”	.095”	.0719”
14	.0800”	.080”	.083”	.0640”
15	.0720”	.072”	.072”	.0570”
16	.0625”	.064”	.065”	.0508”
17	.0540”	.056”	.058”	.0452”
18	.0475”	.048”	.049”	.0403”
19	.0410”	.040”	.042”	.0358”
20	.0348”	.036”	.035”	.0319”
21	.0317”	.032”	.032”	.0284”
22	.0286”	.028”	.028”	.0253”

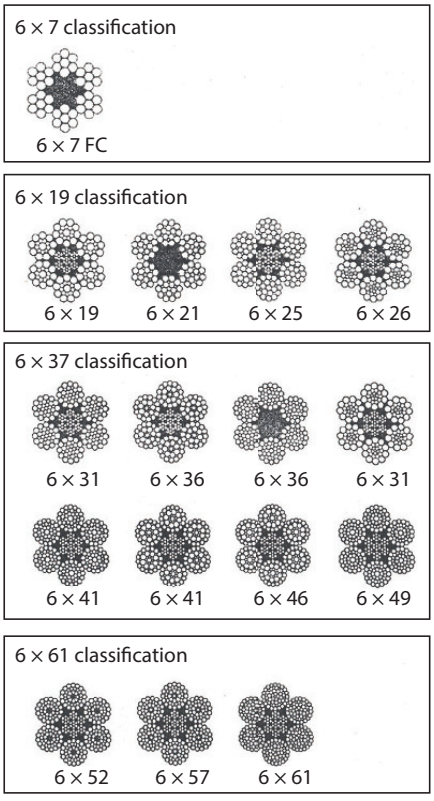
(*Continued*)

Gauge	Washburn & Moen	British Imperial Standard (S.W.G.)	Birmingham or Stubs	American or Brown & Sharp
23	.0258”	.024”	.025”	.0225”
24	.0230”	.022”	.022”	.0201”
25	.0204”	.020”	.020”	.0179”
26	.0181”	.018”	.018”	.0159”
27	.0173”	.0164”	.016”	.0141”
28	.0162”	.0148”	.014”	.0126”
29	.0150”	.0136”	.013”	.0112”
30	.0140”	.0124”	.012”	.0100”
31	.0132”	.0116”	.010”	.0089”
32	.0128”	.0108”	.009”	.0079”
33	.0118”	.0100”	.008”	.0070”
34	.0104”	.0092”	.007”	.0063”
35	.0095”	.0084”	.005”	.0056”
36	.0090”	.0076”	.004”	.0050”
37	.0085”	.0068”	---	.0044”
38	.0080”	.0060”	---	.0039”
39	.0075”	.0052”	---	.0035”
40	.0070”	.0048”	---	.0031”
41	.0066”	.0044”	---	.00280”
42	.0062”	.0040”	---	.00249”
43	.0060”	.0036”	---	.00222”
44	.0058”	.0032”	---	.00198”
45	.0055”	.0028”	--	.00176”
46	.0052”	.0024”	---	.00157”
47	.0050”	.0020”	---	.00140”
48	.0048”	.0016”	---	.00124”
49	.0046”	.0012”	--	.00111”
50	.0044”	.0010”	--	.00099”

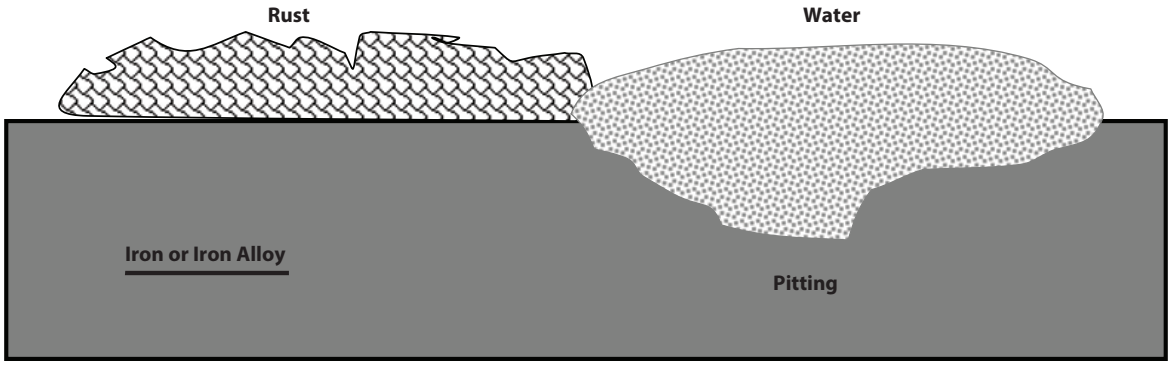
	1 PETE Polyethylene Terephthalate (PET)	2 HOPE High Density Polyethylene	3 V Polyvinyl Chloride (PVC)	4 LOPE Low Density Polyethylene	5 PP Polypropylene	6 PS Polystyrene (PS)
Clarity	Clear	Hazy Translucent	Clear	Translucent	Translucent	Clear
Moisture Barrier (MTVR)	Good	Excellent	Good	Very Good	Excellent	Poor
Oxygen Barrier	Good	Poor	Good	Poor	Poor	Poor
Distortion Temperature	155°F	160°F	150°F	110°F	200°F	170°F
Rigidity	High	Moderate	High	Low	Moderate	High
Stress Crack Resistance	Excellent	Fair	Excellent	Good	Excellent	Fair
Cold Resistance	Good	Excellent	Fair	Excellent	Poor	Poor
Impact Resistance	Good	Excellent	Good	Excellent	Fair	Poor
Alcohol Resistance	Good	Good	Excellent	Good	Good	Fair
Alkalis Resistance	Poor	Good	Excellent	Good	Good	Fair
Solvent Resistance	Good	Poor	Good	Poor	Poor	Poor
Oil Resistance	Fair	Good	Good	Good	Good	Poor
Acid Resistance	Fair	Good	Good	Good	Good	Fair

Resin_comparison_chart

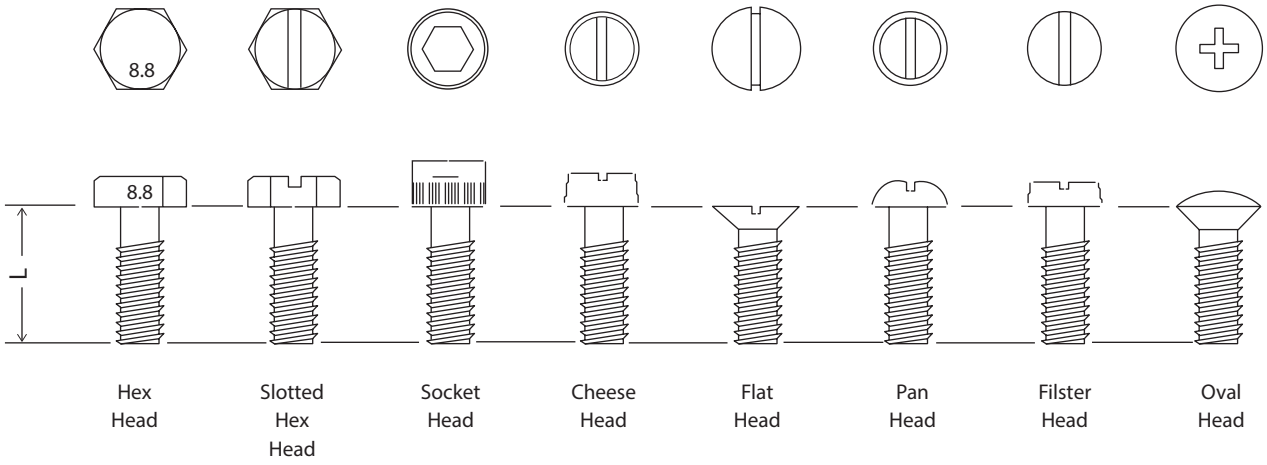
Wire Rope



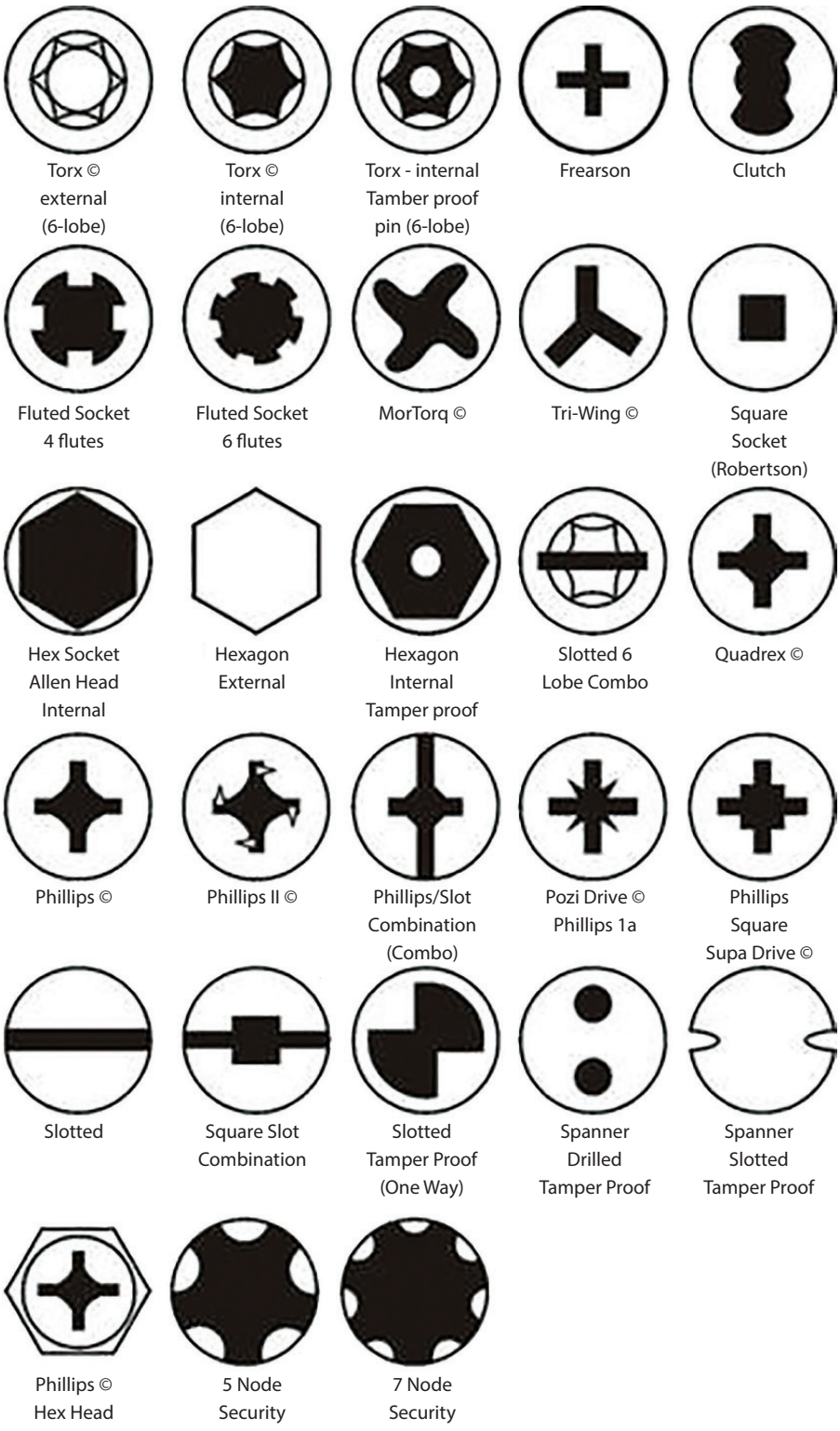
Rope%20Strand%20Classification



Rust



Screw Configuration



Screw slot types

U.S. Thread Chart					
Diameter of Bolt	Coarse Thread "UNC" Threads Per Inch	Fine Thread "UNF" Threads Per Inch	Diameter of Bolt	Coarse Thread "UNC" Threads Per Inch	Fine Thread "UNF" Threads Per Inch
No. 2	56	-	7/8	9	14
No. 3	48	-	1	8	14
No. 4	40	-	1-1/8	7	12
No. 5	40	-	1-1/4	7	12
No. 6	32	-	1-1/2	6	12
No. 8	32	-	-	-	-
No 10	24	32	-	-	-
No. 12	24	-	-	-	-
1/4	20	28	-	-	-
5/16	18	24	-	-	-
3/8	16	24	-	-	-
7/16	14	20	-	-	-
1/2	13	20	-	-	-
9/16	12	18	-	-	-
5/8	11	18	-	-	-
3/4	10	16	-	-	-

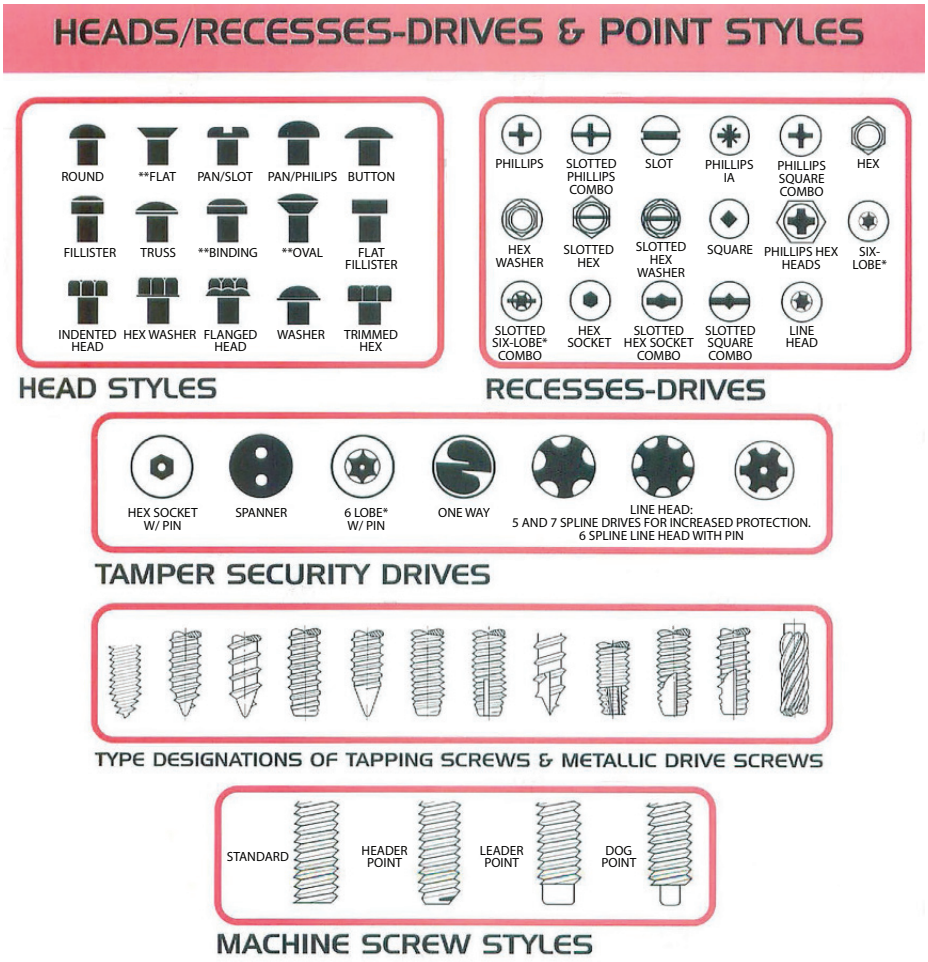
This chart lists the coarse thread and fine thread for each diameter bolt and machine screws.

Metric Thread Pitch			
Bolt Diameter	Standard Thread Pitch (mm)	Fine Thread Pitch (mm)	Extra Fine Thread Pitch (mm)
4mm	0.70	-	-
5mm	0.80	-	-
6mm	1.00	-	-
7mm	1.00	-	-
8mm	1.25	1.00	-
10mm	1.50	1.25	1.00
12mm	1.75	1.50	1.25
14mm	2.00	1.50	-
16mm	2.00	-	-
18mm	2.50	-	-
20mm	2.50	-	-
24mm	3.00	-	-

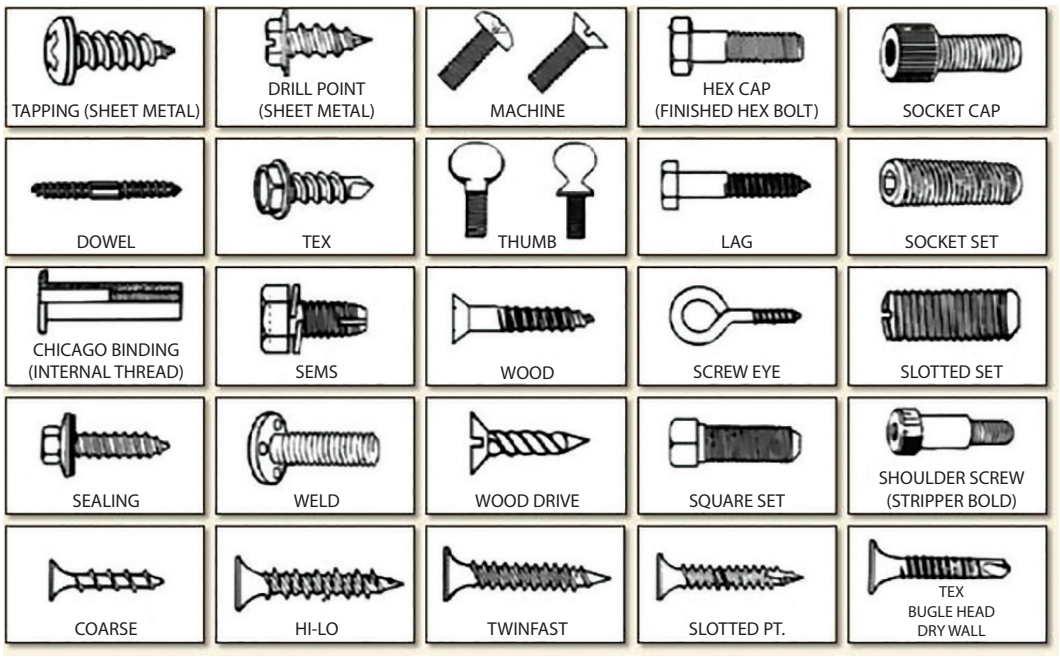
Size Identification: Metric bolts are written down as an 'M' followed by 3 numbers. For example M10×1.25×35 The first number is the diameter, the second the thread pitch, and the third the length all in millimeters. The example is therefore a 10mm diameter fine thread bolth 35mm long.

Thread pitch: The distance from one thread to the next, measured down the length of the fastener.

Screw Thread Chart



Screw%20selection%20chart



Screws types

Nuts

Types of Nuts

Your choices are...	
Acorn	An acorn nut is a domed nut which seals the threads inside the nut. This helps to protect the threads from corrosion.
Anchor	An anchor nut expands a portion of its body to press tightly against the hole in which it is located. The expansion is caused by a bolt that tightens down on the nut.
Cage	A cage nut contains a captive nut that can float in its cage to allow for misalignment and design variations.
Castle	A castle nut has a series of slots on one end and is held in place with a pin. Castle nuts are used in applications where vibration or motion could undo the nut. Castle nuts are also called slotted nuts.
Coupling	A coupling nut has a long, hexagonal body and is used to hold a threaded rod or machine screw at each end.
Cylinder	A cylinder nut is similar to a coupling nut, but has a cylindrical body. Coupling nuts have hexagonal bodies.
Finger	A finger nut is sometimes called a fly nut or thumb nut.
Flange	A flange is a type of locking nut where a ring is inserted into the threads.
Hex	A hex nut or hexagonal nut is a six-sided nut.
Jam	A jam nut resembles a hex nut, but has a smaller profile. Jam nuts are used to lock hex nuts in place by applying torque or force to the hex nut.
Kep	Hex nuts typically have an attached or captive star-type locking washer. Usually, the washer is able to move freely.
Lock	Lock nuts are used to prevent another nut or threaded component from loosening. A lock nut typically has a nylon or plastic insert in the threads that captures and holds the screw or bolt.
Nylon Insert	A nylon insert nut uses a plastic insert to capture the bolt or screw. Nylon insert nuts are used in applications where vibration or motion could loosen or undo the nut.
Pallet	A pallet nut is a captive nut that digs into the pallet material to hold fast. Pallet nuts have a large flange. A portion of the body near the flange is larger in diameter than the regular threaded section. Pallet nuts can be pressed into place or drawn in as the bolt is tightened.
Push	A push nut is a non-threaded fastener that is pushed onto an axle or other non-threaded rod. These fasteners push on easily, but are difficult to remove.
Round	Round nuts are shaped like cylinders and can be tightened in several different ways. They can be tightened with a wrench that fits into parallel slots on the outside wall, an Allen key that fits into one end of the nut, or a wrench that fits a nut's hex-shaped sides.
Self-Clinching	A self-clinching nut is pressed into a hole and holds fast against the wall by the force exerted upon it. Self-clinching nuts are used in applications where the sheet metal is too thin to be tapped for threads. Self-clinching nuts are sometimes called press nuts.
Speed	A speed nut has an arched spring body that acts like a thread lock. Speed nuts are also called self-retaining nuts and self-locking nuts.

Types of Nuts

Your choices are...	
Square	A square nut is a four-sided fastener.
Tee	A tee nut is a threaded barrel with a pronged flange at one end. The prongs embed themselves into the surface that is held as force is applied to the nut. Tee nuts are also called blind nuts.
U-Type	U-type nuts are specialty nuts used on rack-mounted equipment. The nut is integral with the mounting and has a tight U-shaped clip that presses on thin sheet metal.
Washer	Washer nuts attach to a free-spinning or fixed washer.
Weld	Weld nuts have projections or tabs that are used to attach the nut to the substrate. Weld nuts can be square, hexagonal, or round.
Wing	A wing nut has two tabs or wings that extend outwards from the center and allow the user to tighten the nut by hand.
Other	Other unlisted, specialized or proprietary types of nuts.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Thread Specifications

Direction of Turn	
Your choices are...	
Right Hand Thread	The direction for tightening is clockwise.
Left Hand Thread	The direction for tightening is counterclockwise.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Inch	
Your choices are...	
# 0000	# 0000 fasteners have an inner diameter of 0.021 in.
# 000	# 000 fasteners have an inner diameter of 0.034 in.
# 00	# 00 fasteners have an inner diameter of 0.047 in.
# 0	# 0 fasteners have an inner diameter of 0.060 in.
# 1	# 1 fasteners have an inner diameter of 0.073 in
# 2	# 2 fasteners have an inner diameter of 0.086 in.
# 3	# 3 fasteners have an inner diameter of 0.099 in.
# 4	# 4 fasteners have an inner diameter of 0.112 in.
# 5	# 5 fasteners have an inner diameter of 0.125 in.

# 6	# 6 fasteners have an inner diameter of 0.138 in.
# 7	# 7 fasteners have an inner diameter of 0.151 in.
# 8	# 8 fasteners have an inner diameter of 0.164 in.
# 9	# 9 fasteners have an inner diameter of 0.177 in.
# 10	# 10 fasteners have an inner diameter of 0.190 in.
# 12	# 12 fasteners have an inner diameter of 0.216 in.
# 14	# 14 fasteners have an inner diameter of 0.242 in.
1/4”	1/4” fasteners have an inner diameter of .250 in.
# 16	# 16 fasteners have an inner diameter of 0.268 in.
# 18	# 18 fasteners have an inner diameter of 0.294 in.
5/16”	5/16” fasteners have an inner diameter of .3125 in.
# 20	# 20 fasteners have an inner diameter of 0.320 in.
# 24	# 24 fasteners have an inner diameter of 0.372 in.
3/8”	3/8” fasteners have an inner diameter of .375 in.
7/16”	7/16” fasteners have an inner diameter of .4375 in.
1/2”	1/2” fasteners have an inner diameter of .500 in.
5/8”	5/8” fasteners have an inner diameter of .625 in.
3/4”	3/4” fasteners have an inner diameter of .750 in.
7/8”	7/8” fasteners have an inner diameter of .875 in.
1”	1” fasteners have an inner diameter of 1.000 in.
1 1/8”	1 1/8” fasteners have an inner diameter of 1.125 in.
1 1/4”	1 1/4” fasteners have an inner diameter of 1.250 in.
1 3/8”	1 3/8” fasteners have an inner diameter of 1.375 in.
1 1/2”	1 1/2” fasteners have an inner diameter of 1.500 in.
1 3/4”	1 3/4” fasteners have an inner diameter of 1.750 in.
2”	2” fasteners have an inner diameter of 2.000 in.
2 1/4”	2 1/4” fasteners have an inner diameter of 2.250 in.
2 1/2”	2 1/2” fasteners have an inner diameter of 2.500 in.
2 3/4”	2 3/4” fasteners have an inner diameter of 2.750 in.
3”	3” fasteners have an inner diameter of 3.000 in.
Other	Other, unlisted inch-based sizes.

Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting "No Preference" will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Metric	
Your choices are...	
M1.6	M1.6 fasteners have an inner diameter of 1.6 mm.
M2	M2 fasteners have an inner diameter of 2.0 mm.
M2.5	M2.5 fasteners have an inner diameter of 2.5 mm.
M3	M3 fasteners have an inner diameter of 3.0 mm.
M3.5	M3.5 fasteners have an inner diameter of 3.5 mm.
M4	M4 fasteners have an inner diameter of 4.0 mm.
M5	M5 fasteners have an inner diameter of 5.0 mm.
M6	M6 fasteners have an inner diameter of 6.0 mm.
M8	M8 fasteners have an inner diameter of 8.0 mm.
M1	M10 fasteners have an inner diameter of 10.0 mm.
M12	M12 fasteners have an inner diameter of 12.0 mm.
M14	M14 fasteners have an inner diameter of 14 mm.
M16	M16 fasteners have an inner diameter of 16 mm.
M18	M18 fasteners have an inner diameter of 18 mm.
M20	M20 fasteners have an inner diameter of 20 mm.
M22	M22 fasteners have an inner diameter of 22 mm.
M24	M24 fasteners have an inner diameter of 24 mm.
M25	M25 fasteners have an inner diameter of 25 mm.
M26	M26 fasteners have an inner diameter of 26 mm.
M27	M27 fasteners have an inner diameter of 27 mm.
M28	M28 fasteners have an inner diameter of 28 mm.
M30	M30 fasteners have an inner diameter of 30 mm.
M32	M32 fasteners have an inner diameter of 32 mm.
M33	M33 fasteners have an inner diameter of 33 mm.
M35	M35 fasteners have an inner diameter of 35 mm.
M36	M36 fasteners have an inner diameter of 36 mm.
M38	M38 fasteners have an inner diameter of 38 mm.
M40	M40 fasteners have an inner diameter of 40 mm.

M42	M42 fasteners have an inner diameter of 42 mm.
M48	M48 fasteners have an inner diameter of 48 mm.
M56	M56 fasteners have an inner diameter of 56 mm.
M64	M64 fasteners have an inner diameter of 64 mm.
Other	Other, unlisted metric sizes.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting "No Preference" will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Material/Finish

Your choices are...	
Aluminum	Aluminum is a bluish, silver-white, malleable, ductile, light, trivalent, metallic element that has good electrical and thermal conductivity, high reflectivity, and resistance to oxidation. Aluminum is lighter than steel, but not as strong.
Brass	Brass provides good strength, excellent high-temperature ductility, reasonable cold ductility, good conductivity, excellent corrosion resistance, good bearing properties and low magnetic permeability.
Bronze/Copper Base Alloy	A copper base alloy is a metal with copper as the main alloying metal and one or more other metals, such as tin, zinc, or phosphorus. Silicon bronze is a typical fastener alloy.
Copper	Copper is a common, reddish, metallic element that is both ductile and malleable. Copper is one of the best conductors of heat and electricity. It also exhibits good corrosion resistance.
Inconel®/Incoloy®	Inconel® and Incoloy® (Special Metals Corporation) provide good strength and excellent resistance to oxidation and carbonization in high temperatures environments, and in many aqueous environments. These proprietary materials are used in process piping, heat exchangers, heating element sheathing and nuclear steam generator tubing. Typically, Inconel and Incoloy are used at service temperatures below 650° C (1200° F).
Monel®	Monel® (Special Metals Corporation) is a proprietary, high-strength material that offers resistance to a range of corrosive media such as seawater, hydrofluoric and sulfuric acids, and alkalis.
Steel	Steel is a commercial iron that contains carbon in any amount up to about 1.7 percent as an essential alloying constituent. Many grades of carbon and alloy steels are used as fastener materials. Steel may require coating for protection against corrosion.
Hardened Steel	Steel can be hardened in a number of ways. Methods include quenching techniques in oil and water, and passing the steel through induction chambers. During processing, the rapid cooling of steel freezes, traps and packs the carbon atoms inside the shrunken iron crystals. The resulting steel is very hard and brittle. Hardened steel is strong, but cannot absorb much shock or impact without breaking.
Stainless Steel	Stainless steel is chemical and corrosion resistant and can have relatively high stress ratings. Many grades are used in fasteners. Often, stainless steel does not require an anti-corrosion coating; however, most stainless steels cannot be hardened to the same degree as carbon steels.

Titanium	Titanium is a hard, lustrous, silvery element that is relatively abundant in the Earth's crust. It is valued for its lightness, strength, and corrosion resistance. Titanium is used widely in the aerospace industry and in medical products such as replacement joints. When alloyed with other metals, especially steel, titanium adds strength and oxidation resistance.
Other	Other unlisted, specialized, or proprietary metallic materials.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Non-Metallic	
Your choices are...	
Plastic	Products are made of thermoplastic materials.
FRP	Fiber-reinforced plastic (FRP) or fiber-reinforced polyurethane is a composite material with reinforcing fibers. It is stronger than many plastics which do not contain reinforcing additions. When made with polyurethane, FRP is a tough and wear-resistant material.
Nylon	Nylon is a tough, resistant, general-purpose material. It comprises several grades of polyamides and has good pressure ratings. Nylon 6/6 is commonly used with fasteners.
PVC	Polyvinyl chloride (PVC) is a widely used material that has good flexibility, a smooth surface, and nontoxic qualities. Some grades are used in food and chemical processes because of PVC's inert nature and good resistance to chemicals such as acids and alcohols. PVC brand names include ACP® and Dural® (Alpha Gary), Geon® (Geon), Benvic® (Solvay), and Flexalloy® (Teknor Apex).
PVDF	Polyvinylidene fluoride (PVDF) is a melt-processable fluropolymer. PVDF has similar properties to other fluropolymers, but provides better strength and lower creep. PVDF also offers good wear resistance and excellent chemical resistance; however, it does not perform well at elevated temperatures. Brand names include Kynar® (Elf AtoChem).
PTFE	Polytetrafluoroethylene (PTFE) is an insoluble compound that exhibits a high degree of chemical resistance and a low coefficient of friction. It is sometimes marketed in proprietary classes of materials such as Teflon®, a registered trademark of DuPont Dow Elastomers.
Rubber	Synthetic rubber includes grades such as neoprene, silicone, and Norprene® (Norton Co.). Rubber fasteners are used in specialized applications for vibration damping and silencing.
Other	Other unlisted, specialized, or proprietary non-metallic materials.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Finish	
Your choices are...	
Anodize	Anodizing is a process for finishing aluminum alloys that uses the electrolytic oxidation of the aluminum surface to produce a protective oxide coating. The anodic coating consists of hydrated aluminum oxide and is resistant to corrosion and abrasion. Conventional coatings are 0.1 to 1.0 mils thick and are mostly transparent, but may be colored. Anodizing preserves the natural luster and texture of the metal. Anodized coatings are hard, durable, will never peel, and, under normal conditions, will never wear through. Standard and decorative colors are available. This category includes hard-coat anodizing.
Black Oxide	Black oxide is a conversion coating that causes virtually no dimensional change. It is a uniform, continuous conversion of the existing metal to a black form of rust. Black oxide is used on components where tight tolerances are needed. It is used mostly as a decorative coating.
Chrome	Chrome finish is an electroplated coating that is applied for purposes of lubricity, wear resistance, and decoration. Chrome provides a bright and highly reflective finish.
Galvanized	Galvanizing immerses clean, oxide-free iron or steel into molten zinc in order to apply a zinc coating that is metallurgically bonded to the iron or steel surface. The zinc coating protects the surface against corrosion in two ways. First, it shields the base metal from the atmosphere. Second, because zinc is more electronegative than iron or steel, the coating reacts with corroding agents, providing a longer service life for the part.
Gold	Gold plating provides total resistance to oxidation and corrosion. It is electrically conductive and can be alloyed with cobalt to produce a wear-resistant finish.
Phosphate	Phosphate coatings are applied via the chemical or electrochemical treatment of a metal's surface. These corrosion-resistant coatings provide a surface for the improved adhesion of primers and paints.
Nickel Plated	Nickel plating is a common form of electrolytic deposition.
Silver	Silver is the most electrically conductive plating finish. It is used in electronic fasteners for electrical conductivity and signal transmittance. Silver oxidizes rapidly, but resists corrosion.
Tin	Tin plating is applied to electronic fasteners that are made of brass.
Zinc Plated	Zinc plating is a common form of plating that provides corrosion resistance.
Zinc Chromate (Yellow)	Fasteners have a yellow zinc chromate finish.
Other	Other unlisted finish.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Fastener Standards

Fastener Standards	
Your choices are...	
AIA/NAS	Dimensional and material standards for aircraft fasteners are developed by the Aerospace Industries Association (AIA) and/or its National Aerospace Standards Committee (NASC). All drawings and specifications have a NAS or NASM prefix. NAS is an acronym for National Aerospace Standards. NASM is an acronym for National Aerospace Standards, Metric.
AN/MS	Dimensional standards for aircraft fasteners are developed by the Aeronautical Standards Group. All drawings have a prefix of AN or MS. Products are suitable for army, navy, or air force use.
ASME/ANSI	The American Society of Mechanical Engineers (ASME) B18 standard specifies all ASME B18 fastener products with a single 18-digit PIN code system. Approved by the American National Standards Institute (ANSI) and adopted by the U.S. Department of Defense, the ASME B18.24 PIN system is a self-contained code that covers 788 unique B18 fastener types from 72 ASME B18 source documents. The PIN code system is fully parametric, uniform across all fastener types, and is intended as a digital alternative to the traditional plain text fastener product callout prescribed in the "Designation" or "Ordering" section of the applicable source document.
BS	Dimensional and material standards developed by the British Standards Institution. Standards are designated with a BS prefix. The British Standards International (BSI) Kitemark indicates that products are tested regularly against the requirements of an appropriate BSI standard, and that the manufacturer's quality system is assessed at least twice a year to ensure continued quality production.
DIN	DIN is an acronym for Deutsches Institut für Normung (DIN), a German national organization for standardization. Most metric fasteners are manufactured according to DIN standards. Although DIN predates the International Standards Organizations (ISO), DIN standards are being revised to more closely match ISO standards. Ordering DIN fasteners requires three pieces of information: the DIN identifier, which defines the style of the fastener; the material (e.g., 8.8 Steel, 316 Stainless, Hastelloy C276); and the coating or plating (if any).
ISO	The International Standards Organization (ISO) is a worldwide federation of national standards organizations from over 100 countries. ISO's mission is to facilitate the international exchange of goods and services, and to foster cooperation in the spheres of intellectual, technological, and economic activity. ISO standards for metric fasteners are gaining recognition rapidly. They will probably become global standards.
JIS	Japanese Industrial Standard (JIS) is largely based on DIN; however, some standards have been modified to meet the needs of the Japanese market. Most of the fasteners used in electronic equipment manufactured in Japan comply with the JIS standard.
SAE	Fasteners meet standards developed by the Society of Automotive Engineers (SAE), a worldwide organization that establishes industry standards for the testing, measurement, and design of automobiles and their components.
Other	Other unlisted, specialized, or proprietary fastener standards.

Screws

Screw Type

Screw Type	
Your choices are...	
Cap Screw	Cap screws are fasteners for machine parts. They are designed to be threaded into tapped holes. There are many different head styles for cap screws. Flat head, socket head, round head, and hex head styles are the most common types. Cap screws have a fairly wide shoulder for holding fast to an object, but may not be threaded over their full body length.
Dry Wall Screw	Dry wall screws are flat headed, coarse threaded screws used to hold sheet rock to wall studs.
Lag Screw	Lag screws have square or hexagon heads for driving with a wrench and a course-pitch threaded body. They are designed for fastening wood and similar materials and producing their own screw thread when tightened. They are also referred to as lag bolts.
Machine Screw	Machine screws are fully threaded small caliber screws for joining metal parts. They either are screwed into pre-threaded holes or can also be fitted with a nut. They are also referred to as machine bolts.
Sheet Metal Screw	Sheet metal screws are used to fasten sheets of thin metal together. They also used to fasten wood or plastic to metal. Sheet metal screws are fully threaded from the point to the head.
Self Drilling/Thread Cutting Screw	A self-drilling or thread-cutting screw has a point like a drill bit and bores its own hole, eliminating the need for a pre-drilled hole.
Set Screw	A set screw is a small, threaded rod that is used to fix a device such as a pulley to a rotating shaft. Set screws are available with socket and slotted drive types.
Shoulder Screw	A shoulder screw has an unthreaded shank that is long in comparison to its threaded portion, which is located under the head. Shoulder screws are used to attach one machine part to another, or as a plain bearing in places where rotary or sliding motion is required. Precision shoulder screws are manufactured with varying diameters and shoulder length tolerances. Shoulder screws are also referred to as shoulder bolts or stripper bolts.
Tamperproof Screw	Tamperproof screws are designed so they can be tightened, but not loosened. Special tools are required to drive them. Typically, tamperproof screws are used in areas where security is important.
Thumb Screw	A thumbscrew is a hand-tightened fastener used in applications where there is frequent fastening and unfastening. They are not suitable for high-tension applications.
Wood Screw	Wood screws are fully-threaded, tapered fasteners. They have oval, round or flat heads.
Other	Other, unlisted, or proprietary screw types.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Screw Diameter

Inch	
Your choices are...	
# 0000	# 0000 fasteners have an inner diameter of 0.021 in.
# 000	# 000 fasteners have an inner diameter of 0.034 in.
# 00	# 00 fasteners have an inner diameter of 0.047 in.
# 0	# 0 fasteners have an inner diameter of 0.060 in.
# 1	# 1 fasteners have an inner diameter of 0.073 in.
# 2	# 2 fasteners have an inner diameter of 0.086 in.
# 3	# 3 fasteners have an inner diameter of 0.099 in.
# 4	# 4 fasteners have an inner diameter of 0.112 in.
# 5	# 5 fasteners have an inner diameter of 0.125 in.
# 6	# 6 fasteners have an inner diameter of 0.138 in.
# 7	# 7 fasteners have an inner diameter of 0.151 in.
# 8	# 8 fasteners have an inner diameter of 0.164 in.
# 9	# 9 fasteners have an inner diameter of 0.177 in.
# 10	# 10 fasteners have an inner diameter of 0.190 in.
# 12	# 12 fasteners have an inner diameter of 0.216 in.
# 14	# 14 fasteners have an inner diameter of 0.242 in.
1/4”	1/4” fasteners have an inner diameter of .250 in.
# 16	# 16 fasteners have an inner diameter of 0.268 in.
# 18	# 18 fasteners have an inner diameter of 0.294 in.
5/16”	5/16” fasteners have an inner diameter of .3125 in.
# 20	# 20 fasteners have an inner diameter of 0.320 in.
# 24	# 24 fasteners have an inner diameter of 0.372 in.
3/8”	3/8” fasteners have an inner diameter of .375 in.
7/16”	7/16” fasteners have an inner diameter of .4375 in.
1/2”	1/2” fasteners have an inner diameter of .500 in.
5/8”	5/8” fasteners have an inner diameter of .625 in.
3/4”	3/4” fasteners have an inner diameter of .750 in.
7/8”	7/8” fasteners have an inner diameter of .875 in.
1”	1” fasteners have an inner diameter of 1.000 in.
1 1/8”	1 1/8” fasteners have an inner diameter of 1.125 in.
1 1/4”	1 1/4” fasteners have an inner diameter of 1.250 in.

1 3/8”	1 3/8” fasteners have an inner diameter of 1.375 in.
1 1/2”	1 1/2” fasteners have an inner diameter of 1.500 in.
1 3/4”	1 3/4” fasteners have an inner diameter of 1.750 in.
2”	2” fasteners have an inner diameter of 2.000 in.
2 1/4”	2 1/4” fasteners have an inner diameter of 2.250 in.
2 1/2”	2 1/2” fasteners have an inner diameter of 2.500 in.
2 3/4”	2 3/4” fasteners have an inner diameter of 2.750 in.
3”	3” fasteners have an inner diameter of 3.000 in.
Other	Other, unlisted inch sizes.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting “No Preference” will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Metric	
Your choices are...	
M1.6	M1.6 fasteners have an inner diameter of 1.6 mm.
M2	M2 fasteners have an inner diameter of 2.0 mm.
M2.5	M2.5 fasteners have an inner diameter of 2.5 mm.
M3	M3 fasteners have an inner diameter of 3.0 mm.
M3.5	M3.5 fasteners have an inner diameter of 3.5 mm.
M4	M4 fasteners have an inner diameter of 4.0 mm.
M5	M5 fasteners have an inner diameter of 5.0 mm.
M6	M6 fasteners have an inner diameter of 6.0 mm.
M8	M8 fasteners have an inner diameter of 8.0 mm.
M10	M10 fasteners have an inner diameter of 10.0 mm.
M12	M12 fasteners have an inner diameter of 12.0 mm.
M14	M14 fasteners have an inner diameter of 14 mm.
M16	M16 fasteners have an inner diameter of 16 mm.
M18	M18 fasteners have an inner diameter of 18 mm.
M20	M20 fasteners have an inner diameter of 20 mm.
M22	M22 fasteners have an inner diameter of 22 mm.
M24	M24 fasteners have an inner diameter of 24 mm.
M25	M25 fasteners have an inner diameter of 25 mm.
M26	M26 fasteners have an inner diameter of 26 mm.
M27	M27 fasteners have an inner diameter of 27 mm.

M28	M28 fasteners have an inner diameter of 28 mm.
M30	M30 fasteners have an inner diameter of 30 mm.
M32	M32 fasteners have an inner diameter of 32 mm.
M33	M33 fasteners have an inner diameter of 33 mm.
M35	M35 fasteners have an inner diameter of 35 mm.
M36	M36 fasteners have an inner diameter of 36 mm.
M38	M38 fasteners have an inner diameter of 38 mm.
M40	M40 fasteners have an inner diameter of 40 mm.
M42	M42 fasteners have an inner diameter of 42 mm.
M48	M48 fasteners have an inner diameter of 48 mm.
M56	M56 fasteners have an inner diameter of 56 mm.
M64	M64 fasteners have an inner diameter of 64 mm.
Other	Other, unlisted metric sizes.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting "No Preference" will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Length

Length	The length of the fastener.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Head Type

Head Type	
Your choices are...	
Binding Head	A binding head has a rounded top surface with slightly tapered sides and a flat bearing.
Button Head	A button head has a rounded top surface with cylindrical sides and a flat bearing surface.
Fillister Head	A fillister head has a slightly convex top surface with cylindrical sides and a flat bearing surface. An alternate, older term for fillister head is cheese head.
Five-sided	A five-sided head is shaped like a pentagon. These fasteners are tightened and loosened with special wrenches and are designed for specialized applications, such as the valves of fire hydrants.
Flat Head	A flat head has a flat top surface and a conical bearing surface.
Hexagon Head	A hexagonal head has six equal sides, a flat top, and a flat bearing surface. Fasteners with this head type are designed to be tightened and loosened with a wrench.
Oval Head	An oval head has a rounded top surface and a conical bearing surface, usually with an included angle of 82°.

Pan Head	A pan head has a flat top, cylindrical sides, and a flat bearing surface. A recessed pan head fastener has a rounded top, cylindrical sides and a flat bearing surface.
Round Head	A round head has a rounded, elliptical top surface and a flat bearing surface.
Socket Head Cap	Socket head cap screws have a cylindrical head, a hexagonal socket drive, and a flat bearing surface.
Square Head	A square head has four equal sides, a flat top, and a flat bearing surface. Square head fasteners are designed to be tightened and loosened with a wrench.
Truss Head	A truss head has a low head height, a rounded top surface, and a flat bearing surface.
Washer Head	Washer head screws have a washer-like bearing surface that distributes the load over a larger area.
Other	Other, unlisted head types.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Drive Type

Drive Type	
Your choices are...	
12-Point	Drives have 12 points of contact and are tightened and loosed with a special wrench.
Bristol Spline	Bristol spline drives are recessed drives with four to six splines that prevent wrenches from camming out. Most products have six splines; however, two smaller-sized models have only four spines.
Clutch	Clutch drives are recessed and shaped like a bowtie.
Hex Socket/Allen	Hex socket drives or Allen drives are six-sided. They are turned with a hexagonal wrench or an Allen wrench.
Philips/Frearson	Philips is a recessed, cross-drive system that was designed originally for aluminum screws. During tightening, the mating Phillips screwdriver will slip before the drive strips. Frearson drives are a cross-drive system more commonly known as ANSI Type II. Frearson drives have a sharper point (73° included angle) than Phillips drives (123° included angle).
Posidriv®	Posidriv® (Phillips Screw Company) is a recessed drive called ANSI Type 1A. It is similar to a standard Phillips drive, but has an additional cross-recess at 90°. Posidriv fasteners are well-suited for applications that require high tightening torque because the driver will not slip upon tightening.
Slotted	A slotted drive has a standard, slotted recess. This is one of the oldest drive types.
Square/Robertson	Square drives or Robertson drives are four-sided, recessed drives. Square drives do not cam out when tightened and allow for four different driver positions.
Supadriv®	Supadriv® (Trifast Plc.) is a recessed drive that resembles a Phillips cross-drive, but has a smaller square drive in the center. A Supadriv driver will turn a Posidriv fastener.
Torx®	Torx® is a six-pointed, lobed or star-pattern recess with straight walls. Torx is a registered trademark of the Camcar Corporation, a division of Textron Industries.
Other	Other, unlisted, or proprietary drive types.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Material

Material	
Your choices are...	
Aluminum	Aluminum is a bluish, silver-white, malleable, ductile, light, trivalent, metallic element that has good electrical and thermal conductivity, high reflectivity, and resistance to oxidation. Aluminum is lighter than steel, but not as strong.
Brass	Brass provides good strength, excellent high-temperature ductility, reasonable cold ductility, good conductivity, excellent corrosion resistance, good bearing properties and low magnetic permeability.
Bronze/Copper Base Alloy	A copper base alloy is metal composed of copper as the main alloying metal and one or more other metals, such as tin, zinc, or phosphorus. Silicon bronze is one typical fastener alloy.
Copper	Copper is a common, reddish, metallic element that is both ductile and malleable. Copper is one of the best conductors of heat and electricity. It also exhibits good corrosion resistance.
Molybdenum	Molybdenum is a chemical element with the symbol Mo and an atomic number of 42. Molybdenum has a very high melting point (the sixth highest of any element) and is commonly used in high-strength steel alloys.
Plastic	Products are made of thermoplastic materials.
Steel	Steel is a commercial iron that contains carbon in any amount up to about 1.7 percent as an essential alloying constituent. Many grades of carbon and alloy steels are used as fastener materials. Steel may require coating for protection against corrosion.
Hardened Steel	Steel can be hardened in a number of ways. Methods include quenching techniques in oil and water, and passing the steel through induction chambers. During processing, the rapid cooling of steel freezes, traps and packs the carbon atoms inside the shrunken iron crystals. The resulting steel is very hard and brittle. Hardened steel is strong, but cannot absorb much shock or impact without breaking.
Stainless Steel	Stainless steel is chemical and corrosion resistant and can have relatively high stress ratings. Many grades are used in fasteners. Often, stainless steel does not require an anti-corrosion coating; however, most stainless steels cannot be hardened to the same degree as carbon steels.
Superalloy	Superalloys are high-performance alloys that exhibit the following features: mechanical strength, good surface stability, resistance to corrosion and oxidation, and resistance to creep at high temperatures. Common superalloys include Hastelloy®, Inconel®, Incoloy®, and Monel®. The attributes of Hastelloy® alloys include high resistance to uniform attack and localized corrosion resistance. It also provides stress corrosion cracking resistance, and ease of welding and fabrication. Hastelloy is a registered trademark of Haynes International, Inc. Inconel® and Incoloy® (Special Metals Corporation) provide good strength and excellent resistance to oxidation and carbonization in high temperatures environments, and in many aqueous environments. These proprietary materials are used in process piping, heat exchangers, heating element sheathing and nuclear steam generator tubing. Typically, Inconel and Incoloy are used at service temperatures below 650° C (1200° F). Monel® (Special Metals Corporation) is a proprietary, high-strength alloy that offers resistance to a range of corrosive media, including seawater, hydrofluoric and sulfuric acids, and alkalis.
Titanium	Titanium is a hard, lustrous, silvery element that is relatively abundant in the Earth's crust. It is valued for its lightness, strength, and corrosion resistance. Titanium is used widely in the aerospace industry and in medical products such as replacement joints. When alloyed with other metals, especially steel, titanium adds strength and oxidation resistance.

Other	Other unlisted, specialized, or proprietary metallic materials.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Fastener Standards

Fastener Standards	
Your choices are...	
AIA/NAS	Dimensional and material standards for aircraft fasteners are developed by the Aerospace Industries Association (AIA) and/or its National Aerospace Standards Committee (NASC). All drawings and specifications have a NAS or NASM prefix. NAS is an acronym for National Aerospace Standards. NASM is an acronym for National Aerospace Standards, Metric.
AN/MS	Dimensional standards for aircraft fasteners are developed by the Aeronautical Standards Group. All drawings have a prefix of AN or MS. Products are suitable for army, navy, or air force use.
ASME/ANSI	The American Society of Mechanical Engineers (ASME) B18 standard specifies all ASME B18 fastener products with a single 18-digit PIN code system. Approved by the American National Standards Institute (ANSI) and adopted by the U.S. Department of Defense, the ASME B18.24 PIN system is a self-contained code that covers 788 unique B18 fastener types from 72 ASME B18 source documents. The PIN code system is fully parametric, uniform across all fastener types, and is intended as a digital alternative to the traditional plain text fastener product callout prescribed in the "Designation" or "Ordering" section of the applicable source document.
BS	Dimensional and material standards developed by the British Standards Institution. Standards are designated with a BS prefix. The British Standards International (BSI) Kitemark indicates that products are tested regularly against the requirements of an appropriate BSI standard, and that the manufacturer's quality system is assessed at least twice a year to ensure continued quality production.
DIN	DIN is an acronym for Deutsches Institut für Normung (DIN), a German national organization for standardization. Most metric fasteners are manufactured according to DIN standards. Although DIN predates the International Standards Organizations (ISO), DIN standards are being revised to more closely match ISO standards. Ordering DIN fasteners requires three pieces of information: the DIN identifier, which defines the style of the fastener; the material (e.g., 8.8 Steel, 316 Stainless, Hastelloy C276); and the coating or plating (if any).
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JIS	Japanese Industrial Standard (JIS) is largely based on DIN; however, some standards have been modified to meet the needs of the Japanese market. Most of the fasteners used in electronic equipment manufactured in Japan comply with the JIS standard.
SAE	Fasteners meet standards developed by the Society of Automotive Engineers (SAE), a worldwide organization that establishes industry standards for the testing, measurement, and design of automobiles and their components.
Other	Other unlisted, specialized, or proprietary fastener standards.

Rivets

Rivet Type

Rivet Type	
Your choices are...	
Belt	A belt rivet is a large-diameter, countersunk, headed rivet specifically designed to fasten belting material.
Blind	Blind rivets are used where the rivet is not accessible from both sides. They have an integral mandrel that permits the formation of an upset on the blind end of the rivet. As the mandrel is pulled into or against the body being riveted, it breaks at or near the intersection of the mandrel shank and its upset end. Blind rivets are often used as an alternative to solid rivets. They are sometimes called breakstem or POP® rivets. POP is a registered trademark of Emhart Teknologies.
Brake and Clutch	Brake and clutch products are manufactured to dimensional and technical standards in solid, semi-tubular or fully tubular form. They are made from a variety of materials, including aluminum, steel, copper and brass. Products include rivets for brake linings, clutch facings, and disc brake pads.
Collar	Collar rivets are a variation of shoulder rivets. A collar rivet does not have a head. Instead, the rivet has features to captivate on both sides of a center shoulder.
Compression	Compression rivets are comprised of two members: a tubular female half and a solid male rivet. The two pieces are placed in a pre-drilled hole with the solid male rivet on one side and the female tubular half on the other. The diameter of the solid rivet is matched to the diameter of the hole in the tubular rivet so that a compression or press fit is formed when the two halves are squeezed together.
Drive	Drive rivets have a center pin that when driven in flush with the rivet head, causes the rivet to expand on the back side and secure. Drive rivets are also called drive pin rivets.
N-type	N-type rivets have a break mandrel and a semi-filled core. They are often used to tack light sheets together where minimal stresses are exerted. N-type rivets are also called N rivets or nail rivets.
Panel	Panel rivets are one of many types of rivets used to secure panels.
Plastic	Plastic rivets are ideal for non-conductive and non-corrosive environments. They can be used to fasten plastic to plastic, metal, or fiberglass. Brand names for plastic rivets include Uni-Tap®, a registered trademark of U.S.E. Diamond, Inc.
Push	Push rivets are reusable rivets that are designed for fixing panels or joining components together. Push rivets are easy to install and do not require tooling.
Q-type	The Q-type rivet features a break mandrel and filled core. It is similar to the N-type rivet, but has a mandrel neck that is knurled to lock the mandrel in the rivet body and assist in creating a seal. The mandrel breaks relatively flush with the rivet head in midgrip, increasing shear strength. Q-type rivets are used in applications that require shear strength greater than that provided by N-type rivets.
Ratchet	A ratchet rivet is a two-part fastener that attaches panels by pressing the head into the shaft. The head can then be unscrewed to dismantle the panels. Ratchet rivets have a finished head on both sides. They are usually made of plastic.
Rivet Nut	Rivet nuts are internally-threaded fasteners that are designed to be used as a rivet from one side of a workpiece or assembly, and to provide threads for a screw or bolt to be used in the assembly of a mating part.

Self Piercing	Self-piercing rivets do not require pre-drilled holes. Instead, the rivet shaft pierces both materials before the connection is made. Because a self-piercing rivet must penetrate the material, the strength of the materials to be joined must be limited with respect to the rivet.
Semi-tubular	Semi-tubular rivets have a coaxial, cylindrical or tapered hole in the end opposite the head, the depth of which does not exceed 112% of the mean shank diameter. Semi-tubular rivets are similar to solid rivets, but require much less insertion force, allowing longer rivets to be used without causing the rivet shank to buckle. Semi-tubular rivets are used in impact riveting applications. Upon impact, the rivet end flares outward and follows the shape of the tool, until it rolls up against the surface of the workpiece.
Shoulder	A shoulder rivet has an integral shoulder surface below the rivet head.
Snap	Snap rivets are two-piece rivets that snap together.
Solid	Solid rivets have completely solid shafts with no internal cavities. Bending, hammering, or twisting the protruding end creates a strong, secure connection. Solid rivets are more difficult to attach than other types of rivets. They must be inserted with powered machinery. Variations of solid rivets include products with round heads and products with flat heads.
Split	Split rivets have two shanks that are spread apart once the rivet has been inserted. Split rivets are also called bifurcated rivets.
Tinners'	Tinners' rivets are small fasteners with the same style head as flat head rivets. They are larger in diameter than flat head rivets and are used in sheet metal work.
T-type	The T-type or peel rivet features a break mandrel and filled core. During installation, knife action between the mandrel head and rivet shank splits the rivet into three petals that draw the sheets together. A T-type rivet mandrel breaks nearly flush with the rivet head in maximum grip. Because they are insensitive to hole size, T-type rivets work in oversized or elliptical holes.
Tubular	Tubular rivets have a coaxial, cylindrical hole in the headless end that exceeds 112% of the rivet shank diameter. They are designed for securing by splaying the end. Tubular rivets are used in self-piercing applications, where a pre-drilled hole is not required. Tubular rivets are also used in a wide variety of manufacturing areas, including industrial, aerospace and automotive applications.
Other	Other unlisted, specialized, or proprietary rivet type.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Head Style

Head Style	
Your choices are...	
Brazier	Brazier or modified brazier rivets have an oval-shaped head. They are used in standard applications.
Cone/Pan	Cone or pan head rivets have a high profile. A cone head has a flat bearing surface and a flat top surface that rounds into a cylindrical side surface.
Countersunk	Countersunk rivets should be specified whenever a flush surface is required. They are sometimes called flush head rivets.
Dome/Button	Dome head rivets or buttonheads are the most versatile and most commonly specified head style. This type of fastener features a low profile and a neat appearance. The dome head has twice the diameter of the rivet body, providing enough bearing surface to retain all but extremely soft or brittle materials.

Flat	Rivets have a flat head and a conical bearing surface. Flat head rivets may be countersunk or flush.
Large Flange	Large flange rivets have twice the underhead bearing surface of dome head rivets. Typically, large flange rivets are used in applications where soft or brittle materials must be joined to a rigid backing material.
Mushroom	Rivets have a mushroom-shaped head with a large, underhead footprint to distribute the load on softer materials.
Oval	Rivets have an oval-shaped head.
Round/Snap	The cross-sectional shape of the rivet head is round. Round rivets are sometimes called snap head rivets.
Truss	Truss head rivets are used in applications where a low profile head is desired. In comparison to the fastener size, the diameter of the truss head is larger than the diameter of the corresponding round head.
Universal	Universal rivets have an oval-shaped head. Some manufactures refer to universal rivets as mushroom, brazier, oval or truss head rivets.
Other	Other unlisted, specialized, or proprietary head style.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Dimensions

Body Diameter	Body diameter is the diameter of the rivet. The clearance between the rivet and the hole in which the rivet is inserted should be about 1/32 in. or less. For example, the hole for a 1/4 in. rivet should be no more than 9/32 in. Rivet size capabilities may vary with rivet type and material. Consult manufacturers for details.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Grip Length	Grip length is the minimum and maximum thickness of all of the materials or parts that a fastener is designed to secure when assembled.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Shear Strength	Shear strength is resistance to transverse loading. It is usually defined as force in Newtons (N) or pounds (lbs).
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Material/Finish

Material	
Your choices are...	
Aluminum	Aluminum is a bluish, silver-white, malleable, ductile, light, trivalent, metallic element that has good electrical and thermal conductivity, high reflectivity, and resistance to oxidation. Aluminum is lighter than steel, but not as strong.
Brass	Brass provides good strength, excellent high-temperature ductility, reasonable cold ductility, good conductivity, excellent corrosion resistance, good bearing properties and low magnetic permeability.
Bronze/Copper Base Alloy	A copper base alloy is a metal with copper as the main alloying metal and one or more other metals, such as tin, zinc, or phosphorus. Silicon bronze is a typical fastener alloy.
Copper	Copper is a common, reddish, metallic element that is both ductile and malleable. Copper is one of the best conductors of heat and electricity. It also exhibits good corrosion resistance.
Inconel®/Incoloy®	Inconel® and Incoloy® (Special Metals Corporation) provide good strength and excellent resistance to oxidation and carbonization in high temperatures environments, and in many aqueous environments. These proprietary materials are used in process piping, heat exchangers, heating element sheathing and nuclear steam generator tubing. Typically, Inconel and Incoloy are used at service temperatures below 650° C (1200° F).
Monel®	Monel® (Special Metals Corporation) is a proprietary, high-strength material that offers resistance to a range of corrosive media such as seawater, hydrofluoric and sulfuric acids, and alkalis.
Plastic	Products are made of thermoplastic materials.
Rubber	Synthetic rubber includes grades such as neoprene, silicone, and Norprene® (Norton Co.). Rubber fasteners are used in specialized applications for vibration damping and silencing.
Steel	Steel is a commercial iron that contains carbon in any amount up to about 1.7 percent as an essential alloying constituent. Many grades of carbon and alloy steels are used as fastener materials. Steel may require coating for protection against corrosion.
Hardened Steel	Steel can be hardened in a number of ways. Methods include quenching techniques in oil and water, and passing the steel through induction chambers. During processing, the rapid cooling of steel freezes, traps and packs the carbon atoms inside the shrunken iron crystals. The resulting steel is very hard and brittle. Hardened steel is strong, but cannot absorb much shock or impact without breaking.
Stainless Steel	Stainless steel is chemical and corrosion resistant and can have relatively high stress ratings. Many grades are used in fasteners. Often, stainless steel does not require an anti-corrosion coating; however, most stainless steels cannot be hardened to the same degree as carbon steels.
Titanium	Titanium is a hard, lustrous, silvery element that is relatively abundant in the Earth's crust. It is valued for its lightness, strength, and corrosion resistance. Titanium is used widely in the aerospace industry and in medical products such as replacement joints. When alloyed with other metals, especially steel, titanium adds strength and oxidation resistance.

Other	Other unlisted, specialized, or proprietary metallic materials.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Finish	
Your choices are...	
Anodize	Anodizing is a process for finishing aluminum alloys that uses the electrolytic oxidation of the aluminum surface to produce a protective oxide coating. The anodic coating consists of hydrated aluminum oxide and is resistant to corrosion and abrasion. Conventional coatings are 0.1 to 1.0 mils thick and are mostly transparent, but may be colored. Anodizing preserves the natural luster and texture of the metal. Anodized coatings are hard, durable, will never peel, and, under normal conditions, will never wear through. Standard and decorative colors are available. This category includes hard-coat anodizing.
Black Oxide	Black oxide is a conversion coating that causes virtually no dimensional change. It is a uniform, continuous conversion of the existing metal to a black form of rust. Black oxide is used on components where tight tolerances are needed. It is used mostly as a decorative coating.
Chrome	Chrome finish is an electroplated coating that is applied for purposes of lubricity, wear resistance, and decoration. Chrome provides a bright and highly reflective finish.
Galvanized	Galvanizing immerses clean, oxide-free iron or steel into molten zinc in order to apply a zinc coating that is metallurgically bonded to the iron or steel surface. The zinc coating protects the surface against corrosion in two ways. First, it shields the base metal from the atmosphere. Second, because zinc is more electronegative than iron or steel, the coating reacts with corroding agents, providing a longer service life for the part.
Gold	Gold plating provides total resistance to oxidation and corrosion. It is electrically conductive and can be alloyed with cobalt to produce a wear-resistant finish.
Nickel Plated	Nickel plating is a common form of electrolytic deposition.
Phosphate	Phosphate coatings are applied via the chemical or electrochemical treatment of a metal's surface. These corrosion-resistant coatings provide a surface for the improved adhesion of primers and paints.
Silver	Silver is the most electrically conductive plating finish. It is used in electronic fasteners for electrical conductivity and signal transmittance. Silver oxidizes rapidly, but resists corrosion.
Tin	Tin plating is applied to electronic fasteners that are made of brass.
Zinc Plated	Zinc plating is a common form of plating that provides corrosion resistance.
Zinc Chromate (Yellow)	Fasteners have a yellow zinc chromate finish.
Other	Other unlisted finish.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Fastener Standards

Fastener Standards	
Your choices are...	
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Electrical Wire

Conductor Type

Your choices are...	
Solid	A single solid metal piece drawn into a conductor.
Stranded	Several small conductors twisted together to form one flexible conductor.
Flat Strap	A single solid metal piece drawn into a flat conductor.
Flat Braid	Several small conductors braided together to form one flexible flat conductor.
Other	Any other conductor type not listed.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Cable Conductor:	A wire or combination of wires not insulated from one another, suitable for carrying electric current.
Your choices are...	
Aluminum and Aluminum Alloys	Aluminum is a metal characterized by high resistance to corrosion, good electrical and thermal conductivity, and a density which is about one-third or less that of steel, copper, or nickel. Aluminum can be used as a power conductor, or for wire and cable shielding.
Aluminum Clad Steel	Wires with a steel core to which an outer shell of aluminum is fused.
Copper Clad Steel	Wires with a steel core to which an outer shell of copper is fused.
Copper and Copper Alloys	On a volume basis, copper has the conductivity of common (non-precious) metals. Copper and copper alloys offer excellent corrosion resistance, high thermal conductivity, and ease of fabricating, joining and forming. The strength-to-weight ratio of copper is relatively low. It lose strength at elevated temperatures. Copper is the most widely used electrical conductor in wires and cables.
Other	Other unlisted cable conductors.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting “No Preference” will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Conductor Size

North American (AWG)	American wire gauge (AWG) is a U.S. standard for non-ferrous wire conductor sizes. Non-ferrous materials include copper and aluminum. The term "gauge" refers to the wire's diameter. The higher the gauge number, the smaller the diameter and the thinner the wire. Thicker wire carries more current because it has less electrical resistance over a given length. Typical household wiring is AWG 12 or 14. Telephone wire is usually AWG 22, 24, or 26.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
AWG 2/0, 3/0, 4/0 or Larger?	AWG 2/0, 3/0, and 4/0 are also referred to as 00, 000 and 0000, respectively. Sizes larger than 4/0 are measured in circular mils (CM) or thousand circular mils (MCM).
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
International (mm^2)	Outside of North America, wire conductor sizes are measured in square millimeters (mm^2).
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Number of Strands:	Conductors are composed of one or more groups of wires. Typically, the wires in a stranded conductor are twisted or braided together. Stranding makes wires more flexible.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Flat Conductor Size

Width:	The width of the flat conductor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Thickness:	The thickness of the flat conductor.

Lighting

Lamp Type

Your choices are...	
Fluorescent	Products are designed for fluorescent lamps.
Halogen	Products are designed for halogen lamps.
Incandescent	Products are designed for incandescent lamps.
LED	Products are designed for light-emitting diode (LED) lamps.
Mercury	Products are designed for mercury lamps.
Metal Halide	Products are designed for high-intensity discharge lamps such as metal halide lamps.
Sodium	Products are designed for sodium lamps.
Xenon	Products are designed for xenon lamps.
Other	Other unlisted lamp types.

Lamp Type

Your choices are...	
Fluorescent Lamps	Fluorescent lamps are high-efficiency lamps that use electrical discharge through low-pressure mercury vapor to produce ultraviolet (UV) energy, which is then transformed into visible light.
Halogen Lamps	Halogen lamps are high pressure incandescent lamps containing halogen gases such as iodine or bromine, which allow the filaments to be operated at higher temperatures and higher efficacies.
Heat Lamps	Heat lamps are also known as infrared emitters, infrared bulbs, infrared tubes, or infrared lamps. Heat lamps differ from illuminating lamps in their low filament temperature, resulting in much less light and more infrared radiation.
High Intensity Discharge Lamps	High intensity discharge lamps (HID) contain compact arc tubes, which enclose various gases and metal salts, operating at relatively high pressures and temperatures. HID lamps are often used as UV light sources.
Incandescent Lamps	Incandescent lamps generate light by passing an electric current through a thin filament wire (usually of tungsten) until the wire is extremely hot.
LED Lamps	LED lamps are light emitting diode arrays with traditional lamp ballasts.
Projection Lamps	Projection lamps use a built-in reflector to concentrate light in a particular direction. They are used in applications such as slide projection, microfilm, overhead projection, movies, medical/scientific instruments, airport runways, and others.
Spectral Lamps	Spectral lamps radiate line spectra of various gases and metal vapors with high brightness and spectral purity.

Stage Lamps	Stage lamps are used for stage, studio, or television lighting.
Other	Any other lamp type not listed.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Flash Lamp?	A flash lamp is a high-intensity discharge lamp for pulsed operation.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Performance

Lamp Power	Lamp power is the wattage of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Rated Average Life	Rated average life is the lamp-burning hours to median life expectancy.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Overall Length	The maximum overall length of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Color Temperature	Color temperature is a measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Mean Lumens	Mean lumens is the average lamp output over a designated amount of time, usually 40 to 50 % of rated lamp life. A lumen is the standard international (SI) unit of luminous flux or quantity of light.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Lamp features

Compact	A compact fluorescent lamp is sized so that it screws into a regular incandescent light bulb socket.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reflector	The infrared lamp has a built-in reflector to increase light intensity in the desired direction.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Shatterproof	The lamp is coated to prevent shattering.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Twin Tube	The infrared lamp has two tubes with filaments for higher intensity emission.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Water Cooled	The lamp is water cooled for better performance.

Incandescent

Performance

Lamp Power	Lamp power is the wattage of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Rated Average Life	Rated average life is the lamp-burning hours to median life expectancy.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Color Temperature	Color temperature is a measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Mean Lumens	Mean lumens is the average lamp output over a designated amount of time, usually 40 to 50 % of rated lamp life. A lumen is the standard international (SI) unit of luminous flux or quantity of light.

Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Overall Length	The maximum overall length of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Light Center Length	The distance between the center of the filament and the light center length reference plane of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Lamp features

Compact	A compact fluorescent lamp is sized so that it screws into a regular incandescent light bulb socket.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reflector	The infrared lamp has a built-in reflector to increase light intensity in the desired direction.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Shatterproof	The lamp is coated to prevent shattering.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Twin Tube	The infrared lamp has two tubes with filaments for higher intensity emission.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Water Cooled	The lamp is water cooled for better performance.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Lamp Bases

Your choices are...	
1" Ribbon Leads	1" ribbon leads.
4" Leads	4" Leads.
6" Flex Leads	6" flexible leads.
2-Pin	2 Pins make the connection for the lamp.
4-Pin (Circling)	Circling is a four-pin connection.
Ad medium	Ad medium is halfway between a medium based and a mogul screw base.
Ad medium Skirted	Ad medium is halfway between a medium based and a mogul screw base. The term "skirted" means that the base flares out at the top.
Base Restricted Mogul	Movement of the base is restricted. The restricted mogul base is used for many mercury, metal halide, and sodium lamps. It also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Bi-Pin T-5	Bi-pin T-5 uses a miniature-sized, two-pin connection.
Bi-Pin T-8	Bi-pin T-8 uses a small, two-pin connection.
Bi-Pin T-10	Bi-pin T-10 uses a medium-sized, two-pin connection.
Bi-Pin T-12	Bi-pin T-12 uses a large, two pin connection.
Candelabra	Candelabra bases are used mostly for decorative lighting such as chandeliers. 15/32 inch.
Candelabra Refocus	Used for decorative lighting, chandeliers. 15/32 inch. No screw, refocus.
Double Contact Bayonet	No screw, two bayonets on bottom make contact.
Double Contact Bayonet Candelabra	The candelabra base has a double bayonet connection instead of a screw connection.
Extended Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base.
G-12	G-12 is a bi-pin base.
Intermediate	Intermediate bases are used for decorative lighting such as chandeliers. 21/32 inch.
Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W.
Medium IPost	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, IPost connection.
Medium Refocus	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, Refocus.

Medium Skirted	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The term "skirted" means that the base flares out at the top.
Miniature Bi-Pin	Two pin connection.
Miniature Candelabra	Miniature candelabra bases are used mostly for flashlight lamps and instrument panel lamps, typically under 30 V.
Miniature Screw	A small screw base.
Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Mogul End Prong	Bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base. The base has prongs instead of threads.
Mogul IPost	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, iPost connection.
Mogul Refocus	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. The base has two prongs as opposed to thread.
Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, end prong connection.
PG-12	PG-12 is smaller than a G-12 base, but still a bi-pin base.
Position Oriented Mogul	The lamp has a particular orientation determined by the base. The position-oriented mogul base is used for many mercury, metal halide, and sodium lamps. It is also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Recessed Double Contact T-8	Recessed double-contact T-8 uses a small, recessed, two-pin connection.
Recessed Double Contact T-12	Recessed double-contact T-12 uses a large, two-pin connection.
Recessed Single Contact	The lamp base has a recessed single contact.
Screw Terminals	Screws are used to fix and tighten connection.
Single Contact Bayonet Candelabra	The candelabra base has a single bayonet connection instead of screw connection.
Single Pin T-6	Single-pin T-6 uses a small, single-pin connection.
Single Pin T-8	Single-pin T-8 uses a medium-sized, single-pin connection.
Single Pin T-12	Single-pin T-12 uses a large, single-pin connection.

Three Contact Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The three-contact medium base has thicker threads than an ordinary medium base.
Three Contact Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Other Lamp Bases	Other unlisted lamp bases.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting "No Preference" will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Filament Designation

Filament Type	Filament designations starting with the letter "C" indicate a coiled wire filament. The letters or numbers after the C indicate the positioning of the filament.
Your choices are...	
C-1	The filament is a coiled filament wire designated C-1.
C-2R	The filament is a coiled filament wire designated C-2R. Short, coiled curbed filament requiring no support.
C-2V	The filament is a coiled filament wire designated C-2V. Short, coiled filament requiring support.
C-5	The filament is a coiled filament wire designated C-5. Concentrated filament for small light sources.
C-6	The filament is a coiled filament wire designated C-6. Short, coiled filament requiring little or no support.
C-6F	The filament is a coiled filament wire designated C-6F.
C-6 Oval	The filament is a coiled filament wire designated C-6 Oval.
C-7A	The filament is a coiled filament wire designated C-7A. Long filament supported at the top and at the base for universal usage.
C-8	The filament is a coiled filament wire designated C-8. Coiled filament mounted in lamp axis. Can be extended like Lemoine lamps.
C-9	The filament is a coiled filament wire designated C-9. Average length filament mounted in the bulb axis.
C-11	The filament is a coiled filament wire designated C-11. Average length, concentrated filament. Well supported, "M" Shape.
C-11V	The filament is a coiled filament wire designated C-11V.

C-13	The filament is a coiled filament wire designated C-13. Flat, very concentrated filament for projection equipment.
C-13D	The filament is a coiled filament wire designated C-13D.
C-17	The filament is a coiled filament wire designated C-17.
C-17A	The filament is a coiled filament wire designated C-17A.
C-22	The filament is a coiled filament wire designated C-22.
C-130	The filament is a coiled filament wire designated C-130.
2CC-8	The filament is a coiled coil filament wire designated 2CC-8. Two short, double-coiled filaments mounted in the bulb axis.
CC-2V	The filament is a coiled coil filament wire designated CC-2V.
CC-6	The filament is a coiled coil filament wire designated CC-6.
CC-8	The filament is a coiled coil filament wire designated CC-8.
CC-11	The filament is a coiled coil filament wire designated CC-11.
CC-13	The filament is a coiled coil filament wire designated CC-13. Flat, very concentrated double-coiled filament for projection equipment.
BP	The filament is designated BP.
FF	The filament is designated FF.
M	The filament is designated M.
MP	The filament is designated MP.
SC	The filament is designated SC.
Other Filament Types	Any other filament type not listed.

Fluorescent

Performance

Lamp Power	Lamp power is the wattage of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Rated Average Life	Rated average life is the lamp-burning hours to median life expectancy.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Initial Lumens	Initial lumens are the initial light output. A lumen is the standard international (SI) unit of luminous flux or quantity of light.

Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Mean Lumens	Mean lumens is the average lamp output over a designated amount of time, usually 40 to 50 % of rated lamp life. A lumen is the standard international (SI) unit of luminous flux or quantity of light.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Overall Length	The maximum overall length of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Color Rendering Index	Color rendering index is an indication of a lamp's ability to render object colors in a normal, natural way. A higher number indicates better color appearance. Numbers range from 0 to 100.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Color Temperature	Color temperature is a measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Lamp features

Compact	A compact fluorescent lamp is sized so that it screws into a regular incandescent light bulb socket.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reflector	The infrared lamp has a built-in reflector to increase light intensity in the desired direction.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Shatterproof	The lamp is coated to prevent shattering.

Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Twin Tube	The infrared lamp has two tubes with filaments for higher intensity emission.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Water Cooled	The lamp is water cooled for better performance.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Lamp Bases

Your choices are...	
1" Ribbon Leads	1" ribbon leads.
4" Leads	4" Leads.
6" Flex Leads	6" flexible leads.
2-Pin	2 Pins make the connection for the lamp.
4-Pin (Circling)	Circling is a four-pin connection.
Ad medium	Ad medium is halfway between a medium based and a mogul screw base.
Ad medium Skirted	Ad medium is halfway between a medium based and a mogul screw base. The term "skirted" means that the base flares out at the top.
Base Restricted Mogul	Movement of the base is restricted. The restricted mogul base is used for many mercury, metal halide, and sodium lamps. It also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Bi-Pin T-5	Bi-pin T-5 uses a miniature-sized, two-pin connection.
Bi-Pin T-8	Bi-pin T-8 uses a small, two-pin connection.
Bi-Pin T-10	Bi-pin T-10 uses a medium-sized, two-pin connection.
Bi-Pin T-12	Bi-pin T-12 uses a large, two pin connection.
Candelabra	Candelabra bases are used mostly for decorative lighting such as chandeliers. 15/32 inch.
Candelabra Refocus	Used for decorative lighting, chandeliers. 15/32 inch. No screw, refocus.
Double Contact Bayonet	No screw, two bayonets on bottom make contact.
Double Contact Bayonet Candelabra	The candelabra base has a double bayonet connection instead of a screw connection.

Extended Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base.
G-12	G-12 is a bi-pin base.
Intermediate	Intermediate bases are used for decorative lighting such as chandeliers. 21/32 inch.
Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W.
Medium IPost	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, IPost connection.
Medium Refocus	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, Refocus.
Medium Skirted	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The term "skirted" means that the base flares out at the top.
Miniature Bi-Pin	Two pin connection.
Miniature Candelabra	Miniature candelabra bases are used mostly for flashlight lamps and instrument panel lamps, typically under 30 V.
Miniature Screw	A small screw base.
Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Mogul End Prong	Bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base. The base has prongs instead of threads.
Mogul IPost	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, iPost connection.
Mogul Refocus	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. The base has two prongs as opposed to thread.
Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, end prong connection.
PG-12	PG-12 is smaller than a G-12 base, but still a bi-pin base.
Position Oriented Mogul	The lamp has a particular orientation determined by the base. The position-oriented mogul base is used for many mercury, metal halide, and sodium lamps. It is also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Recessed Double Contact T-8	Recessed double-contact T-8 uses a small, recessed, two-pin connection.
Recessed Double Contact T-12	Recessed double-contact T-12 uses a large, two-pin connection.

Recessed Single Contact	The lamp base has a recessed single contact.
Screw Terminals	Screws are used to fix and tighten connection.
Single Contact Bayonet Candelabra	The candelabra base has a single bayonet connection instead of screw connection.
Single Pin T-6	Single-pin T-6 uses a small, single-pin connection.
Single Pin T-8	Single-pin T-8 uses a medium-sized, single-pin connection.
Single Pin T-12	Single-pin T-12 uses a large, single-pin connection.
Three Contact Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The three-contact medium base has thicker threads than an ordinary medium base.
Three Contact Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Other Lamp Bases	Other unlisted lamp bases.

Halogen

Performance

Lamp Power	Lamp power is the wattage of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Rated Average Life	Rated average life is the lamp-burning hours to median life expectancy.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Overall Length	The maximum overall length of the lamp.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Mean Lumens	Mean lumens is the average lamp output over a designated amount of time, usually 40 to 50 % of rated lamp life. A lumen is the standard international (SI) unit of luminous flux or quantity of light.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Lamp features

Compact	A compact fluorescent lamp is sized so that it screws into a regular incandescent light bulb socket.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reflector	The infrared lamp has a built-in reflector to increase light intensity in the desired direction.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Shatterproof	The lamp is coated to prevent shattering.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Twin Tube	The infrared lamp has two tubes with filaments for higher intensity emission.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Water Cooled	The lamp is water cooled for better performance.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Lamp Bases

Your choices are...	
1" Ribbon Leads	1" ribbon leads.
4" Leads	4" Leads.
6" Flex Leads	6" flexible leads.
2-Pin	2 Pins make the connection for the lamp.
4-Pin (Circling)	Circling is a four-pin connection.
Ad medium	Ad medium is halfway between a medium based and a mogul screw base.
Ad medium Skirted	Ad medium is halfway between a medium based and a mogul screw base. The term "skirted" means that the base flares out at the top.
Base Restricted Mogul	Movement of the base is restricted. The restricted mogul base is used for many mercury, metal halide, and sodium lamps. It also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Bi-Pin T-5	Bi-pin T-5 uses a miniature-sized, two-pin connection.

Bi-Pin T-8	Bi-pin T-8 uses a small, two-pin connection.
Bi-Pin T-10	Bi-pin T-10 uses a medium-sized, two-pin connection.
Bi-Pin T-12	Bi-pin T-12 uses a large, two pin connection.
Candelabra	Candelabra bases are used mostly for decorative lighting such as chandeliers. 15/32 inch.
Candelabra Refocus	Used for decorative lighting, chandeliers. 15/32 inch. No screw, refocus.
Double Contact Bayonet	No screw, two bayonets on bottom make contact.
Double Contact Bayonet Candelabra	The candelabra base has a double bayonet connection instead of a screw connection.
Extended Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base.
G-12	G-12 is a bi-pin base.
Intermediate	Intermediate bases are used for decorative lighting such as chandeliers. 21/32 inch.
Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W.
Medium IPost	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, IPost connection.
Medium Refocus	Standard household lamp base for lamps up to about 300 watts also used for a few mercury and sodium lamps under 100 watts. No screw, Refocus.
Medium Skirted	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The term "skirted" means that the base flares out at the top.
Miniature Bi-Pin	Two pin connection.
Miniature Candelabra	Miniature candelabra bases are used mostly for flashlight lamps and instrument panel lamps, typically under 30 V.
Miniature Screw	A small screw base.
Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Mogul End Prong	Bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base. The base has prongs instead of threads.
Mogul IPost	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, iPost connection.
Mogul Refocus	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. The base has two prongs as opposed to thread.
Mogul End Prong	Used for most mercury, metal halide, sodium lamps, and also incandescent lamps over 300 watts. Lamps requiring more than 200 volts are more likely to have a mogul (or larger) base rather than a medium base. No screw, end prong connection.

PG-12	PG-12 is smaller than a G-12 base, but still a bi-pin base.
Position Oriented Mogul	The lamp has a particular orientation determined by the base. The position-oriented mogul base is used for many mercury, metal halide, and sodium lamps. It is also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Recessed Double Contact T-8	Recessed double-contact T-8 uses a small, recessed, two-pin connection.
Recessed Double Contact T-12	Recessed double-contact T-12 uses a large, two-pin connection.
Recessed Single Contact	The lamp base has a recessed single contact.
Screw Terminals	Screws are used to fix and tighten connection.
Single Contact Bayonet Candelabra	The candelabra base has a single bayonet connection instead of screw connection.
Single Pin T-6	Single-pin T-6 uses a small, single-pin connection.
Single Pin T-8	Single-pin T-8 uses a medium-sized, single-pin connection.
Single Pin T-12	Single-pin T-12 uses a large, single-pin connection.
Three Contact Medium	The medium base is the standard household base for lamps up to about 300 W. Medium bases are also used for a few mercury and sodium lamps under 100 W. The three-contact medium base has thicker threads than an ordinary medium base.
Three Contact Mogul	Mogul bases are used for most mercury, metal halide, and sodium lamps. They are also used for incandescent lamps over 300 W. Lamps requiring more than 200 V are more likely to have a mogul (or larger) base instead of a medium base.
Other Lamp Bases	Other unlisted lamp bases.
Search Logic:	Products with the selected attribute will be returned as matches. Leaving or selecting "No Preference" will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Filament Designation

Filament Type	Filament designations starting with the letter "C" indicate a coiled wire filament. The letters or numbers after the C indicate the positioning of the filament.
Your choices are...	
C-1	The filament is a coiled filament wire designated C-1.
C-2R	The filament is a coiled filament wire designated C-2R. Short, coiled curbed filament requiring no support.
C-2V	The filament is a coiled filament wire designated C-2V. Short, coiled filament requiring support.

C-5	The filament is a coiled filament wire designated C-5. Concentrated filament for small light sources.
C-6	The filament is a coiled filament wire designated C-6. Short, coiled filament requiring little or no support.
C-6F	The filament is a coiled filament wire designated C-6F.
C-6 Oval	The filament is a coiled filament wire designated C-6 Oval.
C-7A	The filament is a coiled filament wire designated C-7A. Long filament supported at the top and at the base for universal usage.
C-8	The filament is a coiled filament wire designated C-8. Coiled filament mounted in lamp axis. Can be extended like Lemoine lamps.
C-9	The filament is a coiled filament wire designated C-9. Average length filament mounted in the bulb axis.
C-11	The filament is a coiled filament wire designated C-11. Average length, concentrated filament. Well supported, "M" Shape.
C-11V	The filament is a coiled filament wire designated C-11V.
C-13	The filament is a coiled filament wire designated C-13. Flat, very concentrated filament for projection equipment.
C-13D	The filament is a coiled filament wire designated C-13D.
C-17	The filament is a coiled filament wire designated C-17.
C-17A	The filament is a coiled filament wire designated C-17A.
C-22	The filament is a coiled filament wire designated C-22.
C-130	The filament is a coiled filament wire designated C-130.
2CC-8	The filament is a coiled coil filament wire designated 2CC-8. Two short, double-coiled filaments mounted in the bulb axis.
CC-2V	The filament is a coiled coil filament wire designated CC-2V.
CC-6	The filament is a coiled coil filament wire designated CC-6.
CC-8	The filament is a coiled coil filament wire designated CC-8.
CC-11	The filament is a coiled coil filament wire designated CC-11.
CC-13	The filament is a coiled coil filament wire designated CC-13. Flat, very concentrated double-coiled filament for projection equipment.
BP	The filament is designated BP.
FF	The filament is designated FF.
M	The filament is designated M.
MP	The filament is designated MP.
SC	The filament is designated SC.
Other Filament Types	Any other filament type not listed.

Electric Motors

DC Motors

Performance Specifications

Shaft Speed:	No-load rotational speed of output shaft at rated terminal voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Terminal Voltage:	Design DC motor voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Current:	Continuous current is the maximum rated current that can be supplied to the motor windings without overheating.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Torque:	Output torque capability of the motor under constant running conditions.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Output Power:	Mechanical power provided by the motor output.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Motor Construction

Motor Construction	
Your choices are...	
Permanent Magnet	Permanent magnets (PM) are embedded into the rotor assembly. The rotor aligns itself with the rotating magnetic field of the stator windings. PM motors exhibit constant speed with varying load (zero slip) and provide relatively high torque, good efficiency, and lower current draw than comparable synchronous motors.
Shunt Wound	Shunt wound motors exhibit minimum speed variation through load range and can be configured for constant horsepower over an adjustable speed range. Frequent applications include machine tools, fans, and blowers.

Series Wound	Series wound motors exhibit high starting torques for permanently attached loads. These motors are frequently used in heavy industrial applications.
Compound Wound	Compound wound motors are designed with both a series and shunt field winding. They are often used where the primary load requirement is heavy starting torque, and adjustable speed is not required. They can exhibit speed variation from no-load to full-load. Applications include elevators, hoists, and industrial shop equipment.
Disc Armature	Disc armatures are flat, pancake-shaped rotors that are driven by an axially, rather than radially, aligned magnetic field. The thin construction of these armatures can result in low inertia with resulting high acceleration.
Coreless/Slotless	Coreless and slotless motors incorporate a cylindrical winding that is physically outside of a set of permanent magnets. The winding is not held by a slotted iron cage but is laminated together. In a slotless motor, the magnets attached to the rotor rotate. In a coreless motor, the windings rotate around the permanent magnet stator.
Other	Unlisted motor construction.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Commutation	
Your choices are...	
Brush	Brush motors have the armature windings on the rotor. The magnetic fields are commutated via direct contact of brushes with the rotor commutator.
Brushless	Brushless motors have their armature windings on the stator and the field on the rotor. They rely on internal noncontact sensing devices to activate external commutating electronics.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Gearmotor/Gearhead Options

Motor Configuration:	
Your choices are...	
Motor Only	Motor does not have a gearbox of any kind.
Gearmotor	This category includes units with single integral gearheads, or replaceable/interchangeable gearhead options.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Gearing (if applicable):	
Your choices are...	
Spur	Spur gear heads include one or more sets of pinion-gear sets, in which one pinion drives one gear. These sets can be stacked or cascaded to achieve higher reduction ratios.
Planetary	Planetary gear heads involve several gears per stage rather than one pinion-gear set. A "sun gear" drives multiple planet or satellite gears, which then mesh on the inside of an internal or annular gear to provide relatively high torque and power transmission ratings.
Harmonic	Harmonic drives are an extremely precise speed reduction system that transmits power via a rotating elliptical element that engages a flexible cup that then engages an internal gear, which is typically fixed. This power transmission delivers precise angular position in very high input-to-output ratio (50:1 & up) applications.
Worm	Right-angle drive in which a worm drives a wheel coupled to the output shaft or shafts. This arrangement is used for high reduction and compact right-angle power transmission.
Bevel	Bevel gear sets have intersecting axes that are commonly, but not always, perpendicular. They mate via teeth on angled edges.
Other	Unlisted or specialized gearing arrangement.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Gearbox Ratio:	Gearbox ratio is the ratio of input speed to output speed. A ratio greater than one indicates speed reduction, while a ratio less than one indicates speed increase.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Gearbox Efficiency:	Efficiency is the percentage of power or torque that is transferred through the gearbox. Losses occur due to factors such as friction and slippage inside the gearbox.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Feedback

Feedback	
Your choices are...	
Integral Encoder	Integral encoders are attached for angular position signal. These encoders may include absolute or incremental encoders and a number of different encoder signal types.
Integral Resolver	Integral Resolvers indicate angular position. Resolvers often rely on magnetic fields and are typically very robust; they are sometimes specified for harsh environments.
Integral Tachometer	Tachometers produce an output indicating rotational speed of motor.
Other	Unlisted or specialized feedback signal.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Shaft Options

Orientation/Type	
Your choices are...	
In-line	Output shaft axis is in-line with axis of motor rotation.
Offset/Parallel	Output shaft is parallel with, but not concentric to, the axis of motor rotation.
Right Angle	Output shaft axis is perpendicular to motor rotation axis, intersecting or nonintersecting.
Hollow	Hollow output shafts have a hole or bore that can accept a shaft. Outputs with collets for tool bits are one example.
Other	Unlisted shaft angle or configuration.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Number of Shafts	
Your choices are...	
Single-ended	One output shaft.
Double-ended	Two output shafts. This may be one coming out the front and one coming out the back, or two coming out from a transverse gearbox.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Housing/Enclosure

Design Units:	Refers to the base units for specifications such as diameter, length, and threading. Combinations are possible and this information is not known for some products.
Your choices are...	
English	Base units such as inches or fractions of an inch for primary dimensions as the shaft size, mounting geometry, etc.
Metric	Metric units such as millimeters or centimeters are used for primary dimensions as the shaft size, mounting geometry, etc.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Motor Shape:	
Your choices are...	
Cylindrical Body	Cylindrical motor body cross-sections are round.
Square Body	Square motor bodies have a square or rectangular shape.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Diameter/Width:	Diameter of cylindrical motors or width/height of square motors. This is for the motor body only and does not include flanges.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Housing Length:	Housing length is the length of the motor body, not including shaft.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
NEMA Frame Size:	NEMA frame sizes conform to a standard size and mounting configuration identified by the National Electrical Manufacturers Association (NEMA). Only numerical sizes are searchable in this field.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Enclosure Options	
Your choices are...	
Open Frame/Frameless	Open-frame of frameless enclosures have minimal or frame-like support, but no overall casing.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Features & Options

DC Servomotor?	DC servomotors have an output shaft that can be positioned by sending a coded signal to the motor. As the input to the motor changes, the angular position of the output shaft changes as well. Servomotors are generally small and powerful for their size, and easy to control. Common types of DC servomotors include brushless or gearmotor types.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Driver Electronics?	Integral driver electronics are on-board or attached drivers or amplifier electronics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Brake?	Integral brake can be mechanical or electronic.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Clutch?	Integral clutches engage and disengage the motor.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Brake/Clutch Combination?	Integral combination of brake and clutch.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Environment Full required ranged of ambient operating temperature.

Operating Temperature:	Full required range of operating temperature.
Search Logic:	User may specify either, both, or neither of the limits in a "From - To" range; when both are specified, matching products will cover entire range. Products returned as matches will meet all specified criteria.
Shock Rating:	Shock rating is the maximum shock the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Vibration Rating:	Vibrating rating is the maximum vibration the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Totally Enclosed	Totally enclosed motors have an enclosure that prevents free exchange of air between the inside and the outside of the enclosure. Common ratings are TEFC (fan-cooled) and TENV (non-ventilated); this is not an airtight rating. These motors are most frequently used in potentially contaminated environments.

Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Dust-proof	Dust-proof motors protect against dust infiltration with features such as total enclosure and labyrinth seals for shafts. The IP (Ingress Protection) rating for dust-proof motors is IP6x.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Drip-proof	Drip-proof motors contain ventilation openings that are designed so that drops of liquid or solid particles falling from any angle within 15 degrees of vertical cannot enter the motor. Motors with an IP rating of IPx1 through IPx9 are considered drip-proof.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Waterproof	There are several degrees of waterproofing applicable to motors and they are reflected in the IP rating for the motor: IPx1: Protection against vertically falling drops of water (drip-proof). IPx2: Protection against direct sprays of water up to 15 degrees from vertical. IPx3: Protection against direct sprays of water up to 60 degrees from vertical. IPx4: Protection against water sprayed from all directions. IPx5: Protected against low pressure jets of water from all directions. IPx6: Protected against high pressure jets of water from all directions. IPx7: Protected against the effects of immersion up to 1 meter. IPx8: Protected against long periods of immersion under pressure.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Special/Extreme Environments	
Your choices are...	
Clean Room Use	Clean rooms are classified by particulate size and density in the ambient air. One such rating method classifies rooms according to number of particles larger than 0.5 micron in one cubic foot of air. There are various governmental, metric, and international standards. Motors rated for suitability in a clean room will identify the particular standard for which they are rated.
Cryogenic Use	Motors with a cryogenic rating are constructed for extremely low ambient temperatures such as 20 K and below.
Explosion-proof	Explosion-proof motors have totally enclosed housings that are constructed to withstand internal explosion of a specified gas, vapor, or dust. Should such an explosion occur, the enclosure would prevent the ignition or explosion of the gas or vapor surrounding the motor enclosure. Several explosion-proof ratings are governed by Underwriter's Laboratories (UL).
Radiation-hardened	Radiation-hardened motors are constructed of materials designed to withstand high-energy gamma radiation. Ratings are expressed in units such as permissible RADs in total accumulated dose (TAD).
Vacuum Use	Vacuum-rated motors incorporate features such as lubricant vapor pressure below rated ambient vacuum and construction techniques.

AC Motors

AC Motor Specifications

AC Voltage & Frequency:	
Your choices are...	
115/120V 60 Hz	115/120V is standard residential or commercial voltage for 60Hz power (North America).
208-230/240V 60 Hz	These are for 60Hz power (North America).
460/480V 60 Hz	These are for 60Hz power (North America).
575/600V 60 Hz	These are for 60Hz power (North America).
50 Hz/International Power	International voltage levels, such as those common in Asia and Europe, and includes all 50Hz power.
400 Hz/Aerospace	Motors and other components using 400Hz power are primarily used for aerospace applications.
Other	Unlisted voltage/frequency motor.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Phase	
Your choices are...	
Single-phase	Standard commercial and residential power is single-phase, meaning one sinusoidal or other alternating voltage pattern.
Three-phase	Three-phase power contains three simultaneous sinusoidal or other alternating voltage patterns, typically 120° out of phase with each other. Higher power efficiency and smoothness of operation is possible with three-phase operation. Three-phase power is most typically used for industrial or high power motors.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Shaft Speed:	No-load rotational speed of output shaft at rated terminal voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Output Power:	Mechanical power provided by the motor output.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Torque:	Output torque capability of the motor under constant running conditions.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

AC Motor Type

Motor Type:	
Your choices are...	
Induction	Induction motors derives its name from the fact that current is induced into the rotor windings without any physical connection with the stator windings (which are directly connected to an AC power supply). Induction motors are adaptable to many different environments and capable of providing considerable power as well as variable speed control. Typically there is "slip," or loss of exact speed tracking with induction motors.
Synchronous	Synchronous motors operate at constant speed up to full load. The rotor speed is equal to the speed of the rotating magnetic field of the stator; there is no slip. Reluctance and permanent magnet are the two major types of synchronous motors. A synchronous motor is often used where the exact speed of a motor must be maintained.
AC Servomotors	AC servomotors are typically permanent magnet, synchronous motors that can often have low torque-to-inertia ratios for high acceleration ratings.
Universal	Universal motors can operate at approximately the same speed and output on either DC or single-phase AC power. Universal motors are also known as an AC/DC motors.
Other	Unlisted or specialized AC motor construction.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Multi-speed?	Motor speed can be continuously adjusted or set at discrete speeds within the operating range.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reversible?	Motor can be run in both clockwise and counterclockwise directions with approximately the same operating characteristics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Gearmotor/Gearhead Options

Motor Configuration:	
Your choices are...	
Motor Only	Motor does not have a gearbox of any kind.
Gearmotor	This category includes units with single integral gearheads, or replaceable/interchangeable gearhead options.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Gearing (if applicable):	
Your choices are...	
Spur	Spur gear heads include one or more sets of pinion-gear sets, in which one pinion drives one gear. These sets can be stacked or cascaded to achieve higher reduction ratios.
Planetary	Planetary gear heads involve several gears per stage rather than one pinion-gear set. A "sun gear" drives multiple planet or satellite gears, which then mesh on the inside of an internal or annular gear to provide relatively high torque and power transmission ratings.
Harmonic	Harmonic drives are an extremely precise speed reduction system that transmits power via a rotating elliptical element that engages a flexible cup that then engages an internal gear, which is typically fixed. This power transmission delivers precise angular position in very high input-to-output ratio (50:1 & up) applications.
Worm	Right-angle drive in which a worm drives a wheel coupled to the output shaft or shafts. This arrangement is used for high reduction and compact right-angle power transmission.
Bevel	Bevel gear sets have intersecting axes that are commonly, but not always, perpendicular. They mate via teeth on angled edges.
Other	Unlisted or specialized gearing arrangement.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Gearbox Ratio:	Gearbox ratio is the ratio of input speed to output speed. A ratio greater than one indicates speed reduction, while a ratio less than one indicates speed increase.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Gearbox Efficiency:	Efficiency is the percentage of power or torque that is transferred through the gearbox. Losses occur due to factors such as friction and slippage inside the gearbox.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Feedback

Feedback	
Your choices are...	
Integral Encoder	Integral encoders are attached for angular position signal. These encoders may include absolute or incremental encoders and a number of different encoder signal types.
Integral Resolver	Integral Resolvers indicate angular position. Resolvers often rely on magnetic fields and are typically very robust; they are sometimes specified for harsh environments.
Integral Tachometer	Tachometers produce an output indicating rotational speed of motor.
Other	Unlisted or specialized feedback signal.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

AC Motor Shaft Options

Orientation/Type	
Your choices are...	
In-line	Output shaft axis is in-line with axis of motor rotation.
Offset/Parallel	Output shaft is parallel with, but not concentric to, the axis of motor rotation.
Right Angle	Output shaft axis is perpendicular to motor rotation axis, intersecting or nonintersecting.
Hollow	Hollow output shafts have a hole or bore that can accept a shaft. Outputs with collets for tool bits are one example.
Other	Unlisted shaft angle or configuration.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Number of Shafts	
Your choices are...	
Single-ended	One output shaft.
Double-ended	Two output shafts. This may be one coming out the front and one coming out the back, or two coming out from a transverse gearbox.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

AC Motor Housing

Design Units:	Refers to the base units for specifications such as diameter, length, and threading. Combinations are possible and this information is not known for some products.
Your choices are...	
English	Base units such as inches or fractions of an inch for primary dimensions as the shaft size, mounting geometry, etc.
Metric	Metric units such as millimeters or centimeters are used for primary dimensions as the shaft size, mounting geometry, etc.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Motor Shape:	
Your choices are...	
Cylindrical Body	Cylindrical motor body cross-sections are round.
Square Body	Square motor bodies have a square or rectangular shape.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Diameter/Width:	Diameter of cylindrical motors or width/height of square motors. This is for the motor body only and does not include flanges.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Housing Length:	Housing length is the length of the motor body, not including shaft.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
NEMA Frame Size:	NEMA frame sizes conform to a standard size and mounting configuration identified by the National Electrical Manufacturers Association (NEMA). Only numerical sizes are searchable in this field.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Enclosure Options	
Your choices are...	
Open Frame/ Frameless	Open-frame of frameless enclosures have minimal or frame-like support, but no overall casing.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

AC Motor Options

Integral Driver Electronics?	Integral driver electronics are on-board or attached drivers or amplifier electronics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Brake?	Integral brake can be mechanical or electronic.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Clutch?	Integral clutches engage and disengage the motor.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Brake/Clutch Combination?	Integral combination of brake and clutch.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Environment Full required ranged of ambient operating temperature.

Operating Temperature:	Full required range of operating temperature.
Search Logic:	User may specify either, both, or neither of the limits in a "From - To" range; when both are specified, matching products will cover entire range. Products returned as matches will meet all specified criteria.
Shock Rating:	Shock rating is the maximum shock the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Vibration Rating:	Vibrating rating is the maximum vibration the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Totally Enclosed	Totally enclosed motors have an enclosure that prevents free exchange of air between the inside and the outside of the enclosure. Common ratings are TEFC (fan-cooled) and TENV (non-ventilated); this is not an airtight rating. These motors are most frequently used in potentially contaminated environments.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Dust-proof	Dust-proof motors protect against dust infiltration with features such as total enclosure and labyrinth seals for shafts. The IP (Ingress Protection) rating for dust-proof motors is IP6x.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Drip-proof	Drip-proof motors contain ventilation openings that are designed so that drops of liquid or solid particles falling from any angle within 15 degrees of vertical cannot enter the motor. Motors with an IP rating of IPx1 through IPx9 are considered drip-proof.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Waterproof	There are several degrees of waterproofing applicable to motors and they are reflected in the IP rating for the motor: IPx1: Protection against vertically falling drops of water (drip-proof). IPx2: Protection against direct sprays of water up to 15 degrees from vertical. IPx3: Protection against direct sprays of water up to 60 degrees from vertical. IPx4: Protection against water sprayed from all directions. IPx5: Protected against low pressure jets of water from all directions. IPx6: Protected against high pressure jets of water from all directions. IPx7: Protected against the effects of immersion up to 1 meter. IPx8: Protected against long periods of immersion under pressure.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Special/Extreme Environments	
Your choices are...	
Clean Room Use	Clean rooms are classified by particulate size and density in the ambient air. One such rating method classifies rooms according to number of particles larger than 0.5 micron in one cubic foot of air. There are various governmental, metric, and international standards. Motors rated for suitability in a clean room will identify the particular standard for which they are rated.
Cryogenic Use	Motors with a cryogenic rating are constructed for extremely low ambient temperatures such as 20 K and below.
Explosion-proof	Explosion-proof motors have totally enclosed housings that are constructed to withstand internal explosion of a specified gas, vapor, or dust. Should such an explosion occur, the enclosure would prevent the ignition or explosion of the gas or vapor surrounding the motor enclosure. Several explosion-proof ratings are governed by Underwriter's Laboratories (UL).
Radiation-hardened	Radiation-hardened motors are constructed of materials designed to withstand high-energy gamma radiation. Ratings are expressed in units such as permissible RADs in total accumulated dose (TAD).
Vacuum Use	Vacuum-rated motors incorporate features such as lubricant vapor pressure below rated ambient vacuum and construction techniques.

Stepper Motors

Performance Specifications	
Shaft Speed:	No-load rotational speed of output shaft at rated terminal voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Terminal Voltage:	Design DC motor voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Current per Phase:	This refers to the maximum rated current per phase or winding for a stepper motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Output Power:	Mechanical power provided by the motor output.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Static/Holding Torque:	Static or holding torque is the maximum torque a motor can develop to hold its rotor in a stationary position.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Motor Type

Motor Type:	
Your choices are...	
Permanent Magnet	The motor uses permanent magnet on the rotor. Step angles range from 1.5 to 30 degrees. Permanent magnet motors are the most common and versatile stepper motor; this includes both unipolar (bifilar) and bipolar types.
Variable Reluctance	Variable reluctance motors have a free-moving rotor. No residual torque is produced due to the lack of a permanent magnet. The rotor is instead composed of a soft iron metal. The rotor is also composed of its own very prominent poles, tending to stick out more than a rotor found on the PM version. Step angles: 7.5 to 30 degrees single power source required (like a bifilar PM motor). Variable reluctance motors are the least expensive stepper motor.
Hybrid	Hybrid motors consist of a heavily toothed PM rotor and toothed stators, plus prominent rotor poles like a VR rotor. These motors have very fine step angles: 0.5 to 15 degrees. Hybrid motors have high-speed capability (less chance of a stall) and higher available torque than PM or VR stepper motors. Hybrids are the most effective but most expensive stepper motor type.
Other	Unlisted or specialized stepper motor construction.

Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Step Angle:	The degrees per step of the motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Number of Leads:	Stepper motor configurations can have different numbers of leads depending on the specific winding wiring. For example, bipolar PM motors can have 4, 5, or 6 leads. Unipolar PM motors can commonly have 5 or 6 leads (two windings with two ends plus center taps, which may or may not be tied together). Hybrid motors frequently contain 8 leads, and multiphase motors can have different lead configurations (for example, a motor wired for 5-phase power could have 5 or 10 leads). Consult with manufacturer for specific winding, wiring, and lead information.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Gearmotor/Gearhead Options

Motor Configuration:	
Your choices are...	
Motor Only	Motor does not have a gearbox of any kind.
Gearmotor	This category includes units with single integral gearheads, or replaceable/interchangeable gearhead options.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Gearing (if applicable):	
Your choices are...	
Spur	Spur gear heads include one or more sets of pinion-gear sets, in which one pinion drives one gear. These sets can be stacked or cascaded to achieve higher reduction ratios.
Planetary	Planetary gear heads involve several gears per stage rather than one pinion-gear set. A "sun gear" drives multiple planet or satellite gears, which then mesh on the inside of an internal or annular gear to provide relatively high torque and power transmission ratings.
Harmonic	Harmonic drives are an extremely precise speed reduction system that transmits power via a rotating elliptical element that engages a flexible cup that then engages an internal gear, which is typically fixed. This power transmission delivers precise angular position in very high input-to-output ratio (50:1 & up) applications.
Worm	Right-angle drive in which a worm drives a wheel coupled to the output shaft or shafts. This arrangement is used for high reduction and compact right-angle power transmission.

Bevel	Bevel gear sets have intersecting axes that are commonly, but not always, perpendicular. They mate via teeth on angled edges.
Other	Unlisted or specialized gearing arrangement.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Gearbox Ratio:	Gearbox ratio is the ratio of input speed to output speed. A ratio greater than one indicates speed reduction, while a ratio less than one indicates speed increase.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Gearbox Efficiency:	Efficiency is the percentage of power or torque that is transferred through the gearbox. Losses occur due to factors such as friction and slippage inside the gearbox.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Feedback

Feedback	
Your choices are...	
Integral Encoder	Integral encoders are attached for angular position signal. These encoders may include absolute or incremental encoders and a number of different encoder signal types.
Integral Resolver	Integral Resolvers indicate angular position. Resolvers often rely on magnetic fields and are typically very robust; they are sometimes specified for harsh environments.
Integral Tachometer	Tachometers produce an output indicating rotational speed of motor.
Other	Unlisted or specialized feedback signal.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Shaft Options

Orientation/Type	
Your choices are...	
In-line	Output shaft axis is in-line with axis of motor rotation.
Offset/Parallel	Output shaft is parallel with, but not concentric to, the axis of motor rotation.
Right Angle	Output shaft axis is perpendicular to motor rotation axis, intersecting or nonintersecting.
Hollow	Hollow output shafts have a hole or bore that can accept a shaft. Outputs with collets for tool bits are one example.
Other	Unlisted shaft angle or configuration.

Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Number of Shafts	
Your choices are...	
Single-ended	One output shaft.
Double-ended	Two output shafts. This may be one coming out the front and one coming out the back, or two coming out from a transverse gearbox.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Housing/Enclosure

Design Units:	Refers to the base units for specifications such as diameter, length, and threading. Combinations are possible and this information is not known for some products.
Your choices are...	
English	Base units such as inches or fractions of an inch for primary dimensions as the shaft size, mounting geometry, etc.
Metric	Metric units such as millimeters or centimeters are used for primary dimensions as the shaft size, mounting geometry, etc.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Motor Shape	
Your choices are...	
Cylindrical Body	Cylindrical motor body cross-sections are round.
Square Body	Square motor bodies have a square or rectangular shape.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Diameter/Width:	Diameter of cylindrical motors or width/height of square motors. This is for the motor body only and does not include flanges.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Housing Length:	Housing length is the length of the motor body, not including shaft.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
NEMA Frame Size:	NEMA frame sizes conform to a standard size and mounting configuration identified by the National Electrical Manufacturers Association (NEMA). Only numerical sizes are searchable in this field.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Enclosure Options	
Your choices are...	
Open Frame/ Frameless	Open-frame of frameless enclosures have minimal or frame-like support, but no overall casing.
Totally Enclosed	Totally enclosed motors have an enclosure that prevents free exchange of air between the inside and the outside of the enclosure. Common ratings are TEFC (fan-cooled) and TENV (non-ventilated); this is not an airtight rating. These motors are most frequently used in potentially contaminated environments.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Features & Options

Integral Driver Electronics?	Integral driver electronics are on-board or attached drivers or amplifier electronics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Brake?	Integral brake can be mechanical or electronic.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Clutch?	Integral clutches engage and disengage the motor.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Brake/Clutch Combination?	Integral combination of brake and clutch.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Environment Full required ranged of ambient operating temperature.

Dust-proof	Dust-proof motors protect against dust infiltration with features such as total enclosure and labyrinth seals for shafts. The IP (Ingress Protection) rating for dust-proof motors is IP6x.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Drip-proof	Drip-proof motors contain ventilation openings that are designed so that drops of liquid or solid particles falling from any angle within 15 degrees of vertical cannot enter the motor. Motors with an IP rating of IPx1 through IPx9 are considered drip-proof.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Waterproof	There are several degrees of waterproofing applicable to motors and they are reflected in the IP rating for the motor: IPx1: Protection against vertically falling drops of water (drip-proof). IPx2: Protection against direct sprays of water up to 15 degrees from vertical. IPx3: Protection against direct sprays of water up to 60 degrees from vertical. IPx4: Protection against water sprayed from all directions. IPx5: Protected against low pressure jets of water from all directions. IPx6: Protected against high pressure jets of water from all directions. IPx7: Protected against the effects of immersion up to 1 meter. IPx8: Protected against long periods of immersion under pressure.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Special/Extreme Environments	
Your choices are...	
Clean Room Use	Clean rooms are classified by particulate size and density in the ambient air. One such rating method classifies rooms according to number of particles larger than 0.5 micron in one cubic foot of air. There are various governmental, metric, and international standards. Motors rated for suitability in a clean room will identify the particular standard for which they are rated.
Cryogenic Use	Motors with a cryogenic rating are constructed for extremely low ambient temperatures such as 20 K and below.
Explosion-proof	Explosion-proof motors have totally enclosed housings that are constructed to withstand internal explosion of a specified gas, vapor, or dust. Should such an explosion occur, the enclosure would prevent the ignition or explosion of the gas or vapor surrounding the motor enclosure. Several explosion-proof ratings are governed by Underwriter's Laboratories (UL).
Radiation-hardened	Radiation-hardened motors are constructed of materials designed to withstand high-energy gamma radiation. Ratings are expressed in units such as permissible RADs in total accumulated dose (TAD).
Vacuum Use	Vacuum-rated motors incorporate features such as lubricant vapor pressure below rated ambient vacuum and construction techniques.

Gear Motors

Motor Type	
Your choices are...	
DC Motor	Class of motors that use direct current (DC). DC motors are most commonly used in variable speed and torque applications.
AC Motor	Class of motors that use alternating current (AC). AC motors include a variety of types including synchronous, induction, AC servomotors, and single and multiphase motors.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
DC Servomotor?	DC servomotors have an output shaft that can be positioned by sending a coded signal to the motor. As the input to the motor changes, the angular position of the output shaft changes as well. Servomotors are generally small and powerful for their size, and easy to control. Common types of DC servomotors include brushless or gearmotor types.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Stepper Motor	Stepper motors provide incremental motion, or steps, in response to pulses of current that alternately change the polarity of the stator poles. Step motors do not require feedback and are sometimes used in "Open Loop," or no-feedback applications.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Performance Specifications

Shaft Speed:	No-load rotational speed of output shaft at rated terminal voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Torque:	Output torque capability of the motor under constant running conditions.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Current:	Continuous current is the maximum rated current that can be supplied to the motor windings without overheating.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Continuous Output Power:	Mechanical power provided by the motor output.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

AC Motor Specifications

Voltage & Frequency:	
Your choices are...	
115/120V 60 Hz	115/120V is standard residential or commercial voltage for 60Hz power (North America).
208-230/240V 60 Hz	These are for 60Hz power (North America).
460/480V 60 Hz	These are for 60Hz power (North America).
575/600V 60 Hz	These are for 60Hz power (North America).
50 Hz/International Power	International voltage levels, such as those common in Asia and Europe, and includes all 50Hz power.
400 Hz/Aerospace	Motors and other components using 400Hz power are primarily used for aerospace applications.
Other	Unlisted voltage/frequency motor.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Phase	
Your choices are...	
Single-phase	Standard commercial and residential power is single-phase, meaning one sinusoidal or other alternating voltage pattern.
Three-phase	Three-phase power contains three simultaneous sinusoidal or other alternating voltage patterns, typically 120° out of phase with each other. Higher power efficiency and smoothness of operation is possible with three-phase operation. Three-phase power is most typically used for industrial or high power motors.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
AC Motor Construction:	
Your choices are...	
Induction	Induction motors derives its name from the fact that current is induced into the rotor windings without any physical connection with the stator windings (which are directly connected to an AC power supply). Induction motors are adaptable to many different environments and capable of providing considerable power as well as variable speed control. Typically there is "slip," or loss of exact speed tracking with induction motors.
Synchronous	Synchronous motors operate at constant speed up to full load. The rotor speed is equal to the speed of the rotating magnetic field of the stator; there is no slip. Reluctance and permanent magnet are the two major types of synchronous motors. A synchronous motor is often used where the exact speed of a motor must be maintained.
AC Servomotors	AC servomotors are typically permanent magnet, synchronous motors that can often have low torque-to-inertia ratios for high acceleration ratings.

Universal	Universal motors can operate at approximately the same speed and output on either DC or single-phase AC power. Universal motors are also known as an AC/DC motors.
Other	Unlisted or specialized AC motor construction.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

DC Motor Specifications

DC Terminal Voltage:	Design DC motor voltage.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
DC Motor Construction	
Your choices are...	
Permanent Magnet	Permanent magnets (PM) are embedded into the rotor assembly. The rotor aligns itself with the rotating magnetic field of the stator windings. PM motors exhibit constant speed with varying load (zero slip) and provide relatively high torque, good efficiency, and lower current draw than comparable synchronous motors.
Shunt Wound	Shunt wound motors exhibit minimum speed variation through load range and can be configured for constant horsepower over an adjustable speed range. Frequent applications include machine tools, fans, and blowers.
Series Wound	Series wound motors exhibit high starting torques for permanently attached loads. These motors are frequently used in heavy industrial applications.
Compound Wound	Compound wound motors are designed with both a series and shunt field winding. They are often used where the primary load requirement is heavy starting torque, and adjustable speed is not required. They can exhibit speed variation from no-load to full-load. Applications include elevators, hoists, and industrial shop equipment.
Disc Armature	Disc armatures are flat, pancake-shaped rotors that are driven by an axially, rather than radially, aligned magnetic field. The thin construction of these armatures can result in low inertia with resulting high acceleration.
Coreless/Slotless	Coreless and slotless motors incorporate a cylindrical winding that is physically outside of a set of permanent magnets. The winding is not held by a slotted iron cage but is laminated together. In a slotless motor, the magnets attached to the rotor rotate. In a coreless motor, the windings rotate around the permanent magnet stator.
Other	Unlisted motor construction.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Commutation	
Your choices are...	
Brush	Brush motors have the armature windings on the rotor. The magnetic fields are commutated via direct contact of brushes with the rotor commutator.
Brushless	Brushless motors have their armature windings on the stator and the field on the rotor. They rely on internal noncontact sensing devices to activate external commutating electronics.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Gearmotor/Gearhead Options

Gearing Arrangement:	
Your choices are...	
Spur	Spur gear heads include one or more sets of pinion-gear sets, in which one pinion drives one gear. These sets can be stacked or cascaded to achieve higher reduction ratios.
Planetary	Planetary gear heads involve several gears per stage rather than one pinion-gear set. A "sun gear" drives multiple planet or satellite gears, which then mesh on the inside of an internal or annular gear to provide relatively high torque and power transmission ratings.
Harmonic	Harmonic drives are an extremely precise speed reduction system that transmits power via a rotating elliptical element that engages a flexible cup that then engages an internal gear, which is typically fixed. This power transmission delivers precise angular position in very high input-to-output ratio (50:1 & up) applications.
Worm	Right-angle drive in which a worm drives a wheel coupled to the output shaft or shafts. This arrangement is used for high reduction and compact right-angle power transmission.
Bevel	Bevel gear sets have intersecting axes that are commonly, but not always, perpendicular. They mate via teeth on angled edges.
Other	Unlisted or specialized gearing arrangement.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Gearbox Ratio:	Gearbox ratio is the ratio of input speed to output speed. A ratio greater than one indicates speed reduction, while a ratio less than one indicates speed increase.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Gearbox Efficiency:	Efficiency is the percentage of power or torque that is transferred through the gearbox. Losses occur due to factors such as friction and slippage inside the gearbox.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Feedback

Feedback	
Your choices are...	
Integral Encoder	Integral encoders are attached for angular position signal. These encoders may include absolute or incremental encoders and a number of different encoder signal types.
Integral Resolver	Integral Resolvers indicate angular position. Resolvers often rely on magnetic fields and are typically very robust; they are sometimes specified for harsh environments.
Integral Tachometer	Tachometers produce an output indicating rotational speed of motor.
Other	Unlisted or specialized feedback signal.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Shaft Options

Orientation/Type	
Your choices are...	
In-line	Output shaft axis is in-line with axis of motor rotation.
Offset/Parallel	Output shaft is parallel with, but not concentric to, the axis of motor rotation.
Right Angle	Output shaft axis is perpendicular to motor rotation axis, intersecting or nonintersecting.
Hollow	Hollow output shafts have a hole or bore that can accept a shaft. Outputs with collets for tool bits are one example.
Other	Unlisted shaft angle or configuration.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Number of Shafts	
Your choices are...	
Single-ended	One output shaft.
Double-ended	Two output shafts. This may be one coming out the front and one coming out the back, or two coming out from a transverse gearbox.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Housing/Enclosure

Design Units:	Refers to the base units for specifications such as diameter, length, and threading. Combinations are possible and this information is not known for some products.
Your choices are...	
English	Base units such as inches or fractions of an inch for primary dimensions as the shaft size, mounting geometry, etc.
Metric	Metric units such as millimeters or centimeters are used for primary dimensions as the shaft size, mounting geometry, etc.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Motor Shape:	
Your choices are...	
Cylindrical Body	Cylindrical motor body cross-sections are round.
Square Body	Square motor bodies have a square or rectangular shape.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Diameter/Width:	Diameter of cylindrical motors or width/height of square motors. This is for the motor body only and does not include flanges.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Housing Length:	Housing length is the length of the motor body, not including shaft.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
NEMA Frame Size:	NEMA frame sizes conform to a standard size and mounting configuration identified by the National Electrical Manufacturers Association (NEMA). Only numerical sizes are searchable in this field.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Enclosure Options	
Your choices are...	
Open Frame/ Frameless	Open-frame of frameless enclosures have minimal or frame-like support, but no overall casing.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.

Features & Options

Multi-speed?	Motor speed can be continuously adjusted or set at discrete speeds within the operating range.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Reversible?	Motor can be run in both clockwise and counterclockwise directions with approximately the same operating characteristics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Driver Electronics?	Integral driver electronics are on-board or attached drivers or amplifier electronics.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Brake?	Integral brake can be mechanical or electronic.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Clutch?	Integral clutches engage and disengage the motor.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Brake/Clutch Combination?	Integral combination of brake and clutch.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Environment. Full required ranged of ambient operating temperature.

Operating Temperature:	Full required range of operating temperature.
Search Logic:	User may specify either, both, or neither of the limits in a "From - To" range; when both are specified, matching products will cover entire range. Products returned as matches will meet all specified criteria.
Shock Rating:	Shock rating is the maximum shock the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Vibration Rating:	Vibrating rating is the maximum vibration the motor can withstand and still meet operating specifications.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Totally Enclosed	Totally enclosed motors have an enclosure that prevents free exchange of air between the inside and the outside of the enclosure. Common ratings are TEFC (fan-cooled) and TENV (non-ventilated); this is not an airtight rating. These motors are most frequently used in potentially contaminated environments.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Dust-proof	Dust-proof motors protect against dust infiltration with features such as total enclosure and labyrinth seals for shafts. The IP (Ingress Protection) rating for dust-proof motors is IP6x.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Drip-proof	Drip-proof motors contain ventilation openings that are designed so that drops of liquid or solid particles falling from any angle within 15 degrees of vertical cannot enter the motor. Motors with an IP rating of IPx1 through IPx9 are considered drip-proof.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Waterproof	There are several degrees of waterproofing applicable to motors and they are reflected in the IP rating for the motor: IPx1: Protection against vertically falling drops of water (drip-proof). IPx2: Protection against direct sprays of water up to 15 degrees from vertical. IPx3: Protection against direct sprays of water up to 60 degrees from vertical. IPx4: Protection against water sprayed from all directions. IPx5: Protected against low pressure jets of water from all directions. IPx6: Protected against high pressure jets of water from all directions. IPx7: Protected against the effects of immersion up to 1 meter. IPx8: Protected against long periods of immersion under pressure.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Special/Extreme Environments	
Your choices are...	
Clean Room Use	Clean rooms are classified by particulate size and density in the ambient air. One such rating method classifies rooms according to number of particles larger than 0.5 micron in one cubic foot of air. There are various governmental, metric, and international standards. Motors rated for suitability in a clean room will identify the particular standard for which they are rated.
Cryogenic Use	Motors with a cryogenic rating are constructed for extremely low ambient temperatures such as 20 K and below.
Explosion-proof	Explosion-proof motors have totally enclosed housings that are constructed to withstand internal explosion of a specified gas, vapor, or dust. Should such an explosion occur, the enclosure would prevent the ignition or explosion of the gas or vapor surrounding the motor enclosure. Several explosion-proof ratings are governed by Underwriter's Laboratories (UL).
Radiation-hardened	Radiation-hardened motors are constructed of materials designed to withstand high-energy gamma radiation. Ratings are expressed in units such as permissible RADs in total accumulated dose (TAD).
Vacuum Use	Vacuum-rated motors incorporate features such as lubricant vapor pressure below rated ambient vacuum and construction techniques.

Linear Motors

Motor Type & Specifications

Linear Motor Type:	
Your choices are...	
Moving Coil	Coil moves and the magnet is fixed, such as an audio speaker.
Moving Magnet	Magnet moves and the coil is fixed.
AC Switched Reluctance Design	Types of AC synchronous motors.
AC Synchronous Design	Class of motors that operate at constant speed up to full load. The rotor speed is equal to the speed of the rotating magnetic field of the stator; there is no slip. Reluctance and permanent magnet are the two major types of synchronous motors. A synchronous motor is often used where the exact speed of a motor must be maintained.
AC Induction or Traction Design	Class of motors that derives its name from the fact that current is induced into the rotor windings without any physical connection with the stator windings (which are directly connected to an AC power supply); adaptable to many different environments and capable of providing considerable power as well as variable speed control. Typically there is "slip," or loss of exact speed tracking with induction motors. Typically rolled flat version of rotary AC induction motors.
Linear Stepping Design	A stepper motor uses a magnetic field to move a rotor in small angular steps or fractions of steps. Stepper motors provide precise positioning and ease of use, especially in low acceleration or static load applications.

DC Brushed Design	Brush motors have the armature windings on the rotor. The magnetic fields are commutated via direct contact of brushes with the rotor commutator.
DC Brushless Design	Brushless motors have their armature windings on the stator and the field on the rotor. They rely on internal noncontact sensing devices to activate external commutating electronics.
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Rated Continuous Thrust Force:	Maximum rated current that can be supplied to the motor windings without overheating.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Peak Force:	Maximum force of the linear motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Speed:	Maximum speed of the linear motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Acceleration:	Maximum acceleration of the linear motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Nominal Stator Length:	The length of the fixed magnet or coil.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Slider or Carriage Travel:	The range of travel of the moving coil or magnet.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Slider or Carriage Width:	The maximum width of the moving coil or magnet.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Slider or Carriage Length:	The maximum length of the moving coil or magnet.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Electrical Properties

Continuous Current (AC or DC):	
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Rated Current per Phase (Stepper):	Maximum rated current per phase or winding for a stepper motor.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Motor Force Constant:	
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Number of Leads:	Unipolar = 6 leads, bi-polar = 4
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.

Mechanical Properties

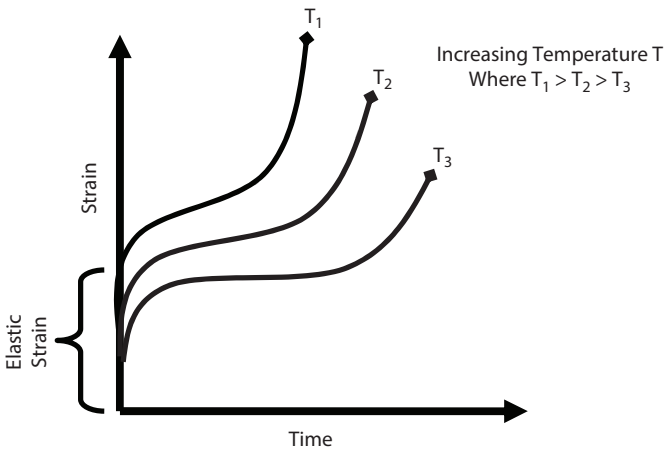
Design Units:	
Your choices are...	
English	
Metric	
Search Logic:	All products with ANY of the selected attributes will be returned as matches. Leaving all boxes unchecked will not limit the search criteria for this question; products with all attribute options will be returned as matches.
Linear Stepper Resolution:	Units are typically in 'distance per step' or 'steps per unit distance'.
Search Logic:	User may specify either, both, or neither of the "At Least" and "No More Than" values. Products returned as matches will meet all specified criteria.
Maximum Coil Temperature:	
Search Logic:	All matching products will have a value less than or equal to the specified value.

Features

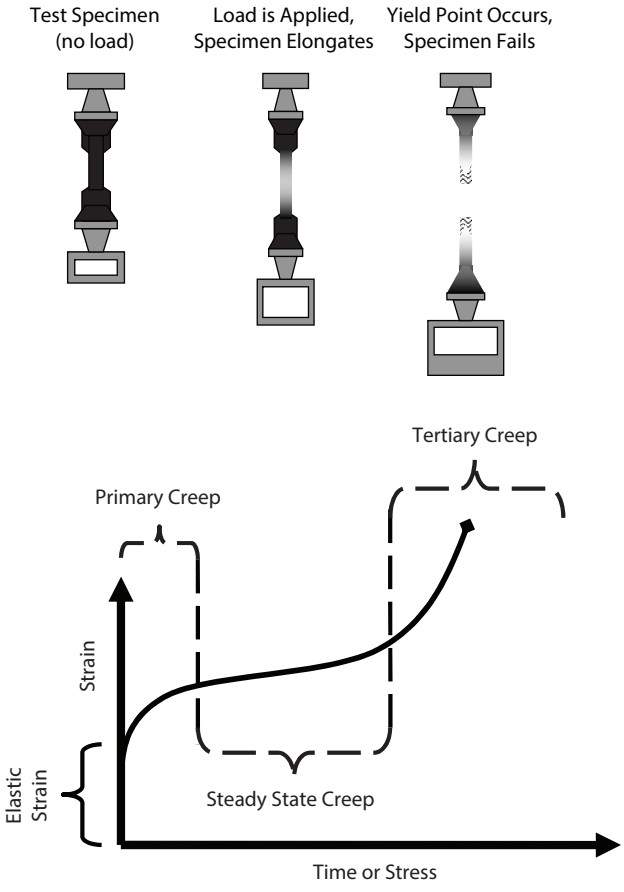
Forced Air Cooling?	Active fan or other air-moving device.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Water Cooling?	Water cooling provices more heat dissipation than convection or forced air cooling.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Balanced Design?	No magnetic attraction
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Integral Position Feedback?	Encoder, resolver, or other feedback signal.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.
Modular Stator?	Allows for unlimited length of travel.
Search Logic:	"Required" and "Must Not Have" criteria limit returned matches as specified. Products with optional attributes will be returned for either choice.

Environment

Operating Temperature:	The temperature range over which the device must operate.
Search Logic:	User may specify either, both, or neither of the limits in a "From - To" range; when both are specified, matching products will cover entire range. Products returned as matches will meet all specified criteria.
Maximum Shock:	The maximum shock you require the device to survive. Items that are 'typical' may not explicitly give their Max Shock value, so it is a good idea to use this only when working with extremes.
Search Logic:	All matching products will have a value greater than or equal to the specified value.
Maximum Vibration:	The maximum vibration you require the device to survive. Items that are 'typical' may not explicitly give their Max Vibration value, so it is a good idea to use this only when working with extremes.



Strain vs. Temperature Curve



Stress Strain Curve

USS THREAD

NOMINAL SIZE	NC	NF	HOLE (INCH)	DRILL SIZE
#5	40		0.125	#38
#5		44	0.125	#37
#6	32		0.138	#36
#6		40	0.138	#33
#8	32		0.164	#29
#8		36	0.164	#29
#10	24		0.190	#25
#10		32	0.190	#21
#12	24		0.216	#16
#12		28	0.216	#14
1/4	20		0.250	#7
1/4		28	0.250	#3
5/16	18		0.313	'F'
5/16		24	0.313	'I'
3/8	16		0.375	5/16
3/8		24	0.375	'Q'
7/16	14		0.438	'U'
7/16		20	0.438	25/64
1/2	13		0.500	27/64
1/2		20	0.500	29/64
9/16	12		0.563	31/64
9/16		18	0.563	33/64
5/8	11		0.625	17/32
5/8		18	0.625	37/64
3/4	10		0.750	21/32
3/4		16	0.750	11/16

METRIC THREAD

NOMINAL SIZE mm	PITCH	HOLE (INCH)	DRILL SIZE
2.5	0.45	0.098	#46
3	0.50	0.118	#40
4	0.70	0.157	#30
5	0.80	0.197	#19
6	1.00	0.236	#9
7	1.00	0.276	'B'
8	1.00	0.315	17/64
10	1.25	0.394	'Q'
12	1.25	0.472	'Y'
14	1.50	0.551	15/32
16	1.50	0.630	35/64
18	1.50	0.709	39/64
20	1.50	0.787	11/16
22	1.50	0.866	49/64
8	1.25	0.315	17/64
10	1.50	0.394	'Q'
12	1.75	0.472	'Y'
14	2.00	0.551	15/32
16	2.00	0.630	35/64
18	1.50	0.709	39/64
20	2.50	0.787	11/16
22	2.50	0.866	49/64

U.S. PIPE THREAD

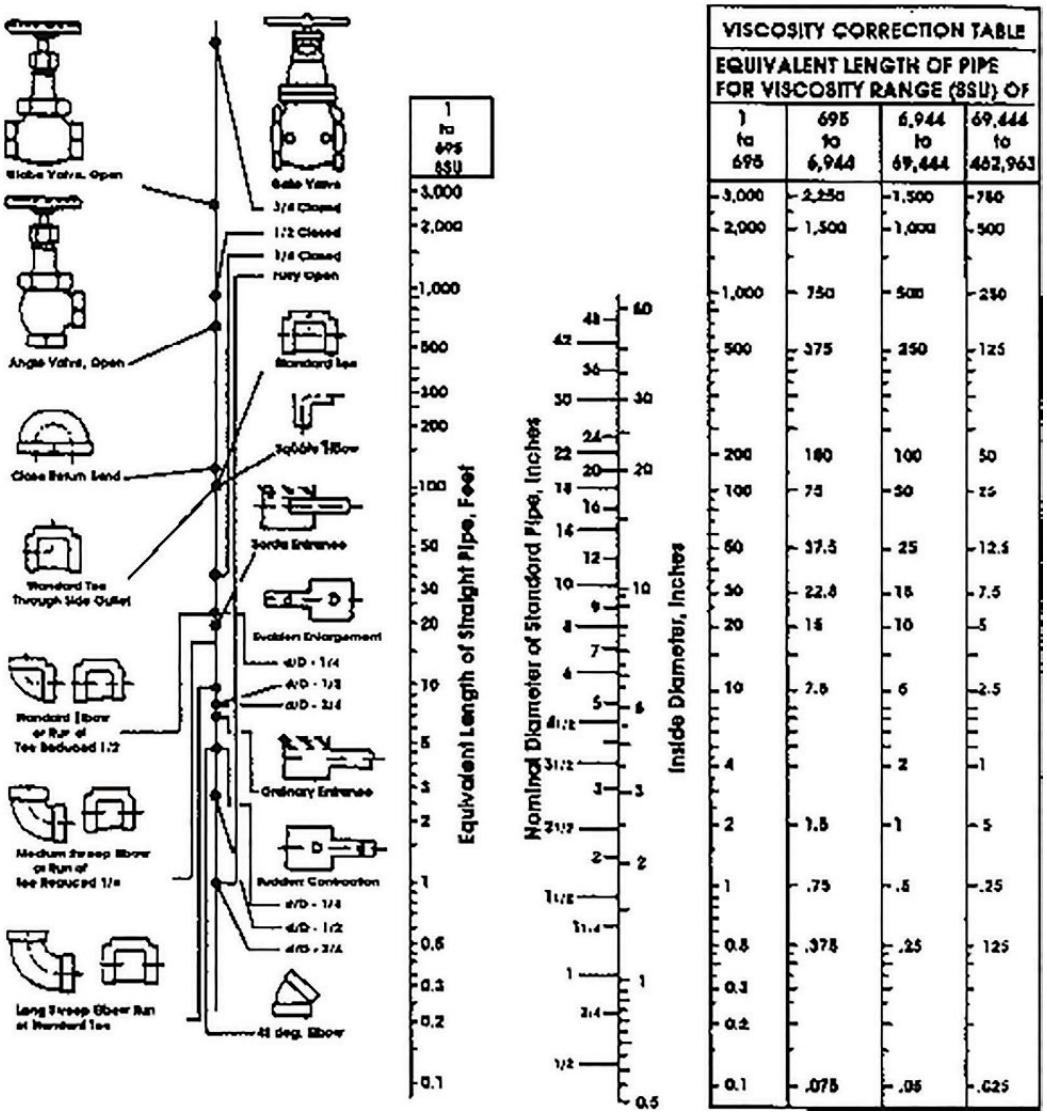
NOMINAL SIZE	THREADS PER INCH	HOLE (INCH)	DRILL SIZE
1/16	27	0.312	'D'
1/8	27	0.405	'R'
1/4	18	0.540	7/16
3/8	18	0.675	37/64
1/2	14	0.840	23/32

SPARK PLUG THREAD

NOMINAL SIZE mm	PITCH	HOLE (INCH)	DRILL SIZE
10	1.00	0.393	'Q'
12	1.25	0.467	'Y'
14	1.25	0.546	15/32
18	1.50	0.707	39/64

Threads-chart

FRICTION LOSS IN VALVES and FITTINGS



ValveChart

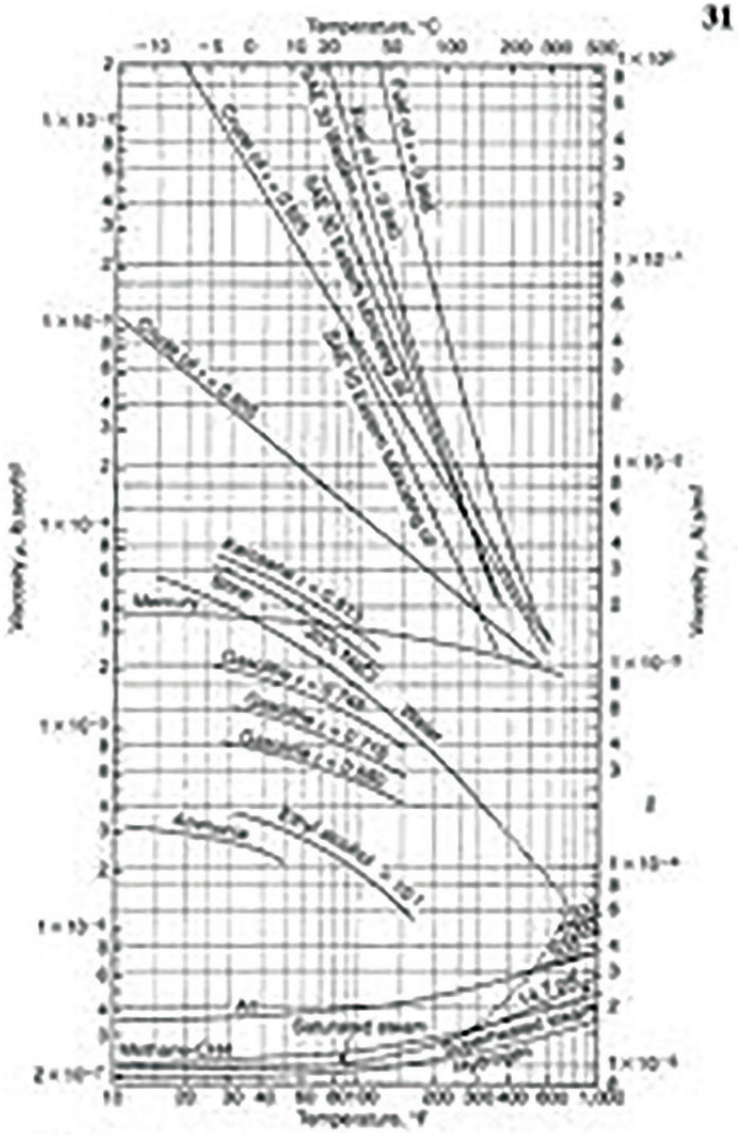
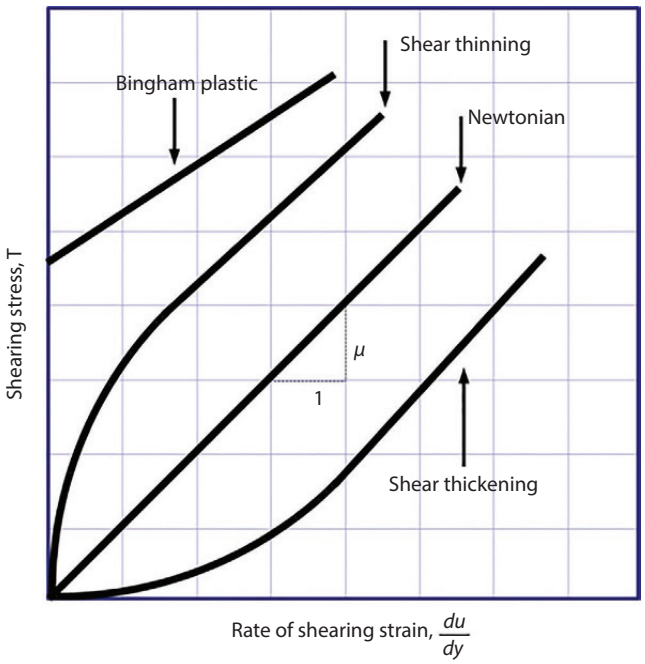
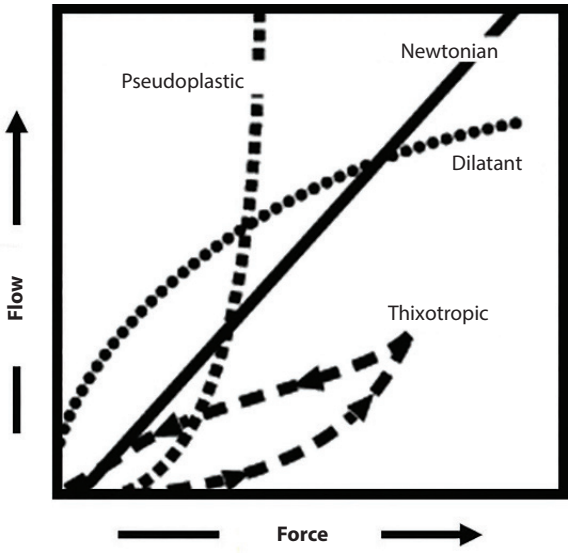


Figure 23
Absolute viscosity μ of fluids. (S = specific gravity at 60°F relative to water at 60°F.)

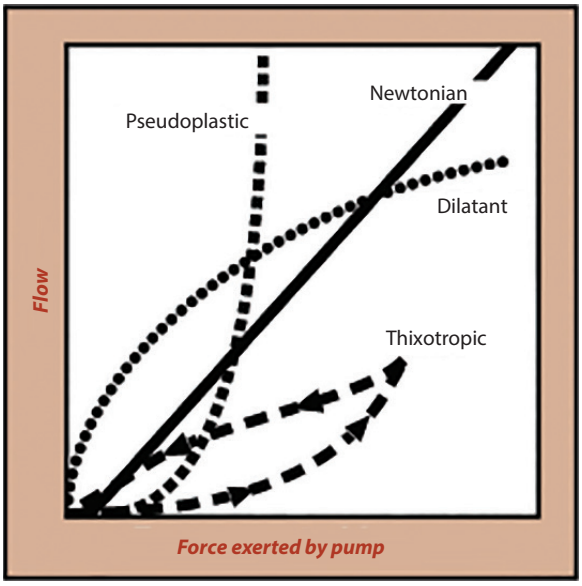
Viscosity Charts



Viscosity Regimes chart



Viscosity Types



Viscosity-chart_253-252

Class	Parameter					
Friction type	Rolling	Rolling-sliding	Sliding	Fretting	Impact	
Contact shape	Sphere–sphere	Cylinder–cylinder	Flat–flat	Sphere–flat	Cylinder–flat	Punch–flat
Contact pressure level	Elastic		Elasto-plastic		Plastic	
Sliding speed or loading speed	Low		Medium		High	
Flash temperature	Low		Medium		High	
Mating contact material	Same	Harder	Softer	Compatible	Incompatible	
Environment	Vacuum	Gas	Liquid	Slurry		
Contact cycle	Low (single)		Medium		High	
Contact distance	Short		Medium		Long	
Phase of wear	Solid	Plastic	Liquid	Gas	Atom	Ion
Structure of wear particle	Original		Mechanically mixed		Tribochemical	
Freedom of wear particle	Free	Trapped	Embedded	Agglomerated		
Unit size of wear	mm scale		μm scale		nm scale	
Elemental physics and chemistry in wear	Physical adsorption, chemical adsorption, tribochemical activation and tribofilm formation, oxidation and delamination, oxidation and dissolution, oxidation and gas formation, phase transition, recrystallization, crack nucleation and propagation, adhesive transfer and retransfer					
Elemental system dynamics related to wear	Vertical vibration	Horizontal vibration	Self-excited vibration	Harmonic vibration	Stick-slip motion	
Dominant wear process	Fracture (ductile or brittle)	Plastic flow	Liquid flow	Dissolution	Oxidation	Evaporation
Wear mode	Abrasive	Adhesive	Flow	Fatigue	Corrosive	Melt	Diffusive
Wear type	Mechanical		Chemical		Thermal	

Wear Particle Parameters

Table 1 Classifications of wear parameters

Class	Parameter					
Friction type	Rolling	Rolling-sliding	Sliding	Fretting	Impact	
Contact shape	Sphere–sphere	Cylinder–cylinder	Flat–flat	Sphere–flat	Cylinder–flat	Punch–flat
Contact pressure level	Elastic		Elasto-plastic		Plastic	
Sliding speed or loading speed	Low		Medium		High	
Flash temperature	Low		Medium		High	
Mating contact material	Same	Harder	Softer	Compatible	Incompatible	
Environment	Vacuum	Gas	Liquid	Slurry		
Contact cycle	Low (single)		Medium		High	
Contact distance	Short		Medium		Long	
Phase of wear	Solid	Plastic	Liquid	Gas	Atom	Ion
Structure of wear particle	Original		Mechanically mixed		Tribochemical	
Freedom of wear particle	Free	Trapped	Embedded	Agglomerated		
Unit size of wear	mm scale		μm scale		nm scale	
Elemental physics and chemistry in wear	Physical adsorption, chemical adsorption, tribochemical activation and tribofilm formation, oxidation and delamination, oxidation and dissolution, oxidation and gas formation, phase transition, recrystallization, crack nucleation and propagation, adhesive transfer and retransfer					
Elemental system dynamics related to wear	Vertical vibration	Horizontal vibration	Self-excited vibration	Harmonic vibration	Stick-slip motion	
Dominant wear process	Fracture (ductile or brittle)	Plastic flow	Liquid flow	Dissolution	Oxidation	Evaporation
Wear mode	Abrasive	Adhesive	Flow	Fatigue	Corrosive	Melt	Diffusive
Wear type	Mechanical		Chemical		Thermal	

Wear Parameters

Right regular lay

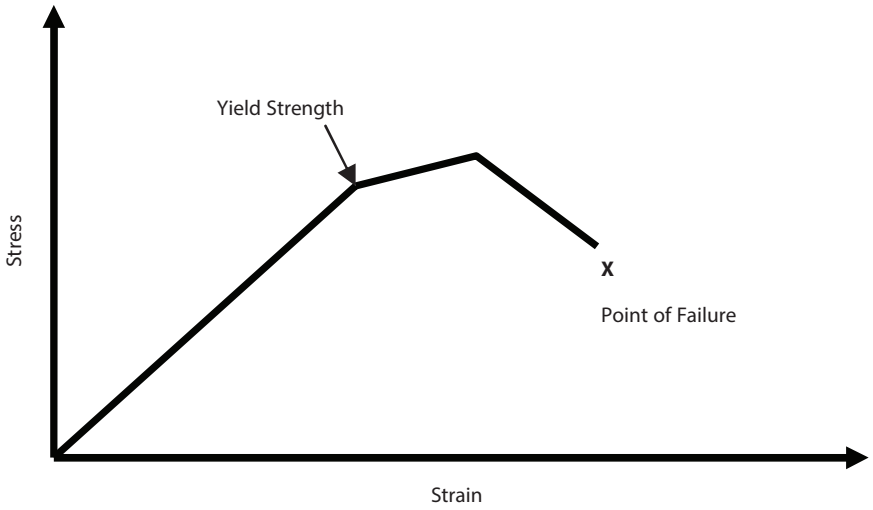
Left regular lay

Right lang lay

Left lang lay

Right alternate lay

Wire Rope Lay



Yield Strength