

# McGraw-Hill Dictionary of Scientific and Technical Terms

## Fifth Edition

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On the cover: Photomicrograph of crystals of vitamin B<sub>1</sub>.  
(Dennis Kunkel, University of Hawaii)

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**INTERNATIONAL EDITION**

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**drill jig** [MECH ENG] A device fastened to the work in repetition drilling to position and guide the drill. { 'dril ,jɪɡ }

**drill jumbo** [MIN ENG] A mobile carriage or platform fitted with mechanical arms upon which several drilling machines are mounted. { 'dril ,jʌm'bō }

**drill log** [ENG] 1. A record of the events and features of the formations penetrated during boring. Also known as boring log. 2. A record of all occurrences during drilling that might help in a complete logging of the hole or in determining the cost of the drilling. { 'dril ,lɒɡ }

**drill out** [ENG] 1. To complete one or more boreholes. 2. To penetrate or remove a borehole obstruction. 3. To locate and delineate the area of a subsurface ore body or of petroleum by a series of boreholes. { 'dril ,aʊt }

**drill-over** [ENG] The act or process of drilling around a casing lodged in a borehole. { 'dril ,ō'vər }

**drill pipe** [MIN ENG] A pipe used for driving a revolving drill bit, used especially in drilling wells; consists of a casing within which tubing is run to conduct oil or gas to ground level; drilling mud flows in the annular space between casing and tubing during the drilling operation. { 'dril ,pɪp }

**drill point gage** See drill grinding gage. { 'dril ,pɔɪnt ,gɑːʒ }

**drill press** [MECH ENG] A drilling machine in which a vertical drill moves into the work, which is stationary. { 'dril ,pres }

**drill rod** [ENG] The long rod that drives the drill bit in drilling boreholes. { 'dril ,rɒd }

**drill runner** [MIN ENG] A tunnel miner who operates rock drills. { 'dril ,rən'ər }

**drill sleeve** [ENG] A tapered, hollow steel shaft designed to fit the tapered shank of a cutting tool to adapt it to the drill press spindle. { 'dril ,sli:v }

**drill socket** [ENG] An adapter to fit a tapered shank drill to a taper hole that is larger than that in the drill press spindle. { 'dril ,sɒk'ət }

**drill steel** [MET] Steel with at least 0.85% carbon content made by the electric furnace process. Formerly known as crucible steel, when made by the crucible process. { 'dril ,sti:l }

**drill stem** See bent sub. { 'dril ,stem }

**drill-stem test** [PETRO ENG] Bottom-hole pressure information obtained and used to determine formation productivity. { 'dril ,stem ,test }

**drill string** [MECH ENG] The assemblage of drill rods, core barrel, and bit, or of drill rods, drill collars, and bit in a borehole, which is connected to and rotated by the drill collar of the borehole. { 'dril ,striŋ }

**drill weave** [TEXT] Special fabric sometimes used in filtration; a three-harness, warp-face twill weave, having the two-up and one-down twill effect. { 'dril ,wēv }

**Drilonematoidea** [INV ZOO] A superfamily of parasitic nematodes in the subclass Spiruria. { ,drɪ'lō,nem'ə'tɔɪd'ē'ə }

**drip** [ARCH] See hoodmold. [HYD] Condensed or otherwise collected moisture falling from leaves, twigs, and so forth.

[MATER] 1. Oil which comes through the cloth of a paraffin wax press. 2. Filter drainings too dark to be included in filter stock. [PETRO ENG] A discharge mechanism installed at a low point in a gas transmission line to collect and remove liquid accumulations. Also known as blowcase. { drip }

**drip cap** [BUILD] A horizontal molding installed over the frame for a door or window to direct water away from the frame. { 'drip ,kæp }

**drip-dry** [TEXT] Of a fabric, shedding water or moisture rapidly without squeezing, spinning, or wringing. { 'drip ,dri }

**drip edge** [BUILD] A metal strip that extends beyond the other parts of the roof and is used to direct rainwater off. { 'drip ,eɪ }

**dripping drop atomization** [HYD] A type of natural gravitational atomization process in which there is periodic emission of drops from the bottom side of a surface to which a liquid is fed continuously, as in dripping of water from leaves. { 'drip ,ɪŋ ,drɒp ,əd'ə'mə'zə'shən }

**dripstone** [GEOL] A cave feature, such as a stalagmite, which is formed by precipitation of calcium carbonate or another mineral from dripping water. { 'drip ,stɒn }

**drive** [ELECTR] See excitation. [MECH ENG] The means by which a machine is given motion or power (as in steam drive, diesel-electric drive), or by which power is transferred from one part of a machine to another (as in gear drive, belt drive). [MIN ENG] 1. To excavate in a horizontal or inclined plane. 2. A

ore or body. [PSYCH] A strong impetus to behavior or active striving. { driv }

**drive chuck** [MECH ENG] A mechanism at the lower end of a diamond-drill drive rod on the swivel head by means of which the motion of the drive rod can be transmitted to the drill string. { drɪv ,tʃʌk }

**drive control** See horizontal drive control. { 'drɪv kən'trɒl }

**drive fit** [DES ENG] A fit in which the larger (male) part is pressed into a smaller (female) part; the assembly must be effected through the application of an external force. { ,drɪv ,fɪt }

**drivehead** [ENG] A cap fitted over the end of a mechanical part to protect it while it is being driven. { 'drɪv ,hed }

**driveless workstation** [COMPUT SCI] A computer or terminal in a local area network that does not have its own disk drives and relies on a central mass storage facility for information storage. { 'drɪv-ləs 'wɜ:k ,stɔ:ʃən }

**drive light** [COMPUT SCI] A lamp on the front of a disk drive that lights to indicate when the unit is reading or writing data. { 'drɪv ,li:t }

**driveline** [MECH ENG] In an automotive vehicle, the group of parts, including the universal joint and the drive shaft, that connect the transmission with the driving wheels. { 'drɪv ,li:n }

**driven array** [ELECTROMAG] An antenna array consisting of a number of driven elements, usually half-wave dipoles, fed in phase or out of phase from a common source. { 'drɪv-ən ə'rɪ }

**driven blocking oscillator** See monostable blocking oscillator. { 'drɪv-ən 'blɒk-ɪŋ 'ɔ:s-ə ,ləd'ər }

**driven caisson** [CIV ENG] A caisson formed by driving a cylindrical steel shell into the ground with a pile-driving hammer and then placing concrete inside; the shell may be removed when concrete sets. { 'drɪv-ən 'kɑ:sən }

**driven element** [ELECTROMAG] An antenna element that is directly connected to the transmission line. { 'drɪv-ən 'el-ə'mənt }

**driven gear** [MECH ENG] The member of a pair of gears to which motion and power are transmitted by the other. { 'drɪv-ən 'gɪr }

**driven snow** [METEOROL] Snow which has been moved by wind and collected into snowdrifts. { 'drɪv-ən 'snə }

**drive pattern** [COMMUN] In a facsimile system, undesired pattern of density variations caused by periodic errors in the position of the recording spot. { 'drɪv ,pad'ərn }

**drivepipe** [ENG] A thick-walled casing pipe that is driven through overburden or into a deep drill hole to prevent caving. { 'drɪv ,pɪp }

**drive pulley** [MECH ENG] The pulley that drives a conveyor belt. { 'drɪv ,pʊl-ē }

**drive pulse** [ELECTR] An electrical pulse which induces a magnetizing force in an element of a magnetic core storage, reversing the polarity of the core. { 'drɪv ,pʊls }

**driver** [COMPUT SCI] A sequence of program instructions that controls an input/output device such as a tape drive or disk drive. [ELECTR] The amplifier stage preceding the output stage in a receiver or transmitter. [ENG ACOUS] The portion of a horn loudspeaker that converts electrical energy into acoustical energy and feeds the acoustical energy to the small end of the horn. { 'drɪv-ər }

**driver element** [ELECTROMAG] Antenna array element that receives power directly from the transmitter. { 'drɪv-ər ,el-ə'mənt }

**drive rod** [ENG] Hollow shaft in the swivel head of a diamond-drill machine through which energy is transmitted from the drill motor to the drill string. Also known as drive spindle. { 'drɪv ,rɒd }

**driver sweep** [ELECTR] Sweep triggered only by an incoming signal or trigger. { 'drɪv-ər ,swēp }

**driver transformer** [ELECTR] A transformer in the input circuit of an amplifier, especially in the transmitter. { 'drɪv-ər træn'z'fɔ:mər }

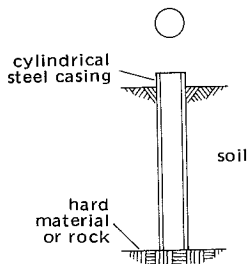
**drive sampling** [ENG] The act or process of driving a tubular device into soft rock material for obtaining dry samples. { 'drɪv ,sæm'plɪŋ }

**drivescrew** [DES ENG] A screw that is driven all the way in, or nearly all the way in, with a hammer. { 'drɪv ,skrʊ }

**drive shaft** [MECH ENG] A shaft which transmits power from a motor or engine to the rest of a machine. { 'drɪv ,ʃɑ:ft }

**drive shoe** [DES ENG] A sharp-edged steel sleeve attached to the bottom of a drivepipe or casing to act as a cutting edge and

#### DRIVEN CAISSON



Driven caisson, top view and cross-section from the side.