



24.1 SCOPE.

24.1.1 Purpose. This section contains the requirements for and a list of abbreviations used on drawings.

24.2 APPLICABLE DOCUMENTS. Note: DoD Policy Memo 05-3 "Elimination of Waivers to Cite Military Specifications and Standards in Solicitation and Contracts" has eliminated the need for waivers to use MIL-SPECS and MIL-STDS on DoD contracts. (See PREFACE 1, Section 2)

ANSI Y1.1 Abbreviations for Use on Drawings and in Text
(Redesignated as ASME Y14.38)

ASME Y14.38 Abbreviations for Use on Drawings. See PARAGRAPH 24.5.5

24.3 DEFINITIONS.

24.3.1 Abbreviation. An abbreviation is a shortened form of a word, expression or phrase used when essential to conserve space.

24.4 DRAWING APPLICATION.

24.4.1 Abbreviations Of Short Words. Abbreviations of short words are omitted except those established by long standing practice.

24.4.2 Use Of Periods. Periods are used with abbreviations which spell whole words to provide clarity and avoid misinterpretation. (e.g., FIG. = Figure)

24.4.3 Letters, Upper And Lower Case. Upper case letters are used except where the use of lower case letters has been established by long practice.

24.4.4 Exceptions To Abbreviations. Abbreviations for Chemical Elements or compounds do not necessarily agree with the chemical symbols, for example: Copper: COP (Cu), Cadmium: CAD (Cd).

24.5 RULES FOR USE.

24.5.1 Abbreviation Of Word Combination. Use an abbreviation of a word combination as such; do not separate for use singly. Single abbreviations may be combined when necessary. i.e. Air Blast = AB.

24.5.2 Abbreviation Of Word Combination Using A Hyphen. Spaces between word combination abbreviations may be filled with a hyphen (-) for clarity, particularly on drawings with freehand lettering, (i.e. USAF-AL = United States Air Force Air Lock).

24.5.3 Abbreviations Are Singular For All Tenses. Use the same abbreviation for all tenses, the possessive case, and the singular and plural forms of a given word.

24.5.4 Use Of Undocumented Abbreviations. If a drawing uses an abbreviation that does not appear in the Applicable Documents (PARAGRAPH 24.2), it must be decoded on the drawing, directly or by reference.

24.5.5 Abbreviations Marked With An Asterisk. An asterisk behind the abbreviation, indicate that this is an old abbreviation stated in previous standards.

24.5.6 Abbreviations in This Edition. The list of abbreviations that follows is the same as the in the previous edition of the DRM. Note that many other abbreviations may be found in the standards referenced in 24.2 above, including other meanings for some of the following abbreviations.



TERM	ABBREVIATION
Abbreviate	ABBR
About	ABT
Above	ABV
Absolute	ABS
Accelerate	ACCEL
Accordance with	AW
Accumulate	ACCUM
Acme Screw Thread	ACME*
Addendum	ADD.
Adhesive	ADH
Adjacent	ADJ
Advance change notice	ACN
Advance engineering change proposal	AECP
Advance engineering order	AEO
Aerodynamic	AERODYN
Aeronautic	AERO
Aerospace Material Specification	AMS
Aeronautical National Taper Pipe Thread	ANPT
Aeronautical Standards Group	ASG
Aerospace Information Report	AIR*
Aerospace Recommended Practice	ARP*
Aerospace Standards	AS*
Air Force	AF*
Air Force-Navy	AN
Air Force-Navy Aeronautical	ANA
Air Force-Navy Design	AND
Alclad	ALCD
Alignment	ALIGN.
Allowance	ALLOW.
Alloy	ALY
Alternate	ALTN
Alternating Current	AC
Alternator	ALTNTR
Altitude	ALT
Aluminum	AL
Amber	AMB
Ambient	AMB
American	AMER
American Steel Wire Gage	ASWG
American Wire Gage	AWG
Ammeter	AMM
Amount	AMT
Ampere	AMP
Ampere	A*
Amperage	AMP*
Amplifier	AMPL
Amplitude modulation	AM.
And	&*
Anhydrous	ANHYD
Anneal	ANL
Annunciator	ANN
Anodize	ANDZ
Antenna	ANT
Antilogarithm	ANTILOG
Apparatus	APPAR
Appendix	APPX
Application	APPL
Approved	APVD
Approximate	APPROX
April	APR
Architecture	ARCH
Armature	ARM
Army	A*
Army-Navy	AN
Army-Navy Design	AND
Arrange	ARR
Article	ART.
Asbestos	ASB
As drawn	AD
As required	AR
Assemble	ASSEM
Assembly	ASSY
Associate(s)	ASSOC
Association	ASSN
Atmosphere	ATM
Atomic (<i>combining form</i>)	AT
Atomic weight	ATWT
Attention	ATTN
Audible	AUD
Audio frequency	AF
August	AUG
Authorize	AUTH
Automatic	AUTO.
Automatic frequency control	AFC
Automatic gain control	AGC
Automatic phase control	APC
Automatic volume control	AVC
Automatic zero set	AZS
Automotive	AUTOM
Auxiliary	AUX
Auxiliary power unit	APU
Auxiliary switch (<i>breaker</i>) normally closed	ASC
Auxiliary switch (<i>breaker</i>) normally open	ASO
Average	AVG
Avordupois	AVDP
Babbitt	BAB
Back pressure	BP
Baffle	BAF
Balance	BAL
Ball bearing	BBRG
Base line	BL
Basic	BSC
Battery	BTRY
Bearing	BRG
Bend line	BL
Bend radius	BR

**TERM**
ABBREVIATION

Between centers.....	BC
Bevel	BEV
Bill of material	BM
Binding head	BDGH
Black	BLK, BK
Blend	BLN
Blue	BLU, BL
Blueprint	BP
Board	BD
Boiling point	BP
Bolt circle	BC
Bonded.....	BND
Bonding	BNDG
Book-form drawing	BFD
Booster.....	BSTR
Both faces	BF
Both Sides	BS
Bottom	BOT
Bottom face	BF
Bottom layer	BL
Bottoming	BOTMG
Boundary	BDY
Bracket	BRKT
Brake horsepower	BHP*
Branch	BR
Brass	BRS
Braze	BRZ
Break	BRK
Brinell hardness	BH
Brinell hardness number	BHN
British thermal unit	BTU
Bronze	BRZ
Brown	BRN, BR
Brown and Sharpe (wire gage)	BS
Building	BLDG
Bulkhead	BHD
Bulletin	BULL.
Bureau.....	BU
Bushing	BSHG
Butt line	BL
Buttock line	BL
By (<i>used between dimensions</i>)	X*
Cadmium	CAD. *
Calculate	CALC*
Calibrate	CAL
Candlepower	CP
Cantilever	CANTIL*
Cap screw	CAPSCR*
Capacitance.....	C*
Capacitance	CAP.
Capacitor	CAP.*
Capacity	CAP.*
Carbon	C*

TERM
ABBREVIATION

Carbon molybdenum steel	CMOS*
Carbon steel	CS
Carbon tetrachloride	CBN TET*
Carburize	CARB*
Case harden	CH*
Casting	CSTG
Cast iron	CI*
Cast-iron pipe	CIP*
Cast steel	CS
Catalogue	CAT.*
Cathode	CATH*
Cathode	K
Cathode-ray tube	CRT
Center	CTR
Center Line	CL*
Center of gravity	CG*
Center section	CS
Centrifugal	CNTFGL*
Centrifugal force	CF*
Ceramic.....	CER*
Chamfer	CHAM*
Change Notice	CN*
Channel.....	CHAN*
Chassis	CHAS*
Check	CHK*
Check valve	CV
Chemica	CHEM*
Chemically pure	CP*
Chrome	CRM*
Chrome molybdenum	CR MOLY*
Chrome plate.....	CRPL
Chrome vanadium	CR VAN*
Chromium	CHR*
Chromium	Cr
Circuit	CKT
Circuit breaker	CB*
Circular	CIRC*
Circular pitch	CP*
Circumference	CRCMF*
Class.....	CL*
Classification	CLASS.*
Clearance	CL*
Clevis	CLV*
Clockwise	CW
Coaxial	COAX.*
Coefficient	COEF*
Cognizant	COG.*
Cold-drawn	CD*
Cold-drawn steel	CDS*
Cold finished.....	CF*
Cold finished steel	CFS*
Cold-punched	CP*
Cold-rolled	CR

**TERM**
ABBREVIATION

Cologarithm	COLOG*
Color code.....	CC
Commercial	COML*
Commercial quality	CQ*
Commutator	COMM*
Company	CO*
Complete	COMPL*
Composition	CMPSN*
Compound	CMPD*
Compressor	COMPR
Concentric	CNCTRC*
Condenser.....	COND*
Conductivity	CNDCT*
Conductor	COND
Conduit	CND*
Confidential	CONF*
Connector	CONN*
Consist of	C/O*
Console	CSL
Constant	CONST*
Construction	CONSTR*
Container	CNTNR*
Contaminated	CONTAM*
Continued	CONT
Contour	CTR
Contractor Contractor	CONTR*
Contract Change Notice	CCN*
Control	CONT*
Converter	CONV*
Conveyor	CNVR
Coordiniate	COORD*
Copper.....	COP.*
Copper	Cu
Corner	COR*
Corner bead	COR BD*
Corporation	CORP*
Correct	CORR*
Corrosion.....	CRSN
Corrosion-resistant.....	CRE*
Corrosion-resistant steel	CRES*
Corrosion-resistant steel (stainless steel)	SST
Corrugate.....	CORR*
Cosecant	CSC
Cosine	COS*
Cotangent	COT*
Counterbalance	CBAL*
Counterbore	CBORE*
Counterclockwise	CCW*
Counterdrill	CDRILL*
Counterdrill other side	CDRILLO*
Countersink	CSK
Countersink other side	CSKO
Countersunk head.....	CSKH

TERM
ABBREVIATION

Counterweight	CTWT
Coupling.....	CPLG*
Crankpin	CPIN*
Crankshaft	CSHAFT
Crossarm	XARM
Cross-connection	XCONN
Cross section	XSECT
Cross head	CRSHD
Cryogenics	CRYOG
Crystal	XTAL
Cubic	CU
Cubic centimeter	CC*
Cubic foot	CUFT
Cubic feet per minute	CFM
Cubic feet per second	CFS
Cubic inch	CUIN
Cubic meter	CUM
Cubic millimeter	CUMM
Cubic yard	CUYD
Current.....	CUR
Customer	CUST
Cutoff	CO*
Cutter	CTR
Cutting	CTG
Cyanide	CYN
Cycle	CY
Cycles per minute	CPM
Cycles per second	CS
Cylinder, Cylindrical.....	CYL
Dated.....	DTD
Datum	DAT
Decalcomania	DECAL
December	DEC
Decimal	DEC
Decrease	DECR
Dedendum	DED
Deep-drawn	DD
Defense.....	DEF
Deflect	DEFL
Degree	DEG
Department.....	DEPT
Depth	DP
Design	DSGN
Detail	DET
Developed horsepower	DHP*
Deviation	DEVN
Diagonal.....	DIAG
Diagram	DIAG
Diameter	DIA
Diameter bolt circle.....	DBC
Diametral pitch	DP
Diaphragm	DIAPH
Differential	DIFF

**TERM**
ABBREVIATION

Dimension	DIM.
Direct current	DC
Direct-current volts	VDC*
Direct-current working volts	VDCW*
Direction	DIR
Disassemble	DISASSM
Disassembly	DISASSY
Disc Grind	DG*
Discharge.....	DISCH
Disconnect.....	DISC
Distance	DIST
Distributor	DISTR
Ditto.....	DO.
Division.....	DIV
Document.....	DOC
Double	DBL
Double-acting	DBL ACT
Double-pole	DP
Double-pole double-throw.....	DPDT
Double-pole single-throw.....	DPST
Doubler	DBLR
Double throw.....	DT
Dovetail	DVTL
Dowel	DWL
Down	DN
Dozen	DOZ
Drafting	DFTG
Drawing Requirements Manual.....	DRM*
Drawing.....	DWG
Drawing list	DL
Drawn.....	DR
Drawn	DWR
Drill	DR
Drill Rod.....	DR
Drive fit	DF
Drop forge	DF
Duplicate	DUP
Dynamic	DYN
Dynamometer.....	DYNMT
Each	EA
Each face.....	E
East.....	E
Eccentric.....	ECC
Effective	EFF
Efficiency	EFF
Elastic limit	EL
Electric	ELEC
Electronic(s)	ELEX
Electromotive Force	EMF
Element	ELEM
Elevate	ELEV
Elevation	EL
Elongation	ELONG

TERM
ABBREVIATION

Emergency	EMER
Emitter	EMTR
Enclose, enclosure.....	ENCL
End to end	EE
Engine	ENG
Engineer.....	ENGR
Engineering	ENRG
Engineering Change Notice	ECN
Engineering Change Order.....	ECO
Engineering Change Proposal.....	ECP
Engineering Change Request	ECR
Engineering Order	EO
Engineering Work Order	EWO
English	ENG
Envelope	ENV
Equally spaced.....	EQLSP
Equally spaced	EQ SP*
Equipment	EQPT
Equivalent	EQUIV
Estimate	EST
Et cetera	ETC
Evaporate, evaporator	EVAP
Example	EX
Exhaust	EXH
Exhaust gas temperature	EGT
Existing	EXST
Experiment, experimental	EXP
Extension	EXT
Exterior	EXT
External pipe thread	EPT
Extra fine.(threads)	EF
Extra heavy	XHVY
Extra strong	XSTR
Extremely-high frequency	EHF
Extrude	EXTD
Fabricate	FAB
Face to Face	F TO F*
Face to Face.....	FF
Fahrenheit	F
Fairing	FAIR.
Farad	F
Far side	FS
Fastener	FSTNR
Fast operating (relay).....	FO
Fast release (relay)	FR
February	FEB
Federal Stock Number (Now: NSN.)	FSN
Federal Stock Catalog Identification List.....	FSCIL
Federal Supply Code for Manufacturers	FSCM
Feet per minute	FPM*
Feet per second	FPS*
Field	FLD
Figure	FIG.

**TERM**
ABBREVIATION

Filament.....	FIL
Fillet.....	FIL
Fillister head	FILH
Final assembly.....	FA
Finish.....	FNSH
Finish all over	FAO
Finish one side	F1S
Finish 2 sides	F2S
Fitting	FTG
Fixture	FXTR
Flange	FLG
Flat bar	FB
Flat fillister head	FFILH
Flat head	FLH
Flat pattern	F/P
Flexible	FLEX.
Flight	FLT
Fluid	FL
Fluorescent	FLUOR
Fluorine	F
Foot	FT
Foot-candle	FC
Footing	FTG
Foot-pound force	FTLB
Foot-pound-second	FPS
Force	F
For example	EG
Forged steel	FST
Forging	FORG
Forward.....	FWD
Foundation.....	FDN
Foundry	FDRY
Four-conductor	4/C
Four-pole	4P
Four-way	4 WAY
Free cutting brass	FCB
Free height	FRHGT
Free-machining steel	FMS
Freezing point	FP
Frequency	FREQ
Frequency modulation	FM
Friction	FRICT
Front	FR
Full hard	FH
Full indicator movement	FIM.
Full indicator reading	FIR.
Furnish	FURN
Gage (gauge).....	GA
Gallon	GAL
Gallons per hour.....	GPH
Gallons per minute	GPM
Gallons per second	GPS
Galvanize	GALV

TERM
ABBREVIATION

Galvanized iron	GALVI
Galvannealed.....	GALVND
Galvanometer	GALVNM
Gaseous oxygen	GOX
Gasket	GSKT
Gate valve	GTV
Gear	GR
General	GENL
Generator.....	GEN
Glove valve	GLV
Government	GOVT
Government-Furnished Equipment	GFE
Governor	GOV
Grade	GR
Grain	GR
Gram	G
Gram calorie.....	GCAL*
Graphite	GPH
Gravity	G
Gray	GRA, GY
Grease	GRS
Green	GRN, G
Grind	GRD
Grommet	GROM
Gross ton	GT*
Ground.....	GND
Ground support equipment.....	GSE
Ground-to-air	GA
Ground-to-ground	GG
Guided missile.....	GM
Gyroscope	GYRO
Half-hard.....	1/2H
Half-round.....	1/2RD
Handbook.....	HDBK
Handle.....	HDL
Handling	HDLG
Handwheel	HNDWHL
Hard	HD*
Hard chromium	HDCR
Hard-drawn.....	HDDRN
Harden.....	HDN
Harden & grind	HG
Hardness	HDNS
Hardware	HDW
Hazardous	HAZ
Head	HD*
Heading	HDG
Headless	HDLS
Headquarters	HQ
Heat	HT*
Heater	HTR
Heat-resisting.....	HTRES
Heat-treat	HTTR

**TERM**
ABBREVIATION

Heavy	HVY
Height	HGT
Henry.....	H*
Hertz.....	Hz
Hexagon	HEX
Hexagonal head	HEXHD
High carbon.....	HC
High-carbon steel	HCS
High carbon steel, heat-treated.....	HCSHT
High frequency	HF
High pressure.....	HP
High speed	HS
High-speed steel.....	HSS
High-tensile steel	HTS
High-velocity aircraft rocket.....	HVAR
High voltage.....	HV*
Horizontal	HORIZ
Horizontal center line	HCL
Horizontal location of center of gravity	HCG
Horizontal reference line.....	HRL
Horsepower.....	HP
Horsepower-hour	PHPR
Hot-press	HP
Hot-rolled steel.....	HRS
Hour	H
Housing	HSG
Hydraulic	HYDR
Hydrogen	H
Hydrostatic.....	HYDRST
Identification	IDENT
Ignition	IGN
Illuminate.....	ILLUM
Illustrate.....	ILLUS
Impeller	IMPLR
Impregnate	IMPRG
Improved plow steel.....	IMPLS
Inboard.....	INBD
Inch	IN.
Inches per second	IPS
Inch-pound (work)	INLB
Inclined	INCLN
Include	INCL
Inclusive	INCL
Incoming	INCM
Incorporated	INC
Increase.....	INCR
Index list	IL
Indicate	IND
Indicated air speed	IAS
Indicated horse power	IHP*
Indicator	IND*
Inductance-capacitance	LC
Inductance-capacitance resistance	LCR

TERM
ABBREVIATION

Inductance coil	L*
Industrial	INDL
Information.....	INFO
Initial velocity	IV
Inside diameter	ID
Inside mold line	IML
Inside radius	IR
Inspect.....	INSP
Install, installation	INSTL
Instantaneous	INST*
Instruction.....	INSTR
Instrumentation	INSTM
Interchangeable	INTCHG
Intercommunication	INTERCOM
Interconnection.....	INTCON
Interface control drawing	ICD
Interference.....	INTRF
Interior.....	INTR
Interlock	INTLK
Intermediate frequency	IF
Internal	INTL
Internal pipe thread	IPT
International Annealed Copper Standard.....	IACS
International Organization for Standardization ..	ISO
International Pipe Standard	IPS
International Standard Thread (metric)	IST
International System of Units	SI
Iron (<i>abbreviate only in conjunction with other materials</i>)	I
Iron pipe	IP
Iron pipe size	IPS
Irregular	IRREG
January	JAN
Job order	JO
Joggle.....	JOG
Joint	JT
Joule	J*
Journal	JNL
July	JUL
Junction	JCT
Junction box	JB
June.....	JUN
Kelvin	K
Keyseat.....	KST
Keyway	KWY
Kilovolt	KV
Kilovolt ampere hour	KVAH
Kilowatt	KW
Kilowatt hour	KWH
Kinetic energy	KE
Laboratory	LAB
Lacquer	LAQ
Laminate	LAM
Landing	LDG

**TERM**
ABBREVIATION

Large	LGE
Lateral.....	LATL
Latitude	LAT
Leading edge	LE
Left	L*
Left hand.....	LH
Length.....	LG
Length over-all.....	LOA
Letter.....	LTR
Lifting eye	LE
Light	LT
Lightening hole.....	LTGH
Limit	LIM
Limited	LTD
Limit switch.....	LIMSW
Linear.....	LIN
Liquid	LIQ
Liquid Oxygen	LOX
Liter	L
Loading	LDG
Locate.....	LCT
Locked.....	LKD
Locked closed	LKDC
Locked open	LKDO
Locking	LKG
Locknut.....	LKNT
Lockscrew	LKSCR
Lock washer	LK WASH*
Lockwire.....	LKWR
Logarithm	LOG.
Logarithm (natural)	LN
Logic	LGC
Longeron.....	LONGN
Long	L
Longitude	LONG.
Longitudinal	LONG.
Low-alloy steel	LAS
Low carbon	LC
Lower	LWR
Low frequency	LF
Low pressure	LP
Lubricant	LUBT
Lubricate	LUB
Lumen	LM*
Luminous	LUM
Lux	LK
Machine	MACH
Machine screw	MSCR
Machine steel	MST
Magnaflux	M
Magnesium	MAG
Magnet	MAG
Magnetic amplifier	MAGAMP

TERM
ABBREVIATION

Magneto	MGN
Maintenance.....	MAINT
Major	MAJ
Male & Female.....	MF
Malleable	MAL
Malleable iron	MI
Manifold	MANF
Manual	MNL
Manufacture	MFR
Manufactured	MFD
Manufacturing	MFG
March.....	MAR
Mark	MK*
Master	MA
Master change record	MCR
Material	MATL
Mathematical, mathematics	MATH
Maximum	MAX
Maximum Material Condition	MMC
Maximum working pressure	MWP
Mean effective pressure	MEP
Measure	MEAS
Mechanical, mechanism	MECH
Medium	MDM
Mega (prefix)	M
Megahertz	MHz
Megawatt	MW
Megohm.....	MEGO
Melting point	MP
Memorandum	MEMO
Metal	MET
Meter	M
Meter (instrument).....	MTR
Microampere	UA
Microampere (peak).....	Ua
Microfarad	UF
Microhenry.....	UH
Micrometer	MIC
Microsecond	USEC
Microphone	MIC
Microvolt	UV
Mile	MI
Mile per gallon	MPG
Mile per hour	MPH
Military	MIL.
Military standard	MS
Milli (10^{-3}) (prefix)	m
Milliampere	mA
Milligram	mG
Millihenry	mH
Millimeter	mm
Minimum	MIN
Minor	MIN

**TERM**
ABBREVIATION

Minute	MIN*
Miscellaneous	MISC
Mixture	MXT
Model (for use in military nomenclatures)	M
Model (for general use)	MOD
Modification	MOD
Modify.....	MOD
Molded	MLD
Molding.....	MLDG
Mold line	ML
Molecular weight	MOLWT
Month	MO
Mount	MT
Mounted	MTD
Mounting	MTG
Mounting center	MTGC
Multiple	MULT
Music wire	MUW
Namely	VIZ
Nameplate	NPL
National	NATL
National Aeronautics & Space Admin.	NASA
National Aerospace Standards	NAS
National coarse (thread).....	NC
National Electric Code	NEC
National extra fine (thread).....	NEF
National Fine (thread)	NF
National form (thread)	N
National gas outlet (thread)	NGO
National pipe.....	NP
National special (thread)	NS
National stock number.....	NSN*
National taper pipe (thread)	NPT
National wire gage	NWG
Nautical	NAUT
Naval	NAV
Naval Bronze	NAVBRZ
Near face	NF
Near side	NS
Neck	NK*
Negative.....	NEG
Neutral	NEUT
New British Std (imperial wire gage)	NBS*
Newton	N
Next assembly	NA
Nickel	NKL
Nickel steel	NS
Nipple	NIP.
Nitrogen	N*
No change	NC
Nomenclature.....	NOMEN
Nominal	NOM
Noncorrosive metal	NCM

TERM
ABBREVIATION

Nondestructive testing	NDT
Normal	NORM.
Normalize	NORM.
Normally closed	NC
Normally open	NO.
North	N
Not applicable	NA
Not to scale	NTS
November	NOV
Nozzle	NOZ
Number	NO.
Numerical control	NC
Nut plate	NTPL
Nylon	NYL
Obsolete	OBS
October	OCT
Ohmmeter	OHM
On center	OC
Opening	OPNG
Opposite	OPP
Optional	OPTL
Orange	ORN, O
Ordnance	ORD
Origin	ORIG
Original	ORIG
Oscillator	OSC
Oscilloscope	SCOPE
Ounce	OZ
Ounce-inch (work)	OZIN
Outboard	OUTBD
Outside diameter	OD
Outside face	OF.
Outside mold line	OML
Outside radius	OR.
Oval head	OVH
Over-all	OA
Overhead	OVHD
Oxide	OXD
Oxygen	OXY
Package	PKG
Packing	PKG*
Page	P*
Pair	PR*
Panel	PNL
Pan head.....	PNH
Panic bolt	PANB
Paragraph	PARA
Parallel	PRL
Parkway	PKWY
Part	PT*
Parting line (castings).....	PL
Part number	PN
Parts list	PL

**TERM**
ABBREVIATION

Pascal	PA
Passivate	PSVT
Patent	PAT.
Pattern	PATT
Percent	PCT
Perforate	PERF
Permanent.....	PERM
Perpendicular	PERP
Phase	PH
Phenolic	PHEN
Phillips head	PHH
Phosphate	PHOS
Phosphor bronze	PHBRZ
Phosphorous	P
Photograph	PHOTO
Physical	PHYS
Pico (prefix)	p
Pico farad	pF
Pico henry	pH
Picture	PIX
Piece	PC
Pint	PT
Pitch	P
Pitch circle	PC
Pitch diameter	PD
Plate	PL
Plate (electron tube)	P
Platinum	PLAT*
Platinum	PT
Plus or minus	PORM
Plywood	PLYWD*
Pneumatic	PNEU
Point	PT
Point of tangency	PT
Pole	P*
Polyphase	PLYPH*
Portable	PORT.
Position	POSN
Positive	POS
Potential	POT.
Potentiometer	POT.
Pound	LB
Pound-foot (torque)	LBFT
Pound-inch (torque).....	LBIN
Pounds per square inch.....	PSI
Pounds per square inch absolute	PSIA*
Pounds per square inch gage	PSIG*
Power	PWR
Power amplifier	PA
Power factor	PF
Power supply	PWRSPLY
Power take-off	PTO
Preamplifier	PREAMP

TERM
ABBREVIATION

Prefabricated	PREFAB
Preferred	PFD
Preliminary	PRELIM
Prepare	PREP
Pressed	PRSD
Press fit	PRFT
Pressure	PRESS.
Pressure reducing valve	PRV
Primary	PRI
Printed circuit	PC
Printed circuit board	PCB
Printed wiring	PW
Printed wiring board	PWB
Product, production	PROD.
Project	PROJ
Proposed	PRPSD
Protective	PROT
Pulley	PUL
Purchase order	PO
Purple	PRP
Push-pull	PP
Pyrometer	PYROM
Quadrant	QDRNT
Qualified products list	QPL
Quality	QUAL
Quality assurance	QA
Quality control	QC
Quantity	QTY
Quart	QT
Quarter	QTR
Quarter-hard	1/4 H*
Quarter-hard	QTRH
Quarter-phase	1/4 PH*
Quarter-phase.....	QTRPH
Quarter-round	1/4 RD*
Quarter-round	QTRRD
Quick-acting	QA
Quick disconnect.....	QDISC
Radius	RAD
Radius	R
Ratchet	RCHT
Rate	RT*
Reactive volt-ampere	RVA
Received	RCVD
Receiver	RCVR
Receptacle	RCPT
Reciprocate	RECIP
Rectangle.....	RECT
Rectifier	RECT
Red	R
Reducer.....	RDCR
Reference	REF
Reference designation	REFDES



TERM	
ABBREVIATION	
Reference line	REFL
Regardless of Feature Size.....	RFS
Regular	RGLR
Reinforce	REINF
Release.....	RLSE*
Release	REL
Relief.....	RLF
Relocated	RELOC
Removable.....	REM
Remove.....	RMV
Replace.....	REPL
Reproduce, reproduction	REPRO
Request	REQ
Required	REQD
Requirement	REQT
Research	RES
Research and Development	R&D
Reservoir	RSVR
Resistance	R
Resistor	RES
Retainer	RTNR
Retract	RETR
Return	RTN
Reverse	RVS
Revise	REV
Revision	REV
Revolution	REV
Revolutions per minute.....	RPM
Revolutions per second	RPS
Rheostat	RHEO
Rhodium.....	RHOD
Right	R
Right hand	RH
Rivet	RVT
Rocker.....	RKR
Rocket	RKT
Rocket assist take-off	RATO
Rockwell hardness	RH
Rolled	RLD
Root mean square	RMS
Root-sum square	RSS
Rotary	RTRY
Rotate	ROT.
Rough	RGH
Round	RND
Roundhead	RDH
Rubber	RBR
Safety	SAF
Sand blast	SDBL
Saturate	SAT.
Schedule	SCHED
Schematic	SCHEM
Screen	SCRN
Screw	SCR
Seamless	SMLS
Seamless steel tubing.....	SSTU
Secant	SEC
Second	SEC
Section	SECT.
Segment.....	SEG
Senior	SR
Separate	SEP
September	SEPT
Sequence	SEQ
Serial	SER
Serrate	SERR
Service	SERV*
Service	SVCE
Servo	SVO
Servomechanism	SERVO
Set screw	SSCR
Shaft horsepower	SHP*
Shank	SHK
Sheet	SH
Shop order.....	SO
Short wave	SW
Shoulder	SHLDR
Silver	SIL
Silver braze or brazing.....	SB
Silver solder	SILS
Similar	SIM
Sine	SIN.
Single conductor	1/C
Single conductor	SC
Single contact	SC
Single pole	SP
Single pole, double throw	SPDT
Single pole, single throw	SPST
Single throw	ST
Sketch	SK
Slate	SLT
Sleeve	SLV
Slide	SL
Slip joint	SJ
Slope	SLP
Slotted	SLTD
Socket	SKT
Socket head	SCH
Solenoid	SOL.
Solid height	SOLHGT
Source control drawing	SOCD
South	S
Spanner	SPNR
Spare, spare part	SP
Special	SPCL
Special equipment	SE

**TERM**
ABBREVIATION

Specific	SP
Specification	SPEC
Specification control drawing	SCD
Specific gravity	SPGR
Specific heat	SPHT
Specimen	SPEC
Speed light	SPLT
Spherical	SPHER
Spindle	SPDL
Split ring	SR
Spot face	SF
Spot weld	SW
Spring	SPR
Square	SQ
Square centimeter	SQCM
Square foot	SQFT
Square head	SQH
Square inch	SQIN
Square kilometer	SQKM
Square root	SQRT
Stabilizer	STAB.
Stainless Steel	SST
Stairway	STWY
Standard	STD
Standpipe	SP
Station	STA
Steel	STL
Stiffener	STIF
Stock	STK
Stove bolt	SB
Straight	STR
Straight shank	SS
Street	ST
Strength	STR
Stringer	STGR
Structural	STRNL
Structure	STRUCT
Subassembly	SUBASSY
Subject	SUBJ
Substitute	SUBST
Suction	SUCT
Sulfur	S*
Superseded	SUPSD
Supplement	SUPPL
Supply	SPLY
Surface	SURF.
Switch	SW
Switchboard	SWBD
Swivel	SWVL
Symbol	SYM
Symmetrical	SYMM
Synchronize, Synchronizer, Synchronizing ...	SYNC
Synchronous	SYN

TERM
ABBREVIATION

Synthetic	SYNT
System	SYS
Tabulate	TAB.
Tachometer	TACH
Tangent	TAN.
Tapping	TPG
Technical	TECH
Technical manual	TM
Technical order	TO.
Teeth	T
Telephone	TEL
Television	TV
Temperature	TEMP
Tempered	TMPD
Template	TEMPL
Temporary construction hole	TCH
Tensile strength	TS
Tentative	TNTV
Terminal	TERM.
Tetrachloride	TET
That is	IE
Theoretical	THEOR
Thermal	THRM
Thermocouple	TC
Thermometer	THERM.
Thermostat	THERMO
Thick	THK
Thread	THD
Threads per inch	TPI
Three-conductor	3/C*
Three-conductor	3C
Three-phase	3PH
Three-pole	3P
Three-way	3WAY
Through	THRU
Title block	T/B*
Tobin Bronze	TOBBRZ
Tolerance	TOL
Ton	T*
Tongue and groove	T&G*
Tongue and groove	TG
Tool steel	TS
Torque	TRQ
Total indicator reading	TIR
Transducer	XDCR
Transfer	XFR
Transformer	XFMR
Transistor	XSTR
Transmitter	XMTR
Transportation	TRANSP
Treatment	TRMT
Triple pole	3P
Triple throw	3T

**TERM**
ABBREVIATION

True position	TP
True position tolerance	TPTOL
Trunnion	TRUN
Truss head	TRH
Tubing	TBG
Tungsten	TUNG
Turbine.....	TURB
Turbine generator	TURBOGEN
Turbine alternator	TURBOALT
Turbojet propulsion	TJP
Turnbuckle	TRNBKL
Turned	TRND
Two-conductor	2/C*
Two-conductor	2C
Two-phase	2/PH*
Two-phase	2PH
Two-way	2WAY
Typical	TYP
Ultimate.....	ULT
Ultra-high frequency.....	UHF
Ultraviolet	UV
Underwater-to-air-missile	UAM
Under-to-surface missile	USM
Unfinished.....	UNFIN
Unified	UN
Unified coarse (thread)	UNC
Unified extra fine (thread)	UNEF
Unified fine (thread)	UNF
Unified special (thread)	UNS
United States	US
United States gage	USG
Universal	UNIV
Used on	UO*
Used on	UO
Used with	U/W*
Used with	UW
Vacuum	VAC
Vacuum tube	VT
Vacuum tube voltmeter	VTVM
Valve	V
Vanadium.....	V*
Variable	VAR
Velocity	VEL
Vendor item control drawing	VICD
Ventilate	VENT.
Ventilator	VENT.
Vernier	VERN
Versed sine	VERS
Versus	VS
Vertical	VERT.
Vertical center line	VCL
Vertical location of the center of gravity	VGC
Vertical reference line.....	VRL

TERM
ABBREVIATION

Very high frequency	VHF
Very low frequency	VLF
Vibrate, vibration	VIB
Violet	VIO, V
Viscosity	VISC
Volt	V
Volt-ampere reactive	VAR*
Voltage regulator	VR
Volt ampere	VA
Voltmeter	VM
Volt ohm millimeter	VOM
Volume	VOL
Vulcanize	VULC
Washer	WSHR
Water line	WL
Watt	W
Watt-hour	WH
Watthour meter	WHM
Wattmeter	WM
Week	WK
Weight	WT
West	W
Wheel	WHL
White	WHT, W
Width	WD
Width across flats	WDF
Withdrawn	W/D*
Withdrawn	WD
Without	W/O*
Without	WO
Woodruff	WDF
Working Circle	WC
Working point	WP
Working pressure	WPR
Wrought brass	WBRS
Wrought iron	WI
Wrought steel	WS
Yard	YD
Year	YR
Yellow	YEL, Y
Yield point (psi)	YP
Yield strength (psi)	YS
Zone	Z



ACRONYMS OF SELECTED NATIONAL AND INTERNATIONAL STANDARDS ORGANIZATIONS

Abrasive Grain Association	AGA
Aeronautical Radio, Inc.	ARINC
Aerospace Industries Assoc.(NAS)	AIA
Air-conditioning & Refr Institute	ARI
*Air Diffusion Council	ADC
*Air Transport Association	ATA
*Alloy Casting Institute	ACA
*Aluminum Association	AA
*Amer Assn of State Hwy & Transp Ofcl ..	AASHTO
*Amer Assn of Textile Chem & Colorists	AATCC
*Amer Bureau of Shipping.....	ABS
American Concrete Institute	ACI
*Amer Conference of Govt Indl Hygienists ..	ACGIH
American Design Drafting Association	ADDA
American Dry Milk Institute.....	ADMI
*American Frozen Food Institute	AFFI
American Gage Design Committee	AGDC
American Gas Association	AGA
American Gear Mfrs Assn	AGMA
American Home Laundry Mfrs Assn	AHLMA
*Amer Inst of Chemical Engrs	AIChE
American Inst of Steel Constr	AISC
American Inst of Timber Constr	AITC
*American Insurance Assn	AIA
American Iron & Steel Inst	AISI
*American National Standards Institute	ANSI
*American Paper Institute	API
*American Petroleum Institute	API
American Power Net Assn	(now: NTA)
American Railway Engrg Association.....	AREA
*Amer Soc of Agricultural Engrg	ASEA
*American Soc of Civil Engrs	ASCE
*American Soc for Non-destructive Testing...	ASNT
*Amer Soc for Quality Control	ASQC
Amer Soc of Heat, Refr & Air-cond Engr ..	ASHRAE
Amer Soc of Mechanical Engrs	ASME
American Stds Assn	(Now: ANSI)
*American Water Works Assn	AWWA
American Welding Society	AWS
Anti-Friction Bearing Mfrs Assn	AFBMA
Assn General Contractors of America	AGCA
Assn of American Feed Control Officials	AAFCO
*Assn of American Railroads	AAR
Assn of Iron & Steel Engrs	AISE
Biological Stain Commission	BSC
*Boating Industry Association	BIA
Braided Trimming Mfrs Assn	(Now: NTA)
California Redwood Association	CRA
Cemented Carbide Producers Assn.....	CCPA
*Composite Can & Tube Inst	CCTI
*Compressed Gas Association.....	CGA
Copper Development Assn	CDA
*Cooling Tower Institute	CTI
Crayon & Water Color Crafts Inst	CWCCI
*Diesel Engine Mfrs Association	DEMA
*Edison Electric Institute	EEI
Elastic Braid Mfrs Assn	(Now: NTA)
Elastic Fabric Mfrs Inst	(Now: NTA)
Electrical Apparatus Service Assn	EASA
Electronic Industries Association	EIA
*Engineers Joint Council	EJC
Galvanized Ware Mfrs Council	GWMC
*Gas Processors Association	GPA
*Graphic Arts Technical Foundation	GATF
Gummed Industries Association	GIA
Hanger & Industrial Door Tech Council	HIDC
Heat Exchange Institute	HEI
Hydraulic Institute	HI
*Illuminating Engineers Society	IES
*Industrial Fasteners Institute.....	IFI
*Inst of Electrical & Electronic Engineers	IEEE
*Inst for Intcon & Packaging Elecronic Circuit....	IPC
Instrument Society of America.....	ISA
Insulated Power Cable Engineers Assn	IPCEA
*International Air Transport Assn	IATA
*Intl Conference of Building Officials	ICBO
International Standards Organization.....	ISO
*Joint Electronic Device Engrg Council	JEDEC
*Joint Industrial Council	JIC
Library Binding Institute	LBI
Lithographic Tech Fnd	(Now: GATF)
Magnetic Materials Producers Assn	MMPA
*Mfrs Std Soc of the Valves & Fitting Ind	MSS
*Mfg Chemists Association.....	MCA
Maple Flooring Mfrs Association	MFMA
*Material Handling Institute	MHI
Metal Lath Association	MLA
*Metal Powder Industry Federation	MPIF
Monorail Mfrs Association	MMA
*Narrow Fabrics Institute	NFI
*Natl Assn of Arch Metal Mfrs	NAAMM
National Assn of Broadcasters	NAB
National Assn of Chain Mfrs	NACM
*Natl Assn of Corrosion Engrs	NACE
Natl Assn of Manufacturers	NAM
*Natl Assn of Relay Mfrs	NARM
Natl Cottonseed Products Assn	NCPA
*Natl Council on Radn Protection & Meas	NCRP
Natl Electrical Mfrs Assn	NEMA



*Natl Elevator Industries, Inc NEII
Natl Elevator Mfg Ind (Now: NEII)
Natl Fibre Can & Tube Association (Now: CCTI)
*Natl Fire Protection Assn NFPA
*Natl Microfilm Association NMA
Natl Machine Tool Builders Association NMTBA
Natl Printing Ink Research Inst NPIRA
Natl Sanitation Foundation NSF
Natural Gas Processors Association ... (Now: GPA)
*Northern Textile Association NTA
Optical Manufacturers Assn OMA
Outboard Industry Assn (Now; BIA)
Paper Bag Institute, Inc PBI
*Pipe Fabrication Institute PFI
*Portland Cement Association PCA
*Pulp Mfrs Research League PMRL
*Radio Tech Commission for Aeronautics.... RTCA
Recording Industry Assn of America RIA
Resistance Welder Mfrs Association RWMA
Rubber Manufacturers Assn..... RMA
*Scientific Apparatus Mfrs Assn SAMA
Shoe Lace Mfrs Assn (Now: NFI)
*Sht Metal & Air-cond Contrs Natl Assn .. SMACNA
Soap & Detergent Council SDA

Society of Automotive Engineers SAE
*Soc of Naval Arch & Marine Engineers.... SNAME
Southern Pine Inspection Bureau SPIB
Specialty Paper & Board Affiliates (Now: API)
*Steel Door Institute SDI
*Steel Structures Painting Council SSPC
Steel Window Institute SWI
Sulphite Pulp Mfrs Res League (Now: PMRL)
Sump Pump Mfrs Assn SPMA
Tech Assn of the Pulp & Paper Industry TAPPI
Tire & Rim Association TRA
*Tubular Exchanger Mfrs Assn TEMA
*Underwriters Laboratories UL
USA Standard Inst (Now: ASME)

NOTE: Entries without asterisks(*) are those listed in DOD-4120.3-M and MIL-STD-12. Those with an asterisk are additional associations frequently encountered in design reference, including some which supersede former listings.

ACRONYMS OF SELECTED NATIONAL AND INTERNATIONAL STANDARDS ORGANIZATIONS

Assn Francaise pour l'Assurance Qualite.... **AFAQ**
Assn Francaise de Normalization (French Std) .. **AFNOR**
American National Standards Institute **ANSI**
British Standards Institution..... **BSI**

Council Committee on conformity assessment studies for International Quality System Registration and Mutual Recognition..... **CASCO/ISO**

US-Conformity Assessment System Evaluation Program **CASE** (Now: **NVCASE**)

CENELEC Certification Agreements (for electrical low voltage goods)..... **CCA**

Conformite Europeene (European Community) Product Approval Mark **CE Mark**

CENELEC Elect Components Committee **CECC**
European Committee for Standardization..... **CEN**
Certification Assn of CEN **CENCER**

European Committee for Electro-technical Standardization **CENELEC**

European Conference of Post and Telecom . **CEPT**
Canadian General Standards Board..... **CGSB**

Canadian Natl Committee of the International Electrical Commission **CNC/IEC**

Canadian Natl Committee of the International Organization for Standardization..... **CNC/ISO**

Certificate of Conformity **COC**
Council of Forest Ind of British Columbia **COFI**
Pan American Standards Commission **COPANT**
Consumer Product Safety Commission **CPSC**

Council Committee on Consumer Policy/ISO
..... **COPOLCO**

Canadian Standards Association..... **CSA**
China State Bureau of Tech Supervision **CSBTS**
Department of Consumer Affairs.(US)..... **DACO**

Deutscher Akkreditierungs Rat (German Accreditation Council) **DAR**

ISO Council Development Committee..... **DEVCO**
Direccion General de Normas (Mexico) **DGN**
Deutsches Inst fur Normung (German Inst of Standards)..... **DIN**



Draft International Standard.....	DIS	ISO Draft International Standard	ISO/DIS
Department of Commerce (US)	DOC	ISO Tech Committee (ISO 9000 Std)	ISO/TC176
Department of Defense (US)	DOD	Intl Telecommunication Union	ITU
Department of Energy (US)	DOE	Japanese Industrial Standards Committee	JISC
Department of Transportation (US)	DOT	Japanese Industrial Standard Product Certification Method	JIS Mark
Deutsche Gesellschaft zur Zertifizierung von Qualitäts Sicherungs Systemen (German Quality System)	DQS	Union of Japanese Scientists and Engrg	JUSE
European Accreditation of Certification	EAC	Keuring van Electrotechnische Materialien (Netherlands)	KEMA
European Atomic Community.....	EAEC	Multilateral Trade Negotiations	MTN
European Community	EC	National Accreditation Council for Certifying Bodies (UK)	NACCB
New Approach Directive.....	EC Directive	North American Free Trade Agreement (USA, Canada and Mexico)	NAFTA
EC Directive	Now: CE Mark	North Atlantic Treaty Organization	NATO
Voluntary mark	ECO Label	National Conference of Standards Lab	NCSL
European Committee for Standardization.....	ECS	Natl Center for Standards and Cert Info.....	NCSCI
European Coal and Steel Community	ECSC	Natl Institute of Standards and Technology	NIST
European Economic Area	EEA	Normas Oficiales Mexicanas (Natl Standard Body for Mexico)	NOM
European Economic Community	EEC	Nuclear Regulatory Commission	NRC
European Foundation for Quality Mgt	EFQM	National Sanitation Foundation	NSF
European Free Trade Assn.....	EFTA	National Standards System	NSS
Europäische Norm (European Standard)	EN	National Voluntary Conformity Assessment System (Was: CASE)	NVLAP
European Parliament	EP	Org for Economic Cooperation & Dev	OECT
Environmental Protection Agency	EPA	Postal, Telegraph and Telephone Admin	PTT
European Organization for Quality	EQQ	Quality Management Institute Canada	QMI
European Org for Testing and Certification..	EOTC	Registrar Accreditation Board USA	RAB
European Network for Quality System assessment and Certification	EQNET	Standards Council of Canada	SCC
European Committee for Quality System Assessment and Certification	EQS	Singapore Institute of Standards.....	SISIR
European Technical Approval	ETA	Swiss Assn for Quality Assurance Cert	SQS
European Telecom Standards Institute	ETSI	Standards Institute of Israel	SII
European Union (New for EC).....	EU	US Department of Agriculture	USDA
Federal Aviation Administration (US).....	FAA	US International Trade Commission.....	USITC
Federal Acquisition Regulations (US).....	FAR		
Federal Communications Commission (US)....	FCC		
Food & Drug Administration (US)	FDA		
General Agreement on Tariffs and Trade.....	GATT		
General Services Administration (US).....	GSA		
International Civil Aviation Organization	ICAO		
International Energy Agency	IEA		
International Classification for Standards.....	ICS		
International Electrotechnical Commission	IEC		
International Maritime Organization.....	IMO		
International Labor Organization	ILO		
International Organization for Standardization..	ISO		
ISO Council Committee on Conformity Assessments and Intl Recognition.....	ISO/CASCO		