

<b>AGA</b>	American Gas Association.
<b>AISI</b>	American Iron and Steel Institute.
<b>ANSI</b>	American National Standards Institute. Formerly the ASA American Standards Assoc.
<b>API</b>	American Petroleum Institute.
<b>ASME</b>	American Society for Mechanical Engineers.
<b>ASTM</b>	American Society of Testing Materials.
<b>AWWA</b>	American Water Works Association.
<b>Bales</b>	Term associated with banded lifts of pipe.
<b>Barlow's Formula</b>	An equation which shows the relationship of internal pressure to allowable stress, nominal thickness and diameter.
<b>Bevel</b>	The angle formed between the prepared edge of the end of the pipe and a plane perpendicular to the surface of the member. The standard bevel for line pipe is 30° to facilitate welding.
<b>Billet</b>	A solid semi finished round or square product that has been hot worked by forging, rolling or extrusion. For seamless tubular products, the billet is heated and pierced to form a tube hollow.
<b>Black Bare</b>	Term associated with pipe surface whereby the pipe will not be coated with mill spray oil and grease spots and cutting oil will not be removed.
<b>Black Dry</b>	Term associated with pipe surface whereby the pipe will not only be coated with mill spray oil and all grease spots and cutting oil will be removed by washing.
<b>Black Oiled</b>	Term associated with pipe surface whereby material ordered in this manner is protected with a varnish type oil on the O.D. for temporary corrosion protection during transit and in short term storage.
<b>Black Pipe</b>	Denotes lacquered OD finish (as opposed to bare or galvanized)
<b>Box</b>	Internal (female) threaded end
<b>Brinell</b>	Hardness testing system which measures indentation of the subject using a standard weight, shaped point
<b>BTC</b>	Buttress threaded and coupled
<b>Bundles</b>	Term associated with practice of packaging NPS 1 1/2" and smaller pipe. Pieces per bundle vary depending upon size.
<b>Burst Test</b>	A destructive hydraulic test employed to determine actual yield strength and ultimate strength of both seamless and welded pipe.
<b>Butt-weld Pipe</b>	See Continuous Weld.
<b>Casing</b>	Pipe used as a structural retainer for the walls of a drilled hole
<b>CFT</b>	Hundred foot (sometimes used in pricing, i.e. \$425.97/cft vs. \$4,259/ft.)
<b>Chamfer</b>	A beveled surface to eliminate an otherwise sharp corner.
<b>Chemical Properties</b>	Normally associated with a limited number of chemical elements; however, depending upon the specification, practically a full analysis may be required. Minimum or maximum limits are established in Standards.
<b>Cold Drawn</b>	Pipe or tubing which is pulled through a die to reduce diameter and wall. This process usually produces closer tolerances and higher strength.
<b>Cold Work</b>	Deforming metal plastically at a temperature lower than the recrystallization temperature. Mechanical or hydraulic expansion employed to achieve higher mechanical properties.
<b>Conduit</b>	Pipe serving as a duct for electrical wiring.
<b>Continuous Weld</b>	In common usage, a phrase for continuous butt weld. 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 series of round pass welding rolls.
<b>Coupling</b>	Threaded sleeve used to connect two lengths of pipe.
<b>Cut Lengths</b>	Pipe cut to a specific length as ordered.
<b>CW</b>	Continuous Weld a method of producing small diameter pipe (1/2 - 4")
<b>CWT</b>	Hundred Weight. Often used in handling or trucking pricing, i.e. .30/cwt load out charge or \$1.65/cwt (freight) with a minimum such as 30,000#.

<b>Die Stamping</b>	Permanent marking placed on pipe as required by some specifications.
<b>Double Extra</b>	Standard pipe weight designation (XXS). Sometimes described as XXH (double extra heavy).
<b>Drift</b>	Minimum ID clearance verified by pulling a mandrel of known size through a length of pipe
<b>DRL</b>	Double Random Length (35' minimum average or as defined in specifications).
<b>DSAW</b>	Double Submerged Arc Weld.
<b>Ductility</b>	The ability of a material to deform plastically without fracturing, being measured by elongation or reduction of area in a tensile test or by other means.
<b>Eddy Current Testing</b>	Non destructive 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.
<b>Elongation</b>	In tensile testing, the increase in the gage length, measured after fracture of the specimen within the gage length, usually expressed as a percentage of the original gage length.
<b>EMI</b>	Electromagnetic inspection a method of determining wall thickness and detecting imperfections in steel tubes
<b>ERW</b>	Electric Resistance Weld. See High Frequency Welding.
<b>EUE</b>	External upset ends forging of ends on (API) tubing and drill pipe to provide additional thickness for strengthening connections
<b>EW</b>	Electric Weld. See High Frequency Weld.
<b>Expanded Pipe</b>	Pipe which has been enlarged circumferentially by mechanical or hydraulic pressure.
<b>Extra Strong</b>	Standard pipe weight designation (XS). Sometimes described as XH (extra heavy).
<b>Flattening Test</b>	A quality test for pipe in which a specimen is flattened between parallel plates that are closed to a specified height.
<b>FLD</b>	Full Length Drift (as opposed to "end drift") usually performed as part of used tubing or casing (OCTG) inspection
<b>Flush Joint</b>	Connection with male and female threads cut directly into the pipe (as opposed to T&C). This provides the same ID and OD clearance as in the middle of the tube, once lengths are joined.
<b>FOB</b>	Free On Board used to denote where pipe is to be provided to the buyer
<b>Galvanizing</b>	Covering of iron or steel surfaces with a protective layer of zinc (weight defined in specifications).
<b>Hardfacing</b>	Abrasion resistant metal applied by welding (usually in strips) on the surface of softer material to increase wear properties
<b>High Frequency Welding</b>	A technique employed in the manufacture of electric resistance weld pipe. Typical radio frequency power for welding is supplied at 450,000 cycles/sec.
<b>Hot Stamp</b>	Permanent marking placed on pipe as employed by manufacturer or as established by specification.
<b>Hydrostatic Test</b>	Normal mill test as required by specifications. The pipe ends are sealed and high pressure water is introduced to predetermined pressures as required by specifications.
<b>I.D.</b>	Inside Diameter.
<b>Impact Test</b>	A test performed at a specified temperature (usually lower than ambient) 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 a Charpy Test.
<b>Ink Mark</b>	Continuous printing identification associated with NPS 1 1/2 and smaller pipe. Detail is normally limited to the trademark and "Made in USA".
<b>Joint</b>	One length of pipe
<b>Kip</b>	A unit of weight equal to 1,000 pounds used to express dead weight.
<b>Lifts</b>	Term associated with separated segments of pipe (banded or unbanded for ease of handling).
<b>LS</b>	Limited Service pipe not meeting specification, usually rejected at the mill

<b>LT</b>	Loaded Trucks used in price quotation to indicate seller pays for handling
<b>LTC</b>	Long Thread and Coupling (OCTG casing connection)
<b>Magnetic Particle</b>	One of several methods of non destructive testing. A non destructive method of inspection for determining the existence and extent of possible defects in ferromagnetic materials. Finely divided magnetic particles, applied to the magnetized part, are attracted to and outline the pattern of and magnetic leakage fields created by discontinuities.
<b>Magnetic Properties</b>	The properties of a material that reveal its elastic and inelastic behavior where force is applied, thereby indicating its suitability for mechanical application; for example, tensile strength, elongation, hardness and fatigue limit.
<b>Mid Weld</b>	Two or more joints welded to form a longer one
<b>Nipple</b>	Short length of pipe (<12") threaded on both ends
<b>Nominal</b>	Pipe size or wall thickness as specified (not actual). Sizes refer to approximate ID, even though OD is the fixed dimension.
<b>Normalizing</b>	Heating a ferrous material to a suitable temperature above the transformation range and then cooling in air to a temperature substantially below the transformation range.
<b>NPS</b>	A dimensionless designator for such traditional terms as "nominal diameter", "size", and "nominal size". Corresponds to actual outside diameter only in sizes 14 inches and over.
<b>NUE</b>	Non upset end OCTG tubing description (not as common as EUE)
<b>O.D.</b>	Outside Diameter.
<b>OCTG</b>	Oil Country Tubular Goods pipe made to API specifications
<b>Oiled</b>	See Black Oiled.
<b>PE</b>	Plain End
<b>PEB</b>	Plain End Beveled
<b>Pickling</b>	Pipe immersed into acid bath for removal of scale, oil, dirt, etc.
<b>Pin</b>	External (male) threaded end
<b>Protector</b>	Plastic, steel or composite cap to protect threads from handling damage
<b>PSI</b>	Pounds per square inch.
<b>PSIG</b>	Pounds per square inch gage.
<b>R &amp; D</b>	Reamed and Drifted. Pipe commonly used in water wells which has a special, heavy duty coupling and a guaranteed I.D. clearance.
<b>Range</b>	(R1, R2, R3) lengths of OCTG (Range 1 casing 16-25') (Range 2 casing 25-34') (Range 3 casing 34-48') (Range 1 tubing 20-24') (Range 2 tubing 28-32')
<b>Rockwell Hardness</b>	Relative resistance of a metal to indentation by a diamond cone, as expressed in hardness scale units (A, B, C or G)
<b>SAW</b>	Submerged arc weld a method of producing very large OD pipe
<b>SC</b>	Square cut plain end pipe.
<b>Schedule</b>	Numbers assigned to different wall thicknesses of pipe (i.e. sch. 40)
<b>SEA</b>	Special End Area inspection to check for defects at either end of a steel tube which is also being inspected electronically. (EMI misses the ends.)
<b>Shoe</b>	Sub sometimes run on bottom of casing string with special metallurgy or design to help pipe to bottom through tight or bridged spots in drill hole
<b>Skelp</b>	A piece or strip of metal produced to a suitable thickness, width and edge configuration, from which welded pipe is made.
<b>SMLS</b>	Seamless.
<b>Spec</b>	Specification
<b>SRL</b>	Single Random Length (16-22 ft. for standard weight ASTM pipe or as defined in specifications).
<b>STC</b>	Short Thread and Coupling (OCTG casing connection)
<b>STD</b>	Standard reference to wall thickness of line pipe (=sch. 40 for 1/8 - 10")
<b>Stencil</b>	Paint spray identification placed on pipe. Specification size, wall, grade, test pressure, method of manufacture and normal mill characters and mill identification are usually included; however, detail varies by specification. "Country of Origin" is included.
<b>Stretch Reduction</b>	A technique employed in the manufacture of continuous weld pipe and in

	certain instances in the manufacture of seamless and electric resistance weld pipe. It involves one or several "master" sizes which are stretch reduced or rolled under tension through a number of stands to achieve a variety of standard pipe diameters and walls.
<b>Strip</b>	A sheet of metal in which the length is many times the width.
<b>Sub</b>	A short coupling with different types and/or sizes of ends
<b>T&amp;C</b>	Threaded and Coupled.
<b>T&amp;D</b>	Tested and Drifted one method of verifying integrity of used tubing and casing (OCTG). "Test" refers to hydrostatic: ends are sealed and water pumped inside to a predetermined pressure. See drift def. above.
<b>TBE</b>	Threaded Both Ends.
<b>Tensile Strength</b>	In tensile testing, the ratio of maximum load to original cross sectional area. Also, called ultimate strength. Usually expressed in pounds per square inch.
<b>TO</b>	Threads Only.
<b>Tolerance</b>	Specified allowance (plus or minus) of the given dimension of a finished product due to inaccuracies in manufacturing; usually quite small (thousandths of an inch or very small percentage) and often part of a standard such as ASTM or API.
<b>Tool Joint</b>	Threaded tube, usually thicker and harder, welded onto pipe to provide joint strength and durability exceeding that of flush joint or T&C connections
<b>Tube Round</b>	See Billet.
<b>Ultrasonic</b>	An electronic method of non destructive testing utilizing sound waves.
<b>Victaulic</b>	Joint grooves in the ends of pipe to accommodate a coupling
<b>XHY</b>	Extra Heavy pipe about 50% thicker than standard (=sch. 80 for 1/8 - 8")
<b>XXHY</b>	Double Extra Heavy twice as thick as xhy for 1/2 - 6"
<b>Yield Strength</b>	The stress at which a material exhibits a specified deviation from proportionality of stress and strain. An offset of 0.2% is used for many metals including steels.