GLOSSARY

- AAR Association of American Railroads
- AGA American Gas Association
- AISI American Iron & Steel Institute
- ANSI American National Standards Institute Formerly ASA
- API American Petroleum Institute
- ASA American Standard Institute Now known as ANSI
- ASM American Society for Metals
- ASME American Society of Mechanical Engineers
- ASTM American Society for Testing Materials
- AWWA American Water Works Association
- BALES Banded lifts of pipe
- BAR MILL Rolling mill where blooms are processed for form billets
- **BESS Bessemer**
- BEVEL The angle formed between the prepared edge of the end of the pipe and a plane perpendicular to the surface. Standard line pipe bevel is 30 degrees.
- BILLET Round, solid bar of steel which is pierced to form a seamless tube or pipe.
- BLK Black Term used when O.D. surface of pipe is protected with a varnish-type oil. Also applies to bare pipe to denote not galvanized.
- BLOOM A semifinished hot rolled product produced on a blooming mill.
- B.O.F. Basic Oxygen Furnace
- B.O.P. Basic Oxygen Process
- BRIGGS STANDARD A standard of thread dimensions. Same as American Standard
- B.T.U. British Thermal Unit
- BLDS Bundles practice of packaging pipe from NPS 1/8 to NPS 1-1/2. Pieces per bundle vary with size.
- BURSTTEST A destructive hydraulic test to determine actual yield strength and ultimate strength of seamless and welded pipe.
- B.W. Butt Weld Pipe See Continuous Weld Pipe
- B.W.G. Birmingham Wire Gauge
- CASING Pipe used as a structural retainer for the walls of a water, gas, or oil well.
- C.D. Cold Drawn Drawing pipe or tubing through a die to reduce diameter and wall, to obtain closer tolerances, a better finish or higher physical properties.
- CHAMFER A beveled surface to eliminate an otherwise sharp corner. A finishing operation prior to threading.
- CHEMICAL PROPERTIES Normally associated with a limited number of chemical elements. Minimum or maximum limits are established in most ASTM and API specifications.
- CUT LENGTH Pipe cut to a specific length as ordered.

CON CAST - Continuous Cast

- CONDUIT Pipe serving as a duct for electrical wiring. Usually supplied in 10 foot lengths, threaded and coupled. Pipe used is normally galvanized, slightly lighter than standard weight with a smooth interior surface.
- CPLG Coupling threaded sleeve used to connect two lengths of pipe.
- C.W. Continuous Weld method of producing pipe normally in sizes from ½ inch to 4 inch.
- CU Copper
- C.W.T. per hundred weight

DIA - Diameter

DIE STAMPING - Permanent marking placed on pipe as required in some specifications.

DOUBLE EXTRA HEAVY - Also known as double extra strong. Available from NPS 1/2 to NPS 8 nominal pipe. Wall

- thickness is twice as heavy as extra heavy pipe with the exception of 8 inch diameter.
- DRL Double Random Length (35 foot minimum average)
- DRIFTED Attaining a certain minimum I.D. clearance by pushing a mandrel through pipe or tubing.
- DRIVE PIPE Pipe used for driving into ground in water well applications. Supplied with drive coupling.
- DUCTILITY The ability of a material to deform plastically without fracturing. Measured by elongation in a tensile test.
- ERW Electric Resistance Weld Pipe method of producing pipe normally in sizes from 2-3/8" OD through 22" OD. E.U.E. External Upset Ends used in API tubing and drill pipe.
- EXPANDED PIPE Pipe which has been enlarged circumferentially by mechanical or hydraulic pressure.
- EXTRA HEAVY Also known as extra strong pipe with walls heavier than standard weight. Same as schedule 80 in sizes NPS 1/8 to NPS 8 diameter.

F.O.B. - Free on Board

FRT - Freight

 $\ensuremath{\mathsf{GALV}}$ - $\ensuremath{\mathsf{Galvanizing}}$ - coating pipe with a protective coating of zinc.

GRADE A OR B - Designations used to indicate minimum yield and tensile strengths of steel in seamless and welded pipe.



GLOSSARY - cont.

G.T. - Gross Ton - 2,240 pounds HYDROSTATIC TESTING - High pressure water test to predetermine pressures as required by specifications. I.D. - Inside Diameter - The O.D. measurement less double the wall thickness is the I.D. measurement of a pipe or tube. INGOT - Usually first solid form of steel. Suitable for reworking or remelting. I.P.S. - Iron Pipe Size - Same as nominal size from 1/8 inch to 12 inch. JOINT - Term used to refer to one length of pipe. LGTH - Length L.T.C. - Long threads and coupling (OCTG) LARGE O.D. PIPE - Pipe NPS 14 and larger LW. - Lap Weld - Old method of producing pipe 5 inch diameter and over. Has not been produced for 25+ years. MECHANICAL PROPERTIES - Tensile strength, elongation, hardness and fatigue limit of steel. MID-WELDS - Two or more joints welded to form one long joint. MINIMUM WALL - Minimum thickness permissible calculated by subtracting minus tolerance from nominal wall. **MN** - Manganese N.A.S.P.D. - The National Association of Steel Pipe Distributors N.B.S. - National Bureau of Standards NI - Nickel NIPPLE - Short length of pipe 12 inches and under normally threaded both ends. NOM - Nominal - name given to standard pipe designations 1/8 inch through 12 inch. Does not indicate actual I.D. measurements. Wall thickness are also expressed as nominal. N.T. - Net Ton - 2,000 pounds O.D. - Outside diameter O.H. - Open hearth PCS - Pieces P.E. - Plain ends PERC - Plain end roller cut PESC - Plain end square cut or saw cut or machine cut PICKLING - Pipe immersed in acid bath to remove scale, oil, dirt, etc. PROTECTOR - Sleeve with threads to protect threads PSI - Pounds per square inch. RANGE - Allowable lengths in oil field casing and tubing. Expressed as Range 1(20 foot R/L), Range 2 (30 foot R/L) and Range 3 (40 foot R/L). R/L - Random Length, Varving lengths of pipe. R&D - Reamed and Drifed - commonly used in water wells to guarantee I.D. clearance SAW - Submerged Arc Weld - a method of producing very large OD pipe. SCALE - An oxide of iron which forms on the surface of steel. SCHEDULE NUMBERS - ANSI numbers assigned to pipe to designate wall thickness. SKELP - Long narrow strips of plate of correct thickness and width to produce CW or ERW pipe. SMLE - Seamless - pipe without a seam or weld in the circumference. **SPEC - Specification** SRL - Single Random Lengths - usually 16 foot to 22 foot. Minimum average of 17'6". S.T. & C. - Short Thread & Coupled (OCTG). STD - Standard - Same as Sch. 40, NPS 1/8- NPS 10 STENCIL - Identification painted on pipe. Specification, size, wall, grade, test pressure, method of manufacture and mill identification are usually indicated. STRAND(S) - Product of Continuous Cast Process STRETCH REDUCE - A technique employed in the manufacture of CW pipe in which one or several master sizes of pipe are produced, then stretched reduced through a number of rolls to achieve a variety of pipe diameters. Also used in certain instances in seamless and ERW manufacturing. **TBE - Thread Both Ends** T & C - Threaded and Coupled TOE - Thread One End TENSILE STRENGTH - Ultimate bursting strength to resist being pulled apart. Expressed in P.S.I. **TUBE ROUND - Billet** VICTAULIC JOINT - Pipe is grooved near ends to accommodate a victaulic coupling. YIELD STRENGTH - The tensile stress required to produce a total elongation of .5 percent of the gauge length as determined by an extensometer. Expressed in P.S.I.

XHY - Extra Heavy (Extra Strong)

XXHY - Double Extra Heavy (Double Extra Strong)

