

## STANDARDS AND SPECIFICATIONS

### **AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)**

- ANSI B2.1 Basic standard for steel pipe threads
- ANSI B36.10 Basic dimensional standard for all steel pipe
- ANSI B31 Code for design and construction of pressure piping systems, consisting of the following sections:
  - ANSI B31.1 Power Piping Systems
  - ANSI B31.2 Industrial Gas and Air Piping Systems
  - ANSI B31.3 Petroleum Refinery Piping
  - ANSI B31.4 Liquid Petroleum Transportation Piping
  - ANSI B31.5 Refrigeration Piping Systems
  - ANSI B31.6 Chemical Process Piping
  - ANSI B31.7 Nuclear Power Piping
  - ANSI B31.8 Gas Transmission and Distribution Piping

### **AMERICAN PETROLEUM INSTITUTE (API)**

- API 5L API Specification for Line Pipe
- API 5LX API Specification for High-Test Line Pipe

### **AMERICAN SOCIETY for TESTING and MATERIALS (ASTM)**

- ASTM A53 Welded and Seamless Steel Pipe
- ASTM A106 Seamless Carbon Steel Pipe for High Temperature Service
- ASTM A135 Electric-Resistance-Welded Pipe, 30 inch and under, intended for conveying liquid, gas, or vapor
- ASTM A139 Electric-Fusion(Arc)-Welded Straight-Seam or Spiral-Seam Pipe, 4 inch and over, wall thicknesses up to 5/8 inch inclusive. Intended for conveying liquid, gas or vapor.
- ASTM A252 Welded and Seamless Steel Pipe Piles
- ASTM A333 Seamless and Welded Steel Pipe for Low Temperature Service
- ASTM A523 Plain End Seamless and Electric Welded Steel Pipe for High Pressure Pipe-Type Cable Systems
- ASTM A589 Seamless and Welded Carbon Steel Water Well Pipe

### **AMERICAN WATER WORKS ASSOCIATION (AWWA)**

- AWWA C202 AWWA Standard for Mill-Type Steel Water Pipe

## OTHER PIPE SPECIFICATIONS

### API 5LX

Covers high-test line pipe with greater tensile and bursting strengths than pipe made to API 5L. Seamless or welded, sizes 6-5/8 inch OD - 36 inch, Grades X-42, X-46, and X-52. Numerical designation in grade indicates minimum yield, thus X-42=42,000 lbs. min. yield steel, etc. OD, weight and wall tolerances, tensile and flattening tests and marking requirements are same as outlined in API 5L.

### ASTM A134

Covers electric-fusion (arc)-welded straight seam or spiral seam steel plate pipe 16 inch and over (ID or OD as specified by customer), with walls up to 3/4 inch inclusive. Pipe intended for conveying liquid, gas, or vapor.

### ASTM A135

Covers two grades (A and B) of electric-resistance-welded pipe, 30 inch and under, intended for conveying liquid, gas, or vapor. Only grade A is adapted for flanging and bending. Purpose for which pipe is intended should be stated in the order.

### ASTM A139

Covers two grades (A and B) of electric-fusion (arc)-welded straight-seam or spiral-seam pipe, 4 inch and over, wall thicknesses up to 5/8 inch inclusive. Pipe intended for conveying liquid, gas, or vapor.

### ASTM A155

Covers electric-fusion-welded pipe for high-temperature, high-pressure service. Generally in sizes 16 inch OD and larger. Pipe is suitable for bending, flanging (vanstoning), and similar forming operations. Several grades of carbon steel and alloy steel plates are covered.

### ASTM A252

Covers three grades (physical properties) of welded and seamless black pipe piles of cylindrical shape either as permanent load-carrying members or shells to form cast-in-place concrete piles. Not intended to apply to pipe for general structural purposes. Sizes 8-5/8 inch OD through 24 inch OD.

### ASTM A312

Covers ten grades (designated as TP 304, TP 304L, TP 316, TP 347, etc.) of seamless and welded stainless steel pipe intended for high-temperature and general corrosive service.

### ASTM A333

Covers seamless and welded carbon and alloy steel pipe for low-temperature service. (Special product note — Yoloy pipe can be certified to meet the requirements of A333, Grade O, for service down to minus 50 degrees F.)

### ASTM A335

Covers fourteen grades, designated as P-11 (1-1/4 percent chrome, 1/2 percent moly) P-12 (1 percent chrome, 1/2 percent moly) P-5 (4-6 percent chrome, 1/2 percent moly) etc., of intermediate alloy seamless steel pipe intended for high-temperature service and suitable for bending, flanging (vanstoning), and similar forming operations.

Other Specifications Available, Please Call.