

ASTM A53 and **ASME SA53** is intended for mechanical and pressure applications and is also acceptable for ordinary uses in steam, water, gas and air lines. It is suitable for welding and for forming operations involving coiling, bending, and flanging, subject to certain qualifications.

A/SA53 covers Seamless and Welded, Black and Hot-Dipped Galvanized nominal (average) wall pipe.

APP STOCKS A FULL RANGE OF A/SA53-B SEAMLESS & WELDED PIPE IN:

- ✓ Sizes: 1/8" NPS to 26" OD
- ✓ Schedules 10 through XXH
- ✓ Non-Scheduled Walls: .188" and .219"

MATERIALS AND MANUFACTURE

The steel for both seamless and welded pipe shall be made by one or more of the following processes: open-hearth, electric furnace, or basic-oxygen. The weld seam of electric-resistance welded pipe in Grade B shall be heat treated after welding.

OUR VALUE-ADDED SERVICES

- ✓ Saw & Torch Cutting, Miter Cutting, Pipe Profiling
- ✓ Pipe Beveling, Roll-Grooving & Threading
- ✓ ID & OD Cleaning
- ✓ Coating (FBE, Galvanizing & Prime/Paint)
- ✓ Boring, Honing, OD Turning, Heat Treating & Plating
- ✓ In-House or 3rd Party Testing



TENSILE REQUIREMENTS

	SEAMLESS AND ELECTRIC-RESISTANCE-WELDED		CONTINUOUS-WELDED
	GRADE A	GRADE B	
TENSILE STRENGTH, MIN., PSI	48,000	60,000	45,000
YIELD STRENGTH, MIN., PSI	30,000	35,000	25,000

CHEMICAL REQUIREMENTS

	TYPE S (SEAMLESS)		TYPE E (ELECTRIC-RESISTANCE WELDED)		TYPE F (FURNACE WELDED PIPE)
	GRADE A	GRADE B	GRADE A	GRADE B	GRADE A
CARBON, MAX. %	0.25	0.30*	0.25	0.30*	0.3
MANGANESE %	0.95	1.2	0.95	1.2	1.2
PHOSPHOROUS, MAX. %	0.05	0.05	0.05	0.05	0.05
SULFUR, MAX. %	0.045	0.045	0.045	0.045	0.045
COPPER, MAX. %	0.40	0.40	0.40	0.40	0.4
NICKEL, MAX. %	0.40	0.40	0.40	0.40	0.4
CHROMIUM, MAX. %	0.40	0.40	0.40	0.40	0.4
MOLYBDENUM, MAX. %	0.15	0.15	0.15	0.15	0.15
VANADIUM, MAX. %	0.08	0.08	0.08	0.08	0.08

*For each reduction of 0.01% below the specified carbon maximum, an increase of 0.06% manganese above the specified maximum will be permitted up to a maximum of 1.65% (does not apply to SA53).



PERMISSABLE VARIATIONS IN WALL THICKNESS

The minimum wall thickness at any point shall not be more than 12.5% under the nominal wall thickness specified.

PERMISSABLE VARIATIONS IN WEIGHTS PER FOOT

Plus or minus 10%

PERMISSABLE VARIATIONS IN OUTSIDE DIAMETER

Outside Diameter at any point shall not vary from standard specified more than:

FOR NPS 1 1/2 AND SMALLER SIZES		FOR NPS AND LARGER SIZES	
1/64" OVER	1/64" UNDER	1% OVER	1% UNDER

HYDROTASTIC TESTING

Hydrostatic inspection test pressures for plain end and threaded and coupled pipe are specified. Hydrostatic pressure shall be maintained for not less than 5 seconds for all sizes of seamless and electric-resistance-weld pipe.