Pipe

Continuous Weld Pipe
Grade A53

- **Size Range:** 1/8" thru 4" SCH 40 and SCH 80
- **Lengths:** 21'-42' plain ends, threaded and coupled
- **Coating:** bare, black, galvanized

Electric Resistance Weld
Grade A53-B

- **Size Range:** 3" thru 24" STD, SCH 40 and SCH 80, XH
- **Lengths:** 18' to 22' (SLR) and 38' to 44' (DLR)
- **Coating:** bare, black, galvanized

Seamless Pipe
Grade A53-B, AP15L, X42, A-106-B

- **Size Range:** 1/8" thru 24" in all wall sizes (see chart on the opposite page)
- **Lengths:** 18' to 22' (SLR) and 38' to 44' (DLR)

Spec	Scope
A-53	Covers seamless and welded BLACK and hot-dipped galvanized nominal (average) wall pipe for coiling, bending, flanging and other special purposes and is suitable for welding. CONTINUOUS-WELDED pipe is not intended for flanging (roll back operation to form flange using pipe wall).
A-106	Covers SEAMLESS carbon steel nominal wall pipe for high-temperature service, suitable for bending, flanging and similar forming operations. NPS 1-1/2 and under may be either hot finished or cold drawn. NPS 2 and larger shall be hot finished unless otherwise specified.

Spec	Hot-Dipped Galvanizing
A-53	Sets standards for coating of pipe with zinc inside and outside by the hot-dipped process. Weight of coating must not average less than 1.8 oz. per square foot and not less than 1.6 oz. per square foot.
A-106	Not covered in specification.

Spec	Permissible Variations in Wall Thickness
A-53	The minimum wall thickness at any point shall not be more than 12.5% under the nominal wall thickness.
A-106	Specified

Spec — Tensile Requirements

A-53	Continuous-	Seamless and Electric-resistance-welded	
		Grade A	Grade B
Tensile strength, min., psi	45,000	48,000	60,000
Yield strength, min., psi	25,000	30,000	35,000
A-106	Grade A	Grade B	Grade C
Tensile strength, min., psi	48,000	60,000	70,000
Yield strength, min., psi	30,000	35,000	40,000

Spec	Permissible Variations in Weights per Foot
A-53	Plus or Minus 10%
A-106	Weight of any length shall not vary more than 10% over and 3.5% under. NOTE-NPS 4 and smaller-weighed in lots. Larger sizes by length.

A500 Grade B Structural Pipe

A500B Structural Pipe is manufactured for use in applications that demand greater strength, closer tolerances, and a superior finish. This product is an excellent choice for painted applications such as handrails, commercial architectural applications, agricultural implements and communication towers. A500B Structural Pipe is manufactured in sizes from NPS 1/2 to NPS 9 in schedules 5 to 80. It can also be custom produced to meet your specific needs in outside diameter form .406 to 9.625 with wall thickness from .035 to .500.

Tolerances:

Straightness:
1/8" times the number of feet of total length divided by 5

Length Tolerances Mill Cut:
22 ft. and under -- +1/2"; -11/4"
Over 22 ft. to 44 ft. -- +3/4"; -1/4"

Outside Diameter:

0.840" to 1.900" incl. -- ±0.5%
2.000 and larger -- ±0.75%

The outside diameter measurements shall be made at positions at least 2" from either end of the pipe.

Physical Requirements:

	A500B Structural Pipe	ASTM A53 Grade B
Tensile Strength Minimum PSI	58,000	60,000
Yield Point Minimum PSI	42,000 [1]	35,000
Elongation in 2 in. Minimum Percent	23% [2]	23.6% [3]

[1] Hi-Y 50 pipe minimum yield typically exceeds 50,000 PSI

[2] Applies to .180 wall thickness & over

[3] Applies to .180 wall thickness. *For wall thickness under .180 use formula.* Formula 48t + 15 = E

t = specific thickness
E = % elongation