

PIPE SPECIFICATIONS

Scope

A106	Covers SEAMLESS nominal size and wall pipe for high-temperature service, suitable for bending, flanging, and similar forming operations.
1/8" - 26" STD, XS AND XXS ANSI B36.10	Heat treated cold drawn pipe may be furnished to this specification. Optional supplementary requirements may be specified when pipe 8 inch and larger is intended for use where a superior grade is required.
Other sizes and dimensions may be furnished	

Hydrostatic Testing

Hydrostatic test pressures are calculated using the Barlow formula. Each pipe shall be tested to 60 percent of specified minimum yield strength, but not exceeding 2500 psi for 3 inch nominal size or smaller, or 2800 psi for sizes over 3 inch.

Permissible Variations in Weights Per Foot

For schedule 120 and lighter

Pipe shall not vary more than 6.5 percent over and 3.5 percent under weights shown in ANSI B36.10.

For pipe heavier than schedule 120

Pipe shall not vary more than 10 percent over and 3.5 percent under weights shown in ANSI B36.10.

Sizes 4 inch and smaller are weighed in convenient lots. Pipe in sizes larger than 4 inch is weighed separately.

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Permissible Variations in OD

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OUTSIDE DIAMETER shall not exceed variations as listed below:

1/8" - 26"	Nominal Pipe Size	Over, Inch	Under, Inch
STD, XS and XXS ANSI B36.10	1/8 to 1-1/2, incl	1/64 (0.015)	1/64 (0.015)
	Over 1-1/2 to 4, incl	1/32 (0.031)	1/32 (0.031)
	Over 4 to 8, incl	1/16 (0.062)	1/32 (0.031)
Other sizes and dimensions may be furnished	Over 8 to 18, incl	3/32 (0.093)	1/32 (0.031)
	Over 18 to 26, incl	1/8 (0.125)	1/32 (0.031)

Permissible Variations in Wall Thickness

Minimum wall thickness at any point shall not be more than 12.5 percent under nominal wall thickness specified.
Specification contains a table of minimum wall thicknesses on inspection calculated as 0.875 x nominal wall.

Chemical Requirements

Composition, max. percent

	C max.	Mn	P max.	S max.	Si min.
Grade A	0.25	0.27/0.93	0.035	0.035	0.10
Grade B	0.30	0.29/1.06	0.035	0.035	0.10
Grade C	0.35	0.29/1.06	0.035	0.035	0.10

Tensile Requirements

	Tensile Strength min, psi	Yield Point min, psi
Grade A	48,000	30,000
Grade B	60,000	35,000
Grade C	70,000	40,000

Table lists minimum elongation values.

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Mechanical Tests Specified

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1/8" - 26"

TENSILE TEST

Required on all sizes.

STD, XS AND
XXS
ANSI B36.10

BEND TEST

Required on sizes 2 inch and smaller. Pipe shall stand cold bending through 90 degrees around a mandrel with a diameter twelve times the nominal diameter of the pipe without cracking. If for close coiling bend shall be 180 degrees around diameter eight times the nominal diameter of pipe.

Other sizes and
dimensions may be
furnished

FLATTENING TEST

Required on sizes over 2 inch in nominal diameter.