

ASTM A-312 PIPE SEAMLESS AND WELDED (NO FILLER METAL ADDED)

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

Permissible Variations in Outside Diameter^{A, B, C}

NPS Designator	Permissible Variations in outside Diameter			
	Over		Under	
	in.	mm	in.	mm
1/8 to 1 1/2, incl	1/64 (0.015)	0.4	1/32 (0.031)	0.8
Over 1 1/2 to 4, incl	1/32 (0.031)	0.8	1/32 (0.031)	0.8
Over 4 to 8, incl	1/16 (0.062)	1.6	1/32 (0.031)	0.8
Over 8 to 18, incl	3/32 (0.093)	2.4	1/32 (0.031)	0.8
Over 18 to 26, incl	1/8 (0.125)	3.2	1/32 (0.031)	0.8
Over 26 to 34, incl	5/32 (0.156)	4.0	1/32 (0.031)	0.8
Over 34 to 48, incl	3/16 (0.187)	4.8	1/32 (0.031)	0.8

^A Variations in outside diameter, unless otherwise specified, shall not exceed the limits prescribed. The tolerances on outside diameter include ovality except as provided for in *B* and *C*.

^B Thin-wall pipe usually develops significant ovality (out-of-roundness) during final annealing, straightening, or both. Thin-wall pipes are defined as having a wall thickness of 3 % or less of the outside diameter.

^C The diameter tolerances are not sufficient to provide for additional ovality expected in thin-wall pipe and are applicable only to the mean of the extreme (maximum and minimum) outside diameter readings in any one cross-section. However, for thin-wall pipe the difference in extreme outside diameter readings (ovality) in any one cross-section shall not exceed 1.5 % of the specified outside diameter.