

WELDED STAINLESS STEEL PIPE - ASTM A312									
A999, Table 1: Permissible Variations in Outside Diameter									
NPS Designator	Permissible Variations in Outside Diameter								
	Over	Under							
	in.	in.							
1/8 to 1-1/2 incl.	1/64 (0.015)	1/32 (0.031)							
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)							
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)							
Over 26 to 34 incl.	5/32 (0.156)	1/32 (0.031)							
Over 34 to 48 incl.	3/16 (0.187)	1/32 (0.031)							

NOTE

The above tolerances on outside diameter include ovality except for thin-wall pipe. Thin-wall pipe usually develops significant ovality (out-of-roundness) during final annealing, straightening, or both. Thin-wall pipe is defined as having a wall thickness of 3 percent or less of the outside diameter.

The above diameter tolerances are not sufficient to provide for additional ovality except 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 percent of the specified outside diameter.

Permissible Variations in Wall Thickness

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



WELDED STAINLESS STEEL PIPE - ASTM A312 Pipe Dimensions and Weights for Schedule 40								
Iron Pipe Size, in.	Diameter	Diameter, in.		Weight LBS./FT.	Schedule 5	Schedule 10	Schedule 40	Schedule 80
	OD	ID						
1/8	0.405	0.269	0.068	0.244			X	Х
1/4	0.540	0.364	0.088	0.424		X	X	Х
3/8	0.675	0.493	0.091	0.567			X	Χ
1/2	0.840	0.622	0.109	0.851	Х	Х	X	Х
3/4	1.050	0.824	0.113	1.131	X	X	X	Х
1	1.315	1.049	0.133	1.679	Х	Х	Х	Х
1-1/4	1.660	1.380	0.140	2.273	Х	Х	Х	Х
1-1/2	1.900	1.610	0.145	2.718	Х	Х	Х	Х
2	2.375	2.067	0.154	3.653	X	X	X	Х
2-1/2	2.875	2.469	0.203	5.793	X	X	X	Х
3	3.500	3.068	0.216	7.576	X	X	X	Х
3-1/2	4.000	3.548	0.226	9.109	X	X	X	Χ
4	4.500	4.026	0.237	10.790	Х	Х	Х	Х
5	5.563	5.047	0.258	14.620	Х	Х	Х	Х
6	6.625	6.065	0.280	18.970	X	X	X	X
8	8.625	7.981	0.322	28.550	X	X	X	Х
10	10.750	10.020	0.365	40.480	X	X	X	Χ
12	12.750	12.000	0.375	49.560	X	X	X	Χ
14	14.000	13.250	0.375	54.570		Х	Х	
16	16.000	15.250	0.375	62.580		Х	Х	
18	18.000	17.250	0.375	70.590		Х	Х	
20	20.000	19.250	0.375	78.600		Х	Х	
24	24.000	23.250	0.375	94.620		Х	Х	