

STAINLESS TUBE TOLERANCES

GENERAL SERVICE

Specification	Size OD Range (in)	Tolerances OD		Wall	
		Plus	Minus	Plus	Minus
ASTM A 632	Under .094	.002"	.000"	10%	10%
Welded and	.094 - .187	.003"	.000"	10%	10%
Seamless	.188 - .500	.004"	.000"	10%	10%
Cold Finished					
ASTM A269	Under .500	.005"	.005"	15%	15%
Welded and	.500 - 1.499	.005" ¹	.005"	10%	10%
Seamless	1.500 - 3.499	.010" ²	.010"	10%	10%
General Service	3.500 - 5.499	.015" ³	.015"	10%	10%
Cold Finished	5.500 - 8.000	.030"	.030"	10%	10%
Or Hot Finished					

¹When wall under .065". OD Tol ±.010"

²When wall under .095". OD Tol ±.020"

³When wall under .150", OD Tol ±.030"

HEAT EXCHANGER

Specification	Size OD Range (in)	Tolerances OD		Wall	
		Plus	Minus	Plus	Minus
ASTM A249	Under 1.000	.004"	.004"	10%	10%
ASME SA-249	1.000 - 1.500	.006"	.006"	10%	10%
Welded and Cold	1.501 - 1.999	.008"	.008"	10%	10%
Worked	2.000 - 2.499	.010"	.010"	10%	10%
Heat Exchanger Tube	2.500 - 2.999	.012"	.012"	10%	10%
Average Wall	3.000 - 4.000	.015"	.015"	10%	10%
	4.001 - 5.000	.015"	.025"	10%	10%
ASTM A213	Under 1.000	.004"	.004"	20%	0%
ASME SA-213	1.000 - 1.500	.006"	.006"	20%	0%
Cold Finished	1.501 - 1.999	.008"	.008"	22%	0%
Seamless	2.000 - 2.499	.010"	.010"	22%	0%
Heat Exchanger Tube	2.500 - 2.999	.012"	.012"	22%	0%
Minimum Wall ^{2,3}	3.000 - 4.000	.015"	.015"	22%	0%
	4.001 - 5.000	.015"	.025"	22%	0%

STAINLESS PIPE TOLERANCES

Outside Diameter Tolerances

Nominal Pipe Size (in)	A312 Seamless		A312 Welded		A376 Seamless	
	Plus	Minus	Plus	Minus	Plus	minus
1/8 - 1 1/2 IPS incl.	.015"	.031"	.015"	.031"	.015"	.031"
2 IPS - 4 IPS incl.	.031"	.031"	.032"	.031"	.032"	.031"
5 IPS - 8 IPS incl.	.062"	.031"	.062"	.031"	.062"	.031"
10 IPS - 12 IPS incl.	.093"	.031"	.093"	.031"	.093"	.031"
Wall Tolerances	By Wt.	12.5%	By Wt.	12.5%	By Wt.	12.5%
Weight Tolerances	10.0%	3.5%	10.0%	3.5%	10.0%	3.5%