THEORETICAL BURSTING PRESSURES STAINLESS STEEL TUBING

PSI	Wall .016"	.020"	.028"	.035"	.049"	.065"	.083"	.095"	.109"	.120"	.134"	.156"	.188"	.250"	.313"	.375"	.500"	.750"
OD 1/16"	38,000	48,000																
1/8"	19,200	24,000	39,000	42,000	58,800													
3/16"	12,800	15,998	22,403	29,498	39,203	51,863												
1/4"		12,000	16,800	21,000	29,400	39,000	49,800	57,000										
5/16"		9,600	13,440	16,800	23,520	31,200	39,780	45,750										
3/8"		8,003	11,998	14,003	19,598	26,003	33,203	38,003	43,598	48,000								
7/16"		6,857	9,600	12,000	16,800	22,285	28,457	32,571	37,371	41,143								
1/2"		6,000	8,400	10,500	14,700	19,500	24,900	28,500	32,700	36,000								
9/16"		5,333	7,467	9,333	13,067	17,333	22,123	25,333	29,066	32,000								
5/8"		4,800	6,720	8,400	11,760	15,600	19,920	22,888	26,160	28,800	32,160	37,440	44,880					
3/4"		3,998	5,603	6,998	9,803	12,997	16,598	18,998	21,803	24,000	26,800	31,200	37,403					
7/8"		3,428	4,800	6,000	8,400	11,145	14,228	16,283	18,683	20,573	22,971	26,745	32,055					
1"		3,000	4,200	5,250	7,350	9,750	12,450	14,250	16,350	18,000	20,100	23,400	28,050	37,500				
1-1/8"		2,663	3,735	4,665	6,533	8,670	11,070	12,668	14,535	15,998	17,866	20,798	24,930	33,330				
1-1/4"		2,400	3,360	4,200	5,880	7,800	9,960	11,400	13,080	14,400	16,080	18,720	22,440	30,000				
1-3/8"			3,053	3,818	5,348	7,087	9,053	10,365	11,888	13,088	14,618	17,018	20,400	27,270				
1-1/2"			2,948	3,503	4,898	6,503	8,303	9,503	10,890	12,000	13,400	15,600	18,698	24,998				
1-5/8"				3,230	4,523	6,000	7,662	8,769	10,062	11,077	12,369	14,400	17,354	23,077				
1-3/4"				3,000	4,200	5,573	7,118	8,145	9,345	10,283	11,486	13,373	16,028	21,428				
2"				2,625	3,675	4,875	6,225	7,125	8,175	9,000	10,050	11,700	14,025	18,750	23,475	28,125	37,500	
2-1/4"				2,333	3,270	4,335	5,535	6,330	7,268	8,003	8,933	10,403	12,465	16,665	20,865	24,998	33,330	
2-1/2"				2,100	2,940	3,900	4,980	5,700	6,540	7,200	8,040	9,360	11,220	15,000	18,780	22,500	30,000	
2-3/4"				1,913	2,670	3,548	4,530	5,183	5,948	6,548	7,309	8,513	10,200	13,636	17,070	20,453	27,270	40,913
3"				1,748	2,453	3,248	4,148	4,748	5,453	6,000	6,700	7,800	9,353	12,503	15,653	18,750	24,998	37,500
3-1/4"						3,000	3,833	4,388	5,033	5,535	6,185	7,200	8,633	11,535	14,445	17,310	23,078	34,613
3-1/2"						2,783	3,555	4,073	4,673	5,145	5,743	6,683	8,018	10,718	13,418	16,073	21,428	32,146
3-3/4"						2,603	3,323	3,803	4,358	4,800	5,360	6,240	7,478	9,998	12,518	15,000	20,003	30,000
4"						2,438	3,113	3,563	4,088	4,500	5,025	5,850	7,013	9,375	11,738	14,063	18,750	28,125

The ASME code suggests a safety factor of four when determining working pressures.

T304/L, T316/L, & T317L. A269 Tubing for temperatures between -20°F and 100°F.

E.g. 1/4"OD x .035" = 21,000 PSI
21,000 PSI ÷ 4 = 5,250 PSI
Working Pressure = 5,250 PSI

For higher temperatures multiply working pressures by:

	300°F	500°F	1000°F
T304/L	.828	.744	.665
T316/L & T317/L	.900	.853	.764

All Pressure Ratings are approximate and for illustration purposes only. Values are not Guaranteed or Warranted.