

**304 AND 316 STAINLESS STEEL ANNEALED SEAMLESS TUBING  
ASTM A-213 OR EQUIVALENT**

**ALLOWABLE WORKING PRESSURE**

ALLOWABLE STRESS = 18,700 PSI between -20° F and 100° F

**WALL THICKNESS**

Tubing O.D	.028	.032	.035	.049	.065	.083	.095	.109	.120
1/8	6,863	9,967	12,641						
3/16	4,357	6,339	8,153	11,762					
1/4		4,600	5,891	8,602	11,688				
5/16		3,609	4,600	6,713	9,182				
3/8			3,777	5,460	7,515				
1/2			2,768	3,976	5,423	7,162			
5/8			2,188	3,123	4,245	5,554	6,470		
3/4			1,814	2,581	3,478	4,544	5,273	6,152	6,863
7/8			1,545	2,188	2,955	3,834	4,451	5,180	5,760
1			1,346	1,907	2,562	3,329	3,852	4,469	4,956

Factor of Safety = 4, considering tensile strength to be 75,000 PSI at room temperature

**CALCULATED BURST PRESSURE**

TENSILE STRENGTH = 75,000

**WALL THICKNESS**

Tubing O.D	.028	.032	.035	.049	.065	.083	.095	.109	.120
1/8	27,525	39,970	50,670						
3/16	17,490	25,440	32,700	47,170					
1/4		18,450	23,650	34,515	46,915				
5/16		14,475	18,600	26,895	36,855				
3/8			15,130	21,885	30,130				
1/2			11,125	15,955	21,765	28,710			
5/8			8,800	12,550	17,020	22,290	25,960		
3/4			7,275	10,345	13,965	18,210	21,145	24,675	27,525
7/8			6,195	8,800	11,850	15,400	17,835	20,755	23,110
1			5,400	7,650	10,285	13,335	15,420	17,910	19,915

Reference: ANSI B31.3, Table A-1 and Par. 304.1.2

ASME Pressure Vessels, Section VIII,

Table UHA-23, Par. UG-27 and Appendix 1, Par. 1-2