

# MAXIMUM ALLOWABLE WORKING PRESSURES (PSI)

## 316 Stainless steel annealed seamless tubing (ASTM A-213 or equivalent)

Tube OD size (inches)	Wall Thickness (inches)								
	0.016	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.109
1/8	4585	5891	8590	10970					
3/16	3004	3816	5514	7110	10288				
1/4	2220	2815	4048	5166	7560	10288			
3/8			2626	3337	4817	6617	8677		
1/2			1944	2467	3526	4788	6297	7357	
5/8				1944	2786	3758	4919	5717	
3/4				1625	2307	3105	4034	4672	
7/8				1378	1959	2626	3410	3947	4585
1"				1204	1698	2278	2960	3410	3961

Factor of safety = 4, considering tensile strength to be 75.000 psi at room temperature

## Copper annealed seamless tubing (ASTM B-75 or equivalent)

Tube OD size (inches)	Wall Thickness (inches)								
	0.020	0.028	0.035	0.049	0.065	0.083	0.095	0.1090	0.120
1/8		3200	4053						
3/16		2033	2616	3768					
1/4		1479	1891	2787	3754				
5/16			1479	2147	2958				
3/8			1209	1749	2417				
1/2			882	1266	1735	2289			
5/8			697	995	1351	1778			
3/4			583	825	1109	1450	1692	1962	
7/8			498	697	939	1223	1422	1650	
1			427	611	825	1067	1223	1422	1593

Factor of safety = 5, considering tensile strength to be 30.000 psi at room temperature

Size thread (inches)	Threaded connections			
	Straight		Tee or elbow	
	female	male	female	male
1/8"	7300	12300	5700	9700
1/4"	7300	9900	5400	7800
3/8"	5500	9000	5000	7500
1/2"	4900	8900	4600	7400
3/4"	3700	8300	4100	6900
1"	4300	5900		

- For others thickness not shows in this tables, it will be necessary to test to validate its use.
- The admisible pressures indicated here corresponds to a usage under room temperature and normal workable conditions (factor of safety 4 or 5).  
In case of using high temperatures or over pressures and hard vibrations, it will be necessary to apply a factor in order to reduce such maximun pressure.  
Contact our Technical Department.