

SEAMLESS STAINLESS STEEL TUBE

IMPERIAL RANGE .

IMPERIAL RANGE:								
	WALL	WALL	WALL	MAXIMUM WORKING	MAXIMUM WORKING	MINIMUM BURSTING	MINIMUM BURSTING	
TUBE O.D.	THICKNESS	THICKNESS	THICKNESS	PRESSURE	PRESSURE	PRESSURE	PRESSURE	WEIGHT
(INCHES)	(INCHES)	(SWG)	(BWG)	(PSI)	(BAR)	(PSI)	(BAR)	(KG/MTR)
1/8	0.028	22		8600	593	34,400	2372	0.436
1/8	0.036	20		10,900	752	43,600	3006	0.515
1/4	0.028	22		4000	275	16,000	1103	0.099
1/4	0.036	20		5100	352	20,400	1407	0.124
1/4	0.048	18		7500	517	30,000	2069	0.157
1/4	0.064	16		10,300	710	41,200	2841	0.192
1/4	0.080	14		11,900	820	47,700	3285	0.219
3/8	0.036	20		3300	227	13,200	910	0.127
3/8	0.048	18		4800	331	19,200	1324	0.253
3/8	0.064	16		6600	455	26,400	1820	0.321
3/8	0.080	14		7900	545	31,800	2190	0.381
3/8	0.104	12		10,300	710	41,400	2855	0.455
3/8	0.125			12,400	855	49,700	3425	0.504
1/2	0.036	20		2500	172	10,000	690	0.270
1/2	0.048	18		3500	241	14,000	965	0.350
1/2	0.064	16		4800	331	19,200	1324	0.451
1/2	0.083		14	6300	434	25,200	1738	0.550
3/4	0.048	18		2400	170	9800	680	0.544
3/4	0.064	16		3300	228	13,200	910	0.709
3/4	0.080	14		4300	296	17,200	1186	0.866
3/4	0.104	14		5100	350	20,600	1420	1.08
1	0.080	14		3200	221	12,800	883	1.19

Special Note: The above working pressures are for guidance purposes only. Your design pressure should include a suitable allowance over the working pressure to allow for possible fluctuations of pressure during operation. This allowance should be separately determined for each application by your design department.

System Temperature

Operating temperature, is another factor in determining the proper tubing material. Stainless steel tubing is suitable for higher temperature media. Special alloys such as Alloy 600 are recommended for extremely high temperatures. The table below lists derating factors which should be applied to the recommended working pressures of tubing for elevated temperature conditions. Simply locate the correct factor in the table below and multiply this to the appropriate working pressure to achieve the elevated temperature working pressure.

Temperature Derating Factors								
Temperature (°F)	316 SS &6Mo	304 SS	Monel 400					
100	1.00	1.00	1.00					
200	1.00	.84	.88					
300	1.00	.75	.82					
400	.97	.69	.79					
500	.90	.65	.79					
600	.85	.61	.79					
700	.82	.59	.76					
800	.80	.56	.76					
900	.78	.54						

Example: 1/2" x 1.0 wall seamless stainless steel tubing has a working pressure of 245 bar @ room temperature. If the system were to operate @ 800° F, a factor of 80% (or .80) would apply (see Table left) and the "at temperature" system pressure would be 245 bar x .80 = 196 bar.