

# SANITARY WELDED TUBE SPECIFICATIONS

We inventory a large quantity of welded and seamless stainless tubing to meet your immediate needs. Readily available in 20-foot lengths from 1/4" OD to 6" OD, are types 304L and 316L – produced to ASTM specifications A249, A269, or A270. Other diameters, specifications, and lengths available on special order. Large orders of tubing are packaged in tri-wall corrugated cartons equipped with wooden ends.

## POLISH ID/OD Sanitary Finish

Polished to 180 grit OD and ID meeting or exceeding 3A standards. After polishing, special attention is given to cleanliness by washing and packaging in individual sealed plastic sleeves.

## Other Finishes

Tubing also available in ID or OD polish only or provided unpolished (bright annealed).

## Special Pharmaceutical & Electronic Finishes

ID polish to 15 RA or 20 RA, followed by electropolishing is available on special orders.

STAINLESS STEEL TUBING SPECIFICATIONS			
Size (Tube OD)	Gauge	Wall	lbs/ft
1/2"	18	0.049	0.2365
3/4"	18	0.049	0.3670
1"	18	0.049	0.4980
1"	16	0.065	0.6490
1 1/2"	16	0.065	0.9962
2"	16	0.065	1.3430
2 1/2"	16	0.065	1.6900
3"	16	0.065	2.0370
4"	14	0.083	3.4723
6"	12	0.109	6.9230
8"	12	0.109	9.3000

# ENGINEERING DATA

## \*LOSS OF HEAD IN FEET DUE TO FRICTION IN 100FT. OF OD SANITARY TUBING

S.	Lbs.	Lbs.						
CPM	Min.	Hr.	1	1 1/2	2	2 1/2	3	4
5	42	2520	1.93	0.27				
10	83	4980	10.26	1.08				
15	125	7500	16.05	2.23				
20	167	10020	28.29	3.81				
25	208	12480	43.70	5.02				
30	250	15000	63.25	8.26				
35	292	17520	85.10	11.61				
40	333	19980		14.99	0.20			
45	374	22440		18.74	1.76		0.75	
50	416	24960			5.61		1.86	0.80
75	624	37440			12.23		4.14	1.70
100	831	49860			21.75		7.36	3.01
.80								
125	1038	62280			34.27		11.24	4.57
1.21								
150	1245	74700			48.76		16.10	6.55
1.72								
75	1425	85500				21.75	8.55	2.28
200	1659	99540				28.68	11.59	2.90

\*Established on products with viscosity and density similar to water or milk.

## SANITARY TUBE VOLUME PER FOOT

Tube Size	U.S. Gallon	Imp. Gallons	Cu. In.
1	0.033	0.0275	7.67
1 1/2	0.080	0.067	18.52
2	0.143	0.119	32.95
2 1/2	0.229	0.191	52.94
3	0.336	0.280	77.63
4	0.611	0.500	141.16

## \*90° ELBOW FRICTION EQUIVALENT

1"	ELL= 6ft.	Straight Pipe
1 1/2"	ELL= 8ft.	" "
2"	ELL= 8ft.	" "
2 1/2"	ELL= 11 ft.	" "
3"	ELL = 15ft.	" "
4"	ELL = 15ft.	" "

## RECOMMENDED TUBE SIZE LOW VISCOSITY PRODUCTS

0 – 4250 Lbs. per Hour	1"
4250 – 14500	" 1 1/2"
14500 – 33400	" 2"
33400 – 51900	" 2 1/2"
51900 – 82500	" 3"
Greater than 82500	" 4"

## NOTE:

For higher viscosity products increase tube size, our Engineering Department's facilities are at your service.

# THEORETICAL INTERNAL BURSTING PRESSURES

Theoretical Bursting Pressure, in pounds for welded stainless tubes. Based on Barlow's Formula:  $P = \frac{2ST}{D}$

P Bursting pressure in psi. D = Outside diameter of tube in inches. S = Fiber stress of 75,000 psi ultimate for bursting pressure. T = Wall thickness. The mill pressures used when hydrotesting are usually based on fiber stress of 20,000 psi (26.7% of burst pressures listed below) unless specifications require other pressures.

Specifications and code rulings assign maximum stresses in use which are dependent on factors such as inspection requirements, temperatures encountered, service life expected and alloy.

WALL THICKNESS – INCHES & B.W.G.																		
O.D. inches	0.020 25	0.022 24	0.025 23	0.028 22	0.032 21	0.035 20	0.042 19	0.049 18	0.058 17	0.065 16	0.072 15	0.083 14	0.095 13	0.109 12	0.120 11	0.134 10	0.148 9	0.185 8
1/8	24000	26400	30000	33600	38400	42000	50400	58800										
1/4	12000	13200	15000	16800	19200	21000	25200	29400	34800	39000								
3/8	8000	8800	10000	11200	12800	14000	16800	19600	23200	26000								
1/2	6000	6600	7500	8400	9600	10500	12600	14700	17400	19500	21600	24900	28500					
5/8	4800	5300	6000	6725	7675	8400	10075	11750	13925	15600	17275	19925	22800					
3/4	4000	4400	5000	5600	6400	7000	8400	9800	11600	13000	14400	16600	19000	21800				
7/8	3425	3750	4300	4800	5475	6000	7200	8400	9950	11150	12350	14225	16275	18675				
1	3000	3300	3750	4200	4800	5250	6300	7350	8700	9750	10800	12450	14250	16350	18000	20100	22200	
1 1/8			3325	3750	4275	4650	5600	6550	7750	8650	9600	11050	12650	14550	16000	17875	19725	
1 1/4			3000	3350	3850	4200	5050	5875	6950	7800	8650	9950	11400	13075	14400	16075	17750	
1 3/8			2725	3050	3500	3825	4575	5350	6325	7100	7850	9050	10350	11900	13100	14625	16150	
1 1/2			2500	2800	3200	3500	4200	4900	5800	6500	7200	8300	9500	10900	12000	13400	14800	
1 5/8			2300	2575	2950	3225	3875	4525	5350	6000	6650	7650	8775	10050	11075	12375	13650	
1 3/4			2150	2400	2750	3000	3600	4200	4975	5575	6175	7125	8150	9350	10275	11475	12675	
1 7/8						2800	3350	3925	4650	5200	5750	6650	7600	8725	9600	10725	11850	
2						2625	3150	3675	4350	4875	5400	6225	7125	8175	9000	10050	11100	
2 1/8						2475	2975	3450	4100	4600	5075	5850	6700	7700	8475	9450	10450	
2 1/4							2800	3275	3875	4350	4800	5550	6350	7275	8000	8975	9875	
2 3/8							2650	3100	3675	4100	4550	5250	6000	6900	7575	8475	9350	10425
2 1/2							2525	2950	3475	3900	4325	4975	5700	6550	7200	8050	8875	9900
2 5/8						2400	2800	3325	3725	4125	4750	5425	6225	6850	7650	8450	9425	
2 3/4							2675	3150	3550	3925	4525	5175	5950	6550	7300	8075	9000	
2 7/8								2550	3025	3400	3750	4325	4950	5675	6250	7000	7725	8600
3								2450	2900	3250	3600	4150	4750	5450	6000	6700	7400	8250
3 1/8								2350	2775	3125	3450	3975	4550	5225	5550	6425	7100	7925
3 1/4								2250	2675	3000	3325	3825	4375	5025	5525	6175	6825	7600
3 3/8								2175	2575	2875	3200	3675	4225	4850	5325	5950	6575	7325
3 1/2								2100	2475	2775	3075	3550	4075	4675	5150	5750	6350	7075
3 5/8								2025	2400	2675	2975	3425	3925	4500	4950	5550	6100	6825
O.D. inches	0.049 18	0.058 17	0.065 16	0.072 15	0.083 14	0.095 13	0.109 12	0.120 11	0.134 10	0.148 9	0.165 8	0.180 7	0.203 6	0.220 5	0.238 4	0.259 3	0.284 2	0.300 1
3 3/4	1950	2325	2600	2875	3325	3800	4350	4800	5350	5900	6600	7200	8125	8800				
3 7/8	1900	2250	2500	2775	3200	3675	4200	4650	5175	5725	6375	6975	7850	8500				
4	1825	2175	2425	2700	3100	4075	4090	4500	5025	5550	6175	6750	7600	8250				
4 1/4	1725	2050	2300	2550	2925	3350	3850	4225	4725	5225	5825	6350	7150	7750				
4 1/2	1625	1925	2150	2400	2750	3150	3625	4000	4450	4925	5500	6000	6750	7325	7925			
4 3/4	1550	1825	2050	2275	2625	3000	3450	3775	4225	4675	5200	5675	6400	6950	7500			
5	1475	1750	1925	2150	2500	2850	3275	3600	4025	4450	4950	5400	6100	6600	7150			
5 1/4	1400	1650	1850	2050	2375	2700	3100	3425	3825	4225	4700	5150	5800	6275	6800			
5 1/2	1325	1575	1775	1950	2250	2600	2975	3275	3650	4025	4500	4900	5550	6000	6500	7050		
5 3/4	1275	1500	1700	1875	2150	2475	2850	3125	3500	3850	4300	4700	5300	5725	6200	6750		
6	1220	1450	1625	1800	2075	2375	2325	3000	3350	3700	4125	4500	5075	5500	5950	6475	7100	
8	925	1100	1225	1350	1550	1775	2050	2250	2525	2775	3100	3375	3800	4125	4475	4850	5325	5625
10	750	875	975	1075	1250	1425	1625	1800	2000	2225	2475	2700	3050	3300	3575	3875	4250	4500
12	625	725	825	900	1050	1200	1375	1500	1675	1850	2075	2250	2550	2750	2975	3250	3550	3750
14	525	625	700	775	900	1025	1175	1300	1450	1600	1775	1925	2175	2350	2550	2775	3050	3225
16	450	550	600	675	775	900	1025	1125	1250	1400	1550	1700	1900	2050	2225	2425	2675	2825
18	400	475	550	600	700	800	900	1000	1125	1250	1375	1500	1700	1850	1975	2150	2350	2500
20	375	450	500	550	625	725	825	900	1000	1100	1250	1350	1525	1650	1775	1950	2125	2250
24	300	375	400	450	525	600	675	750	850	925	1025	1125	1250	1375	1475	1625	1775	1875
30	250	300	325	350	425	475	550	600	675	750	825	900	1025	1100	1200	1300	1425	1500

# STAINLESS STEEL TUBING

## THEORETICAL WEIGHTS\*

WALL THICKNESS		OUTSIDE DIAMETER IN INCHES AD POUNDS PER FOOT											
Fraction or B.W.G	Decimal	1/8 0.125	3/16 0.187	1/4 0.250	5/16 0.313	3/8 0.375	7/16 0.438	1/2 0.500	9/16 0.563	5/8 0.625	11/16 0.688	3/4 0.750	13/16 0.813
31	0.010	0.0124	0.0192	0.0258	0.0327	0.0394	0.0461	0.0528	0.0597	0.0663	0.0731	0.0797	0.0866
30	0.012	0.0146	0.0228	0.0308	0.0390	0.0469	0.0551	0.0631	0.0713	0.0793	0.0874	0.0955	0.1037
29	0.013	0.0157	0.0245	0.0332	0.0421	0.0508	0.0596	0.0682	0.0771	0.0858	0.0946	0.1033	0.1121
28	0.014	0.0167	0.0262	0.0356	0.0451	0.0545	0.0640	0.0734	0.0829	0.0923	0.1017	0.1110	0.1206
27 or 1/64	0.016	0.0188	0.0297	0.0404	0.0513	0.0619	0.0728	0.0835	0.0944	0.1051	0.1159	0.1266	0.1375
26	0.018	0.0208	0.0330	0.0450	0.0572	0.0692	0.0815	0.0936	0.1058	0.1178	0.1300	0.1420	0.1542
25	0.020	0.0226	0.0362	0.0496	0.0632	0.0765	0.0901	0.1035	0.1171	0.1304	0.1440	0.1574	0.1710
24	0.022	0.0244	0.0394	0.0541	0.0690	0.0837	0.0986	0.1133	0.1283	0.1430	0.1580	0.1727	0.1877
23	0.025	0.0269	0.0439	0.0607	0.0776	0.0944	0.1113	0.1280	0.1450	0.1617	0.1787	0.1954	0.2124
22	0.028	0.0293	0.0482	0.0670	0.0860	0.1048	0.1238	0.1424	0.1615	0.1802	0.1993	0.2179	0.2369
21	0.032	0.0321	0.0538	0.0752	0.0969	0.1183	0.1401	0.1614	0.1832	0.2046	0.2263	0.2477	0.2694
20	0.035	0.0339	0.0577	0.0812	0.1049	0.1283	0.1520	0.1754	0.1993	0.2226	0.2464	0.2698	0.2936
19	0.042			0.0942	0.1227	0.1508	0.1793	0.2073	0.2359	0.2640	0.2925	0.3206	0.3491
18	0.049			0.1062	0.1395	0.1722	0.2055	0.2382	0.2715	0.3043	0.3376	0.3703	0.4036
17	0.058			0.1200	0.1595	0.1983	0.2376	0.2764	0.3158	0.3545	0.3939	0.4328	0.4721
1/16	0.063			0.1270	0.1698	0.2119	0.2547	0.2968	0.3396	0.3817	0.4245	0.4666	0.5094
16	0.065			0.1296	0.1738	0.2172	0.2605	0.3049	0.3490	0.3925	0.4366	0.4800	0.5242
15	0.072							0.3322	0.3812	0.4292	0.4782	0.5263	0.5752
14	0.083							0.3731	0.4295	0.4851	0.5414	0.5969	0.6532
13	0.095									0.5428	0.6074	0.6709	0.7354
12 or 7/64	0.109											0.7533	0.8273
11	0.120												
1/8	0.125												
10	0.134												
9/64	0.141												
9	0.148												
5/32	0.156												
8	0.165												
7	0.180												
6 or 13/64	0.203												
5	0.220												
4	0.238												
1/4	0.250												
3	0.259												
9/32	0.281												
2	0.284												
1	0.300												
5/16	0.313												

\*The weights on these and the following pages were calculated according to the formula:

$$W = 10.78 (D-t) \times t$$

where

W = the weight in pounds, of one foot of tubing

D = the outside diameter of the tube in inches,

and

t = the wall thickness in inches

This formula involves the density of the tubing material. The formula, and therefore, the values given in these tables apply to types 302, 304, 305, 308, 309, 310, 316, 317, and 321. For other materials, multiply the figure in the tables by the following factors:

Type 347 and 348 .....	1.014
Type 409 .....	0.972
Hastelloy B .....	1.168
Hastelloy C .....	1.129
Incoloy 800 .....	1.014
Incoloy 825 .....	1.028
Monel 400 .....	1.115
Titanium .....	0.570
Low Carbon Steel .....	0.993

# STAINLESS STEEL TUBING

## THEORETICAL WEIGHTS (continued)

WALL THICKNESS		OUTSIDE DIAMETER IN INCHES AD POUNDS PER FOOT											
Fraction or B.W.G	Decimal	7/8 0.875	15/16 0.938	1 1.000	1 1/16 1.063	1 1/8 1.125	1 3/16 1.188	1 1/4 1.250	1 5/16 1.313	1 3/8 1.375	1 7/16 1.438	1 1/2 1.500	1 5/8 1.625
31	0.010	0.0933	0.1000	0.1067	0.1136	0.1202	0.1270	0.1336	0.1405				
30	0.012	0.1116	0.1198	0.1278	0.1360	0.1439	0.1521	0.1602	0.1683	0.1763	0.1845		
29	0.013	0.1208	0.1296	0.1383	0.1472	0.1558	0.1646	0.1733	0.1822	0.1909	0.1997		
28	0.014	0.1299	0.1395	0.1488	0.1583	0.1677	0.1772	0.1865	0.1960	0.2054	0.2149	0.2243	
27 or 1/64	0.016	0.1482	0.1591	0.1697	0.1806	0.1913	0.2022	0.2129	0.2237	0.2344	0.2453	0.2560	0.2775
26	0.018	0.1663	0.1786	0.1906	0.2028	0.2148	0.2270	0.2390	0.2514	0.2634	0.2756	0.2876	0.3118
25	0.020	0.1843	0.1980	0.2113	0.2249	0.2382	0.2519	0.2652	0.2788	0.2921	0.3058	0.3191	0.3460
24	0.022	0.2023	0.2172	0.2320	0.2469	0.2617	0.2766	0.2912	0.3062	0.3209	0.3359	0.3506	0.3802
23	0.025	0.2291	0.2461	0.2628	0.2797	0.2965	0.3134	0.3302	0.3472	0.3639	0.3809	0.3975	0.4312
22	0.028	0.2557	0.2747	0.2935	0.3124	0.3311	0.3502	0.3689	0.3879	0.4066	0.4256	0.4444	0.4821
21	0.032	0.2908	0.3125	0.3339	0.3557	0.3770	0.3988	0.4202	0.4419	0.4634	0.4851	0.5065	0.5496
20	0.035	0.3170	0.3407	0.3641	0.3879	0.4113	0.4351	0.4585	0.4822	0.5056	0.5294	0.5528	0.5999
19	0.042	0.3772	0.4057	0.4338	0.4623	0.4904	0.5189	0.5470	0.5755	0.6036	0.6321	0.6602	0.7168
18	0.049	0.4364	0.4696	0.5024	0.5356	0.5684	0.6018	0.6345	0.6678	0.7005	0.7338	0.7765	0.8326
17	0.058	0.5109	0.5503	0.5890	0.6284	0.6672	0.7066	0.7454	0.7848	0.8235	0.8629	0.9017	0.9799
1 1/16	0.063	0.5515	0.5943	0.6365	0.6792	0.7241	0.7641	0.8063	0.8491	0.8912	0.9340	0.9716	1.061
16	0.065	0.5676	0.6117	0.6553	0.6994	0.7429	0.7870	0.8304	0.8746	0.9180	0.9621	1.006	1.093
15	0.072	0.6234	0.6722	0.7204	0.7692	0.8167	0.8663	0.9144	0.9634	1.011	1.060	1.108	1.205
14	0.083	0.7088	0.7651	0.8206	0.8769	0.9318	0.9888	1.044	1.100	1.156	1.212	1.268	1.380
13	0.095	0.7989	0.8634	0.9269	0.9914	1.055	1.119	1.183	1.242	1.311	1.376	1.439	1.567
12 or 7/64	0.109	0.8995	0.9743	1.047	1.121	1.194	1.268	1.341	1.415	1.488	1.562	1.634	1.782
11	0.120					1.300	1.382	1.462	1.543	1.623	1.705	1.786	1.947
1 1/8	0.125					1.347	1.432	1.516	1.601	1.685	1.770	1.853	2.022
10	0.134					1.431	1.522	1.612	1.703	1.793	1.884	1.973	2.154
9/64	0.141						1.592	1.686	1.782	1.876	1.971	2.065	2.256
9	0.148												
5/32	0.156												
8	0.165												
7	0.180												
6 or 13/64	0.203												
5	0.220												
4	0.238												
1/4	0.250												
3	0.259												
9/32	0.281												
2	0.284												
1	0.300												
5/16	0.313												

Note: For aluminum tube, multiply X .33 for approximate weight.

# STAINLESS STEEL TUBING

## THEORETICAL WEIGHTS (continued)

WALL THICKNESS		OUTSIDE DIAMETER IN INCHES AD POUNDS PER FOOT											
Fraction or B.W.G	Decimal	1 3/4 1.750	1 7/8 1.875	2 2.000	2 1/8 2.125	2 1/4 2.250	2 3/8 2.375	2 1/2 2.500	2 5/8 2.625	2 3/4 2.750	2 7/8 2.875	3 3.000	3 1/8 3.125
31	0.010												
30	0.012												
29	0.013												
28	0.014												
27 or 1/64	0.016	0.2991	0.3206	0.3422									
26	0.018	0.3361	0.3603	0.3846									
25	0.020	0.3730	0.3999	0.4269	0.4538	0.4808	0.5077	0.5347	0.5616	0.5886	0.6155	0.6425	0.6694
24	0.022	0.4098	0.4395	0.4692	0.4987	0.5284	0.5580	0.5877	0.6173	0.6470	0.6766	0.7063	0.7359
23	0.025	0.4650	0.4987	0.5323	0.5660	0.5996	0.6333	0.6670	0.7007	0.7344	0.7681	0.8018	0.8355
22	0.028	0.5198	0.5575	0.5923	0.6330	0.6708	0.7085	0.7462	0.7839	0.8216	0.8593	0.8971	0.9348
21	0.032	0.5927	0.6359	0.6790	0.7221	0.7652	0.8083	0.8515	0.8945	0.9376	0.9807	1.024	1.067
20	0.035	0.6472	0.6943	0.7415	0.7886	0.8259	0.8830	0.9301	0.9773	1.025	1.072	1.118	1.166
19	0.042	0.7734	0.8300	0.8866	0.9433	0.9998	1.056	1.113	1.170	1.226	1.283	1.340	1.396
18	0.049	0.8986	0.9647	1.031	1.096	1.163	1.228	1.295	1.361	1.426	1.493	1.559	1.625
17	0.058	1.058	1.137	1.214	1.292	1.371	1.449	1.527	1.605	1.684	1.761	1.839	1.918
1/16	0.063	1.146	1.230	1.315	1.400	1.486	1.571	1.655	1.704	1.825	1.910	1.995	2.079
16	0.065	1.181	1.269	1.356	1.443	1.531	1.619	1.706	1.794	1.882	1.969	2.056	2.144
15	0.072	1.302	1.399	1.497	1.594	1.691	1.788	1.885	1.982	2.078	2.175	2.273	2.370
14	0.083	1.485	1.604	1.715	1.827	1.939	2.051	2.163	2.274	2.386	2.498	2.610	2.723
13	0.095	1.695	1.823	1.951	2.079	2.207	2.335	2.463	2.591	2.719	2.848	2.975	3.103
12 or 7/64	0.109	1.928	2.075	2.222	2.369	2.516	2.663	2.809	2.957	3.103	3.250	3.397	3.544
11	0.120	2.109	2.270	2.432	2.594	2.756	2.917	3.079	3.240	3.403	3.564	3.726	3.887
1/8	0.125	2.190	2.358	2.527	2.695	2.864	3.032	3.201	3.370	3.537	3.706	3.874	4.043
10	0.134	2.335	2.516	2.695	2.876	3.057	3.237	3.418	3.599	3.719	3.960	4.141	4.321
9/64	0.141	2.446	2.636	2.825	3.016	3.206	3.395	3.583	3.780	3.970	4.150	4.350	
9	0.148			2.955	3.155	3.354	3.553	3.753	3.952	4.152	4.351	4.551	4.751
5/32	0.156						3.732	3.942	4.152	4.362	4.572	4.783	4.994
8	0.165						3.931	4.153	4.376	4.598	4.820		5.265
7	0.180												
6 or 13/64	0.203												
5	0.220												
4	0.238												
1/4	0.250												
3	0.259												
9/32	0.281												
2	0.284												
1	0.300												
5/16	0.313												

Note: For aluminum tube, multiply X .33 for approximate weight.

# STAINLESS STEEL TUBING

## THEORETICAL WEIGHTS (continued)

WALL THICKNESS		OUTSIDE DIAMETER IN INCHES AD POUNDS PER FOOT											
Fraction or B.W.G	Decimal	3 1/4 3.250	3 3/8 3.375	3 1/2 3.500	3 5/8 3.625	3 3/4 3.750	3 7/8 3.875	4 4.000	4 1/8 4.125	4 1/4 4.250	4 3/8 4.375	4 1/2 4.500	4 5/8 4.625
31	0.010												
30	0.012												
29	0.013												
28	0.014												
27 or 1/64	0.016												
26	0.018												
25	0.020	0.6964	0.7233	0.7503	0.7772	0.8042	0.8311	0.8581					
24	0.022	0.7656	0.7952	0.8248	0.8545	0.8841	0.9138	0.9434					
23	0.025	0.8691	0.9028	0.9365	0.9702	1.004	1.038	1.071					
22	0.028	0.9725	1.010	1.048	1.086	1.123	1.161	1.199	1.237	1.274	1.312	1.350	1.388
21	0.032	1.110	1.153	1.196	1.239	1.283	1.326	1.369	1.412	1.455	1,498	1.541	1.584
20	0.035	1.213	1.260	1.307	1.355	1.402	1.449	1.496	1.543	1.591	1.637	1.685	1.732
19	0.042	1.453	1.509	1.566	1.622	1.679	1.735	1.792	1.848	1.906	1.961	2.019	2.075
18	0.049	1.691	1.757	1.823	1.889	1.955	2.021	2.088	2.153	2.219	2.285	2.351	2.418
17	0.058	1.996	2.074	2.152	2.231	2.309	2.386	2.465	2.543	2.622	2.699	2.778	2.856
1 1/16	0.063	2.164	2.249	2.335	2.420	2.504	2.589	2.674	2.759	2.844	2.928	3.013	3.098
16	0.065	2.232	2.320	2.408	2.494	2.582	2.670	2.758	2.845	2.932	3.020	3.108	3.196
15	0.072	2.467	2.564	2.661	2.758	2.855	2.952	3.049	3.147	3.243	3.340	3.437	3.534
14	0.083	2.834	2.946	3.058	3.170	3.282	3.393	3.505	3.617	3.729	3.841	3.952	4.064
13	0.095	3.231	3.360	3.488	3.616	3.743	3.871	4.000	4.128	4.256	4.383	4.511	4.640
12 or 7/64	0.109	2.692	3.838	3.985	4.132	4.279	4.426	4.573	4.719	4.867	5.013	5.160	5.307
11	0.120	4.049	4.212	4.373	4.535	4.696	4.858	5.020	5.182	5.343	5.505	5.666	5.829
1 1/8	0.125	4.212	4.380	4.549	4.717	4.885	5.053	5.222	5.391	5.559	5.728	5.896	6.065
10	0.134	4.501	4.682	4.863	5.043	5.224	5.405	5.585	5.766	5.946	6.127	6.307	6.488
9/64	0.141												
9	0.148	4.949	5.149	5.341	5.548	5.747	5.947	6.147	6.346	6.545	6.744	6.944	7.144
5/32	0.156	5.204	5.414	5.624	5.835	6.045	6.255	6.465	6.676	6.896	7.096	7.306	7.517
8	0.165	5.488	5.711	5.933	6.155	6.377	6.600	6.822	7.044	7.267	7.489	7.711	7.934
7	0.180												
6 or 13/64	0.203												
5	0.220												
4	0.238												
1 1/4	0.250												
3	0.259												
9/32	0.281												
2	0.284												
1	0.300												
5/16	0.313												

Note: For aluminum tube, multiply X .33 for approximate weight.

# STAINLESS STEEL TUBING

## THEORETICAL WEIGHTS (continued)

WALL THICKNESS		OUTSIDE DIAMETER IN INCHES AD POUNDS PER FOOT											
Fraction or B.W.G	Decimal												
31	0.010												
30	0.012												
29	0.013												
28	0.014												
27 or 1/64	0.016												
26	0.018												
25	0.020												
24	0.022												
23	0.025												
22	0.028	1.425	1.463	1.501									
21	0.032	1.628	1.671	1.714									
20	0.035	1.779	1.826	1.874	1.921	1.967	2.015	2.062	2.109	2.156	2.203	2.251	
19	0.042	2.132	2.188	2.245	2.302	2.358	2.415	2.471	2.528	2.584	2.641	2.698	
18	0.049	2.483	2.550	2.616	2.681	2.748	2.813	2.879	2.945	3.011	3.077	3.143	
17	0.058	2.934	3.012	3.090	3.169	3.246	3.325	3.403	3.481	3.559	3.637	3.715	
1/16	0.063	3.184	3.269	3.353	3.438	3.523	3.608	3.693	3.777	3.862	3.948	4.033	4.118
16	0.065	3.283	3.371	3.458	3.546	3.633	3.721	3.809	3.897	3.984	4.071	4.159	4.247
15	0.072	3.631	3.728	3.825	3.923	4.020	4.117	4.214	4.310	4.407	4.504	4.601	4.699
14	0.083	4.176	4.288	4.400	4.511	4.623	4.735	4.848	4.960	5.071	5.183	5.295	5.407
13	0.095	4.768	4.896	5.024	5.151	5.280	5.408	5.536	5.664	5.792	5.920	6.048	6.176
12 or 7/64	0.109	5.454	5.601	5.748	5.894	6.042	6.188	6.336	6.482	6.629	6.776	6.923	7.069
11	0.120	5.990	6.152	6.313	6.475	6.637	6.799	6.960	7.122	7.283	7.446	7.607	7.769
1/8	0.125	6.233	6.401	6.570	6.738	6.907	7.075	7.244	7.413	7.580	7.749	7.917	8.086
10	0.134	6.669	6.849	7.030	7.211	7.391	7.571	7.752	7.933	8.113	8.294	8.475	8.655
9/64	0.141												
9	0.148	7.343	7.543	7.742	7.942	8.141	8.340	8.540	8.739	8.939	9.138	9.338	9.537
5/32	0.156	7.727	7.937	8.147	8.358	8.568	8.778	8.987	9.197	9.407	9.618	9.828	10.04
8	0.165	8.157	8.379	8.601	8.824	9.046	9.268	9.489	9.712	9.934	10.16	10.38	10.60
7	0.180							10.32	10.57	10.81	11.05	11.29	11.54
6 or 13/64	0.203							11.59	11.87	12.14	12.41	12.69	12.96
5	0.220							12.52	12.82	13.11	13.41	13.71	14.00
4	0.238							13.50	13.82	14.14	14.46	14.78	15.10
1/4	0.250												
3	0.259												
9/32	0.281												
2	0.284												
1	0.300												
5/16	0.313												

Note: For aluminum tube, multiply X .33 for approximate weight.