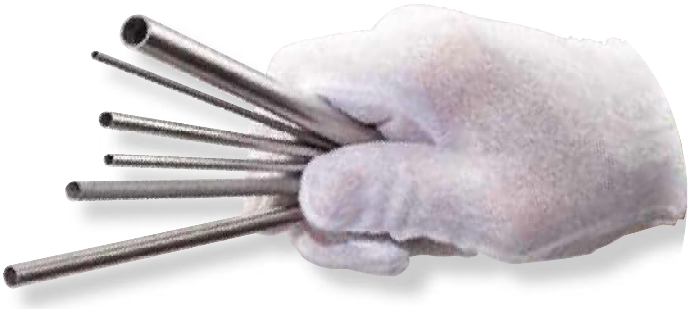
Hypodermic Tubing Selection Guide



The tubing below is available in standard 10 foot lengths. Eagle can cut your order to shorter lengths as required.

• Full hard #3 temper • T304 • T316

Gauge Size	O.D. Range (Inches)	Nominal Wall (In.)	I.D. Range (Inches)	Gauge Size	O.D. Range (Inches)	Nominal Wall (In.)	I.D. Range (Inches)	Gauge Size	O.D. Range (Inches)	Nominal Wall (In.)	I.D. Range (Inches)
3 STD	.258/.260	.015	.226/.232	13 STD	.094/.096	.012	.069/.073	20XTW	.0355/.036	.004	.026/.0285
4 STD	.236/.240	.020	.195/.201	13TW	.094/.096	.009	.075/.079	20V	.034/.0345	.004	.0255/.0275
5 STD	.218.220	.015	.187/.191	13 XTW	.094/.096	.005	.083/.087	20STD	.032/.0325	.006	.0195/.021
5 TW	.218/.220	.010	.196/.200	14 STD	.082/.084	.010	.061/.065	21 TW	.032/.0325	.005	.022/.024
6 STD	.202/.204	.015	.170/.1765	14 SP	.082/.084	.008	.065/.069	21XTW	.032/.0325	.002	.0280/.0295
6TW	.202/.204	.010	.180/.186	14 TW	.082/.084	.0055	.071/.073	21 V	.030/.0305	.0035	.023/.0245
6V	.187/.189	.010	.165/.171	14 XTW	.082/.084	.003	.075/.079	22 STD	.028/.0285	.006	.0155/.017
7 STD	.179/.181	.015	.147/.153	14 V	.077/.079	.007	.062/.066	22 TW	.028/.0285	.004	.019/.0205
7TW	.179/.181	.010	.158/.162	15 STD	.0715/.0725	.009	.0525/.0555	22 XTW	.028/.0285	.0025	.0225/.024
7V	.171/.173	.011	.147/.153	15 TW	.0715/.0725	.006	.0595/.0615	22 V	.026/.027	.003	.0195/.021
8 STD	.164/.166	.015	.132/.138	15 XTW	.0715/.0725	.004	.062/.066	23 STD	.025/.0255	.006	.0125/.014
8TW	.164/.166	.010	.143/.147	15 V	.0675/.0685	.007	.0525/.0555	23 TW	.025/.0255	.004	.0165/.018
8XTW	.164/.166	.009	.145/.149	16 STD	.0645/.0655	.009	.0455/.0485	23 XTW	.025/.0255	.002	.0185/.020
8V	.155/.157	.010	.133/.139	16 TW	.0645/.0655	.006	.0525/.0545	23V	.023/.0235	.003	.0165/.018
9 STD	.147/.149	.015	.115/.121	16XTW	.0645/.0655	.004	.055/.058	24 STD	.022/.0225	.005	.0115/.013
9TW	.147/.149	.010	.126/.130	16 V	.0615/.0625	.005	.0505/.0535	24XTW	.022/.0225	.003	.0155/.017
9XTW	.147/.149	.006	.134/.138	17 STD	.0575/.0585	.008	.0405/.0435	24V	.021/.0215	.002	.0155/.017
9V	.140/.142	.011	.117/.121	17 TW	.0575/.0585	.005	.0465/.0485	25 STD	.020/.0205	.005	.0095/.011
10 STD	.133/.135	.014	.104/.108	17 XTW	.0575/.0585	.003	.051/.053	25 TW	.020/.0205	.004	.0115/.013
10 TW	.133.135	.010	.112/.116	17 V	.0555/.0565	.005	.045/.047	25XTW	.020/.0205	.002	.0155/.017
10XTW	.133/.135	.008	.1165/.120	18 STD	.0495/.0505	.0085	.0315/.0345	25V	.019/.0195	.002	.0135/.015
10 V	.125/.127	.010	.104/.108	18 SP	.0495/.0505	.006	.0375/.0395	26 STD	.018/.0185	.004	.0095/.011
11 STD	.119/.121	.013	.092/.096	18 TW	.0495/.0505	.004	.041/.043	27 STD	.016/.0165	.004	.0075/.009
11 TW	.119/.121	.010	.098/.102	18 V	.0455/.0465	.0065	.0315/.0345	27 TW	.016/.0165	.003	.0095/.011
11XTW	.119/.121	.007	.104/.108	19 STD	.0415/.0425	.0075	.0255/.0285	27 SP	.016/.0165	.002	.0115/.0125
11 V	.114/.116	.010	.092/.096	19 TW	.0415/.0425	.005	.0315/.0335	28 STD	.014/.0145	.0035	.0065/.008
12 STD	.108/.110	.012	.083/.087	19 XTW	.0415/.0425	.0035	.034/.036	29 STD	.013/.0135	.003	.0065/.008
12 TW	.108/.110	.009	.089/.093	19 V	.0385/.0395	.006	.0255/.0285	30 STD	.012/.0125	.003	.0055/.007
12 XTW	.108/.110	.0045	.098/.102	20 STD	.0355/.036	.006	.023/.0245	30TW	.012/.0125	.002	.0065/.008
12 V	.099/.101	.008	.080/.083	20 TW	.0355/.036	.005	.025/.027	31 STD	.010/.0105	.0025	.0045/.006
								32 STD	.009/.0095	.0025	.0035/.005
								33 STD	.008/.0085	.002	.0035/.005

Note: Special sizes available on request!

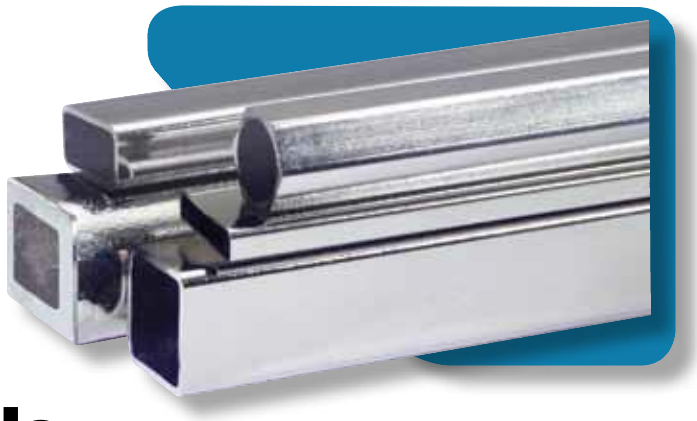
Lab Sample Kit

Here is a helpful kit featuring a large assortment of **T304 series** stainless steel hypodermic tubing well suited for test, evaluation and prototyping by designers and laboratory personnel. Filling the need for customers who want to experiment with a variety of sizes before placing production orders, the kit features 90 pieces of 40" long hypodermic tubing in a full range of sizes from 6 Gauge to 33 Gauge – all with a variety of wall thicknesses. A handy reorder form is included for ordering production quantities of required sizes with 24 hour delivery.

Metric Stainless Steel Tubing • T304 • Alloy 600 • T316 • T321 • Alloy 400 • T347

O.D.	Wall	Theor I.D.	Weight Per Ft	O.D.	Wall	Theor I.D.	Weight Per Ft	O.D.	Wall	Theor I.D.	Weight Per Ft	O.D.	Wall	Theor I.D.	Weight Per Ft
1 mm (.040")	.25 mm (.010")	.5 mm (.020")	.002	7 mm (.276")	1 mm (.040")	5 mm (.196")	.140	13 mm (.512")	1 mm (.040")	11 mm (.432")	.202	20 mm (.787")	1 mm (.040")	18 mm (.707")	.319
2 mm (.080")	.25 mm (.010")	1.5 mm (.060")	.005	8 mm (.315")	. 1mm (.040")	6 mm (.235")	.118	14 mm (.551")	1 mm (.040")	11.7 mm (.463")	.238	21 mm (.827")	1 mm (.040")	19 mm (.747")	.336
3 mm (.118")	.64 mm (.025")	1.7 mm (.068")	.015	9 mm (.354")	1 mm (.040")	7 mm (.274")	.134	15 mm (.591")	1.2 mm (.049")	12.5 mm (.493")	.284	22 mm (.866")	1.2 mm (.045")	19.6 mm (.777")	.395
4 mm (.158")	.5 mm (.020")	.3 mm (.118")	.034	10 mm (.394")	.5 mm (.020")	9 mm (.354")	.140	16 mm (.630")	1.2 mm (.049")	13.4 mm (.527")	.304	23 mm (.906")	1 mm (.036")	21 mm (.834")	.335
5 mm (.197")	.5 mm (.020")	4 mm (.157")	.038	10 mm (.394")	1 mm (.040")	8 mm (.314")	.151	17 mm (.669")	1.2 mm (.046")	14.7 mm (.577")	.306	24 mm (.945")	1 mm (.038")	22 mm (.870")	.368
6 mm (.236")	.5 mm (.020")	5 mm (.236")	.045	11 mm (.433")	.8 mm (.032")	9.3 mm (.368")	.045	18 mm (.709")	1.2 mm (.045")	15.8 mm (.620")	.319	25 mm (.984")	1 mm (.041")	23 mm (.902")	.413
6 mm (.236")	1 mm (.040")	4 mm (.156")	.063	12 mm (.472")	.9 mm (.035")	10.1 mm (.402")	.163	19 mm (.749")	1.2 mm (.049")	16.5 mm (.651")	.366	26 mm (1.024")	1.3 mm (.052")	23.4 mm (.920")	.540

Note: special metric sizes available upon request



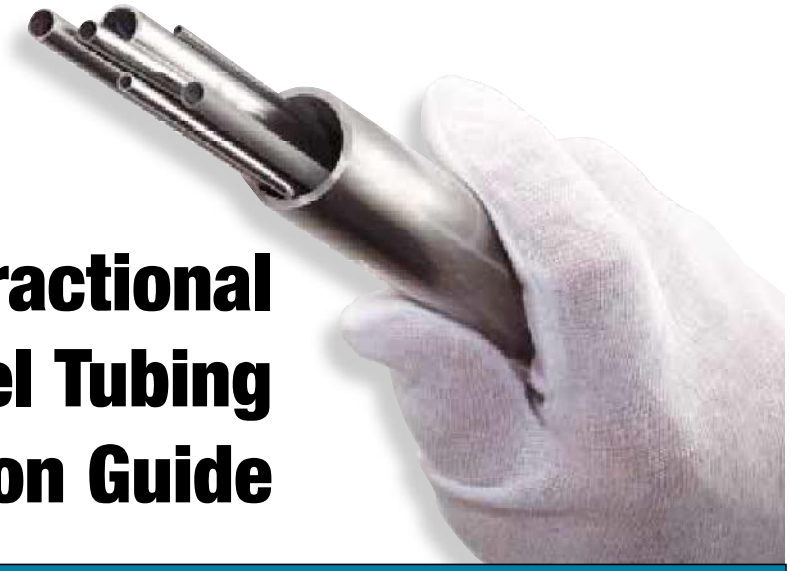
Tubing Selection Guide – Square & Rectangular

Eagle can re-draw standard tubing to provide you with the exact shape to meet your application requirements. Standard lengths are 10 to 12 feet.

Standard Tubing Square / Rectangular Sizing Chart

Available with Wall Thicknesses of .010" .020" .028" .035"

	.125	.187	.250	.313	.375	.437	.500	.625	.750	1.000	1.250	1.500
.125	✓	✓	✓	✓	✓	✓	✓	✓				
.187	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.250	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.313	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.375	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.437	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.500	✓	✓	✓	✓	✓	✓	✓	✓	✓			
.625	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
.750								✓	✓	✓	✓	✓
1.000									✓	✓	✓	✓
1.250									✓	✓	✓	✓
1.500									✓	✓	✓	✓



Fractional Stainless Steel Tubing Selection Guide

• T304 • Alloy 600 • T316 • T321 • Alloy 400 • T347

O.D.	Wall	Theor I.D.	Weight Per Ft
1/16	.010	.042	.005
(.062)	.016	.030	.008
	.020	.022	.009
	.028	.006	.012
3/32	.010	.074	.009
(.094)	.016	.062	.015
	.020	.054	.016
	.028	.038	.020
1/8	.010	.105	.015
(.125)	.016	.093	.019
	.020	.085	.022
	.025	.075	.025
	.028	.069	.029
	.035	.055	.033
	.049	.027	.040
5/32	.010	.136	.019
(.156)	.016	.124	.034
	.020	.116	.040
	.028	.100	.060
	.035	.086	.082
	.049	.058	.096
3/16	.010	.168	.019
(.188)	.016	.156	.029
	.020	.148	.035
	.028	.132	.047
	.035	.118	.057
	.049	.090	.073
	.065	.058	.085
7/32	.016	.186	.035
(.218)	.028	.162	.056
	.035	.148	.069
1/4	.010	.230	.026
(.250)	.016	.218	.040
	.020	.210	.049
	.028	.194	.066
	.035	.180	.080
	.049	.152	.105
	.065	.120	.128
	.083	.084	.148
	.095	.060	.157

O.D.	Wall	Theor I.D.	Weight Per Ft
9/32	.028	.225	.076
(.281)	.035	.211	.092
5/16	.016	.281	.050
(.313)	.020	.273	.062
	.028	.257	.085
	.035	.243	.103
	.049	.215	.138
	.065	.183	.172
	.083	.147	.203
	.095	.123	.221
3/8	.010	.355	.038
(.375)	.016	.343	.061
	.020	.335	.075
	.028	.319	.103
	.035	.305	.127
	.049	.277	.170
	.065	.245	.215
	.083	.209	.258
	.095	.185	.284
	.120	.135	.326
7/16	.020	.398	.089
(.438)	.028	.382	.123
	.035	.368	.150
	.049	.340	.203
	.065	.308	.258
	.083	.272	.315
1/2	.010	.480	.052
(.500)	.016	.468	.082
	.020	.460	.102
	.028	.444	.141
	.035	.430	.173
	.049	.402	.236
	.065	.370	.302
	.083	.310	.418
	.095	.310	.418
	.120	.260	.487
9/16	.028	.506	.160
(.562)	.035	.492	.197
	.049	.464	.257
	.065	.432	.346
	.095	.372	.474
	.125	.312	.584

O.D.	Wall	Theor I.D.	Weight Per Ft
5/8	.020	.585	.129
(.625)	.028	.569	.178
	.035	.555	.221
	.049	.527	.301
	.065	.495	.388
	.083	.459	.480
	.095	.435	.537
	.120	.385	.647
	.188	.249	.877
3/4	.020	.710	.155
(.750)	.028	.694	.215
	.035	.680	.267
	.049	.652	.366
	.065	.620	.475
	.083	.584	.591
	.095	.560	.664
	.120	.510	.807
	.156	.438	.990
13/16	.028	.756	.235
(.812)	.035	.742	.290
	.049	.714	.399
	.065	.682	.519
7/8	.028	.819	.253
(.875)	.035	.805	.314
	.049	.777	.432
	.065	.745	.562
	.083	.709	.702
	.095	.685	.791
	.120	.635	.968
	.156	.563	1.198
	.188	.499	1.379
1	.020	.960	.209
(1.000)	.028	.944	.290
	.035	.930	.360
	.049	.902	.497
	.065	.870	.649
	.083	.834	.812
	.095	.810	.918
	.120	.760	1.128
	.188	.624	1.630
	.250	.500	2.003

O.D.	Wall	Theor I.D.	Weight Per Ft
1-1/8	.028	1.069	.328
(1.125)	.035	1.055	.407
	.049	1.027	.563
	.065	.995	.736
	.095	.935	1.045
	.120	.885	1.288
	.188	.750	1.881
	.250	.625	2.336
1-1/4	.028	1.194	.365
(1.250)	.035	1.180	.454
	.049	1.152	.628
	.065	1.120	.822
	.083	1.084	1.034
	.095	1.060	1.172
	.109	1.032	1.328
	.120	1.010	1.448
	.188	.875	2.132
	.250	.750	2.670
1-3/8	.035	1.305	.500
(1.375)	.049	1.277	.693
	.065	1.245	.909
	.120	1.135	1.608
	.134	1.107	1.776
	.188	1.000	2.383
	.250	.875	3.004
1-1/2	.028	1.444	.440
(1.500)	.035	1.430	.547
	.049	1.402	.759
	.065	1.370	.996
	.083	1.334	1.256
	.120	1.260	1.769
	.134	1.232	1.955
	.156	1.188	2.239
	.188	1.125	2.634
	.250	1.000	3.338
	.375	.750	4.506
1-5/8	.049	1.527	.8248
(1.625)	.065	1.495	1.083
	.083	1.459	1.367
	.095	1.435	1.552
	.120	1.385	1.929
	.188	1.249	2.885
	.250	1.125	3.671
	.375	.875	5.006

Fractional Stainless Steel Tubing Selection Guide

• T304 • Alloy 600 • T316 • T321 • Alloy 400 • T347

O.D.	Wall	Theor I.D.	Weight Per Ft
1-3/4	.049	1.652	.8902
(1.750)	.065	1.620	1.170
	.120	1.510	2.089
	.156	1.438	2.656
	.188	1.374	3.316
	.250	1.250	4.005
	.375	1.000	5.507
	.500	.750	6.675
1-7/8	.065	1.745	1.257
(1.875)	.095	1.685	1.806
	.120	1.635	2.249
	.188	1.500	3.387
	.250	1.375	4.339
2	.035	1.930	.7345
(2.000)	.049	1.902	1.021
	.065	1.870	1.343
	.083	1.834	1.699
	.095	1.810	1.933
	.109	1.782	2.201
	.120	1.760	2.409
	.134	1.732	2.671
	.156	1.688	3.072
	.188	1.625	3.638
	.250	1.500	4.673
	.375	1.250	6.508
	.500	1.000	8.010
2-1/8	.049	2.027	1.086
(2.125)	.065	1.995	1.430
	.095	1.935	2.060
	.120	1.885	2.570
	.188	1.750	3.889
	.250	1.625	5.006
	.375	1.375	7.008
	.500	1.125	8.678
2-1/4	.049	2.152	1.152
(2.250)	.065	2.120	1.517
	.083	2.084	1.921
	.095	2.060	2.252
	.120	2.010	2.730
	.188	1.874	4.140
	.250	1.750	5.340
	.375	1.500	7.509
	.500	1.250	9.345
2-3/8	.065P	2.245	1.604
(2.375)	.083	2.209	2.032
	.095	2.185	2.313
	.109P	2.157	2.638
	.154P	2.067	3.653
	.188	1.990	4.391
	.218P	1.939	5.022
	.250	1.875	5.674
	.343P	1.689	7.444
	.375	1.625	8.010
	.436P	1.503	9.029
	.500	1.375	10.010

O.D.	Wall	Theor I.D.	Weight Per Ft
2-1/2	.049	2.402	1.283
(2.500)	.065	2.370	1.690
	.083	2.334	2.143
	.095	2.310	2.440
	.109	2.282	2.783
	.120	2.260	3.050
	.134	2.232	3.386
	.156	2.188	3.905
	.188	2.125	4.642
	.250	2.000	6.008
	.375	1.750	8.511
	.500	1.500	10.680
	.625	1.250	12.515
2-3/4	.065	2.620	1.864
(2.750)	.083	2.584	2.364
	.095	2.560	2.694
	.120	2.510	3.371
	.188	2.375	5.144
	.250	2.250	6.675
	.375	2.000	9.512
	.500	1.750	12.015
	.750	1.250	16.020
3	.049	2.902	1.544
(3.000)	.065	2.870	2.038
	.083	2.834	2.586
	.095	2.810	2.947
	.109	2.782	3.366
	.120	2.760	3.691
	.134	2.732	4.102
	.156	2.688	4.738
	.188	2.624	5.646
	.250	2.500	7.343
	.313	2.374	8.982
	.375	2.250	10.510
	.500	2.000	13.350
	.625	1.750	15.850
	.750	1.500	18.020
3-1/4	.065	3.120	2.211
(3.250)	.083	3.084	2.807
	.095	3.060	3.201
	.120	3.010	4.011
	.188	2.874	6.148
	.250	2.750	8.010
	.375	2.500	11.514
	.500	2.250	14.685
	.750	1.750	20.025
3-1/2	.065	3.370	2.385
(3.500)	.083P	3.334	3.029
	.120P	3.260	4.332
	.188	3.124	6.650
	.216P	3.068	7.756
	.250	3.000	8.678
	.300P	2.900	10.250
	.375	2.750	12.520
	.500	2.500	16.020
	.625	2.250	19.190
	.750	2.000	22.030

O.D.	Wall	Theor I.D.	Weight Per Ft
3-3/4	.120	3.510	4.652
(3.750)	.250	3.250	9.345
	.375	3.000	13.520
	.500	2.750	17.360
	.625	2.500	24.030
4	.065	3.870	2.732
(4.000)	.083P	3.834	3.472
	.120P	3.760	4.973
	.188	3.624	7.654
	.226P	3.548	9.109
	.250	3.500	10.010
	.318P	3.364	13.180
	.375	3.250	14.520
	.500	3.000	18.690
	.625	2.750	22.530
	.636P	2.728	22.850
	.750	2.500	26.030
4-1/4	.065	4.120	2.905
(4.250)	.095	4.060	4.216
	.120	3.880	5.293
	.156	3.938	8.156
	.250	3.750	10.680
	.313	3.624	13.160
	.375	3.500	15.520
	.500	3.250	20.030
	.688	2.874	26.170
	.750	2.750	28.040
4-1/2	.065	4.370	5.840
(4.500)	.120	4.260	5.613
	.188	4.124	8.658
	.250	4.000	11.350
	.375	3.750	16.520
	.500	3.500	21.360
	.625	3.250	25.870
	.750	3.000	30.040
	.875	2.750	33.880
4-3/4	.120	4.510	5.934
(4.750)	.188	4.374	9.160
	.250	4.250	12.020
	.375	4.000	17.520
	.500	3.750	22.700
	.625	3.500	27.530
	.750	3.250	32.040
	.875	3.000	36.210
5	.065	4.870	3.426
(5.000)	.083	4.834	4.359
	.120	4.760	6.254
	.188	4.624	9.662
	.250	4.500	12.680
	.375	4.250	18.520
	.500	4.000	24.030
	.625	3.750	29.200
	.750	3.500	34.040
	.875	3.250	38.550

O.D.	Wall	Theor I.D.	Weight Per Ft
5-1/2	.065	5.370	3.773
(5.500)	.120	5.260	6.895
	.250	5.000	14.020
	.375	4.750	20.530
	.500	4.500	26.700
	.750	4.000	38.050
	.875	3.750	43.220
	1.000	3.500	48.060
6	.065	5.870	4.120
(6.000)	.083	5.834	5.245
	.109	5.782	6.857
	.120	5.760	7.536
	.188	5.624	11.670
	.250	5.500	15.350
	.375	5.250	22.530
	.500	5.000	29.370
	.625	4.750	35.880
	.750	4.500	42.050
	1.000	4.000	53.400
6-1/4	.250	5.750	16.020
(6.250)	.375	5.500	23.530
	.500	5.250	30.710
	.750	4.750	44.060
	1.000	4.250	56.070
6-1/2	.250	6.000	16.690
(6.500)	.375	5.750	24.530
	.500	5.500	32.040
	.625	5.250	39.220
	.750	5.000	46.060
	1.000	4.500	58.740
7	.250	6.500	18.020
(7.000)	.375	6.000	26.530
	.500	6.000	34.710
	.750	5.500	50.060
	1.000	5.000	64.080
7-1/2	.250	7.000	19.360
(7.500)	.500	6.500	37.380
8	.120	7.760	10.100
(8.000)	.250	7.500	20.690
	.375	7.250	30.540
	.500	7.000	40.050
	.625	6.750	49.230
	.750	6.500	58.070
	1.000	6.000	74.760

Note: Larger sizes are available on request. Please consult factory.

"P" Designates pipe size

ALUMINUM TUBING

Selection Guide

Alloys • 2024 • 3003 • 5052 • 6061

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
1/8	0.125	0.020	0.085	T6061-T6	0.0078
3/16	0.188	0.028	0.132	T6061-T6	0.0166
		0.035	0.118	T6061-T6	0.0198
		0.035	0.118	T5052-0	0.0197
		0.035	0.118	T2024-T3	0.0203
1/4	0.250	0.020	0.210	T6061-T6	0.0170
		0.028	0.194	T6061-T6	0.0230
		0.028	0.194	T2024-T3	0.0236
		0.035	0.180	T6061-T6	0.0278
		0.035	0.180	T2024-T3	0.0285
		0.035	0.180	T3003-T14	0.0268
		0.035	0.180	T5052-0	0.0276
		0.049	0.152	T6061-T6	0.0364
		0.049	0.152	T2024-T3	0.0374
		0.058	0.134	T6061-T6	0.0412
		0.065	0.120	T6061-T6	0.0445
5/16	0.312	0.028	0.256	T6061-T6	0.0294
		0.035	0.242	T6061-T6	0.0359
		0.035	0.242	T2024-T3	0.0368
		0.035	0.242	T5052-0	0.0356
		0.049	0.214	T6061-T6	0.0477
		0.049	0.214	T2024-T3	0.0489
3/8	0.375	0.020	0.335	T6061-T6	0.0263
		0.028	0.319	T6061-T6	0.0359
		0.028	0.319	T5052-0	0.0357
		0.035	0.305	T6061-T6	0.0440
		0.035	0.305	T2024-T3	0.0451
		0.035	0.305	T3003-T14	0.0424
		0.035	0.305	T5052-0	0.0437
		0.049	0.277	T6061-T6	0.0591
		0.049	0.277	T2024-T3	0.0606
		0.049	0.277	T5052-0	0.0587
		0.058	0.259	T6061-T6	0.0680
		0.065	0.245	T6061-T6	0.0746
		0.065	0.245	T2024-T3	0.0764
		0.083	0.209	T6061-T6	0.0897
		0.095	0.185	T6061-T6	0.0984
		0.095	0.185	T2024-T3	0.1009
7/16	0.438	0.035	0.368	T6061-T6	0.0522
		0.035	0.368	T2024-T3	0.0535
		0.049	0.340	T6061-T6	0.0705
		0.049	0.340	T2024-T3	0.0723
		0.065	0.308	T6061-T6	0.0897
		0.065	0.308	T2024-T3	0.0919
		0.095	0.248	T2024-T3	0.1236
		0.120	0.198	T6061-T6	0.1412
1/2	0.500	0.020	0.460	T6061-T6	0.0355
		0.028	0.444	T6061-T6	0.0489
		0.028	0.444	T2024-T3	0.0501

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
1/2	0.500	0.028	0.444	T3003-T14	0.0471
		0.028	0.444	T5052-0	0.0486
		0.035	.0430	T6061-T6	0.0602
		0.035	0.430	T2024-T3	0.0617
		0.035	0.430	T3003-T14	0.0580
		0.035	0.430	T5052-0	0.0598
		0.049	0.402	T6061-T6	0.0818
		0.049	0.402	T2024-T3	0.0838
		0.049	0.402	T3003-T14	0.0787
		0.049	0.402	T5052-0	0.0812
		0.058	0.384	T6061-T6	0.0949
		0.065	0.370	T6061-T6	0.1046
		0.065	0.370	T2024-T3	0.1072
		0.065	0.370	T3003-T14	0.1007
		0.065	0.370	T5052-0	0.1039
		0.083	0.334	T6061-T6	0.1281
		0.083	0.334	T2024-T3	0.1313
		0.095	0.310	T6061-T6	0.1424
		0.095	0.310	T2024-T3	0.1459
		0.125	0.250	T6061-T6	0.1734
		0.125	0.250	T2024-T6	0.1778
9/16	0.562	0.035	0.492	T6061-T6	0.0682
		0.035	0.492	T2024-T3	0.0700
		0.049	0.464	T2024-T3	0.0953
		0.125	0.312	T2024-T3	0.2072
5/8	0.625	0.028	0.569	T6061-T6	0.0618
		0.028	0.569	T2024-T3	0.0634
		0.028	0.569	T3003-T14	0.0596
		0.028	0.569	T5052-0	0.0614
		0.035	0.555	T6061-T6	0.0764
		0.035	0.555	T2024-T3	0.0783
		0.035	0.555	T3003-T14	0.0736
		0.035	0.555	T5052-0	0.0759
		0.049	0.527	T6061-T6	0.1044
		0.049	0.527	T2024-T	0.1070
		0.049	0.527	T3003-T14	0.1006
		0.049	0.527	T5052-0	0.1037
		0.058	0.509	T6061-T6	0.1217
		0.065	0.495	T6061-T6	0.1347
		0.065	0.495	T2024-T3	0.1380
		0.065	.0495	T3003-T14	0.1297
		0.083	0.459	T6061-T6	0.1664
		0.095	0.435	T6061-T6	0.1863
		0.095	0.435	T2024-T3	0.1910
		0.125	0.375	T6061-T6	0.2313
		0.125	0.375	T2024-T3	0.2370
		0.156	0.313	T6061-T6	0.2707
3/4	0.750	0.028	0.694	T6061-T6	0.0748
		0.028	0.694	T2024-T3	0.0767

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
3/4	0.750	0.028	0.694	T5052-0	0.0743
		0.035	0.680	T6061-T6	0.0926
		0.035	0.680	T2024-T3	0.0949
		0.035	0.680	T3003-H14	0.0892
		0.035	0.680	T5052-0	0.0919
		0.049	0.652	T6061-T6	0.1271
		0.049	0.652	T2024-T3	0.1303
		0.049	0.652	T3003-H14	0.1224
		0.049	0.652	T5052-0	0.1262
		0.058	0.634	T6061-T6	0.1485
		0.065	0.620	T6061-T6	0.1647
		0.065	0.620	T2024-T3	0.1689
		0.065	0.620	T3003-H14	0.1586
		0.065	0.620	T5052-0	0.1636
		0.083	0.584	T6061-T6	0.2048
		0.083	0.584	T2024-T3	0.2100
		0.095	0.560	T6061-T6	0.2302
		0.095	0.560	T2024-T3	0.2360
		0.125	0.500	T6061-T6	0.2891
		0.188	0.374	T6061-T6	0.3909
7/8	0.875	0.035	0.805	T6061-T6	0.1088
		0.035	0.805	T2024-T3	0.1115
		0.035	0.805	T3003-H14	0.1048
		0.049	0.777	T6061-T6	0.1498
		0.049	0.777	T2024-T3	0.1535
		0.058	0.759	T6061-T6	0.1753
		0.065	0.745	T6061-T6	0.1948
		0.065	0.45	T2024-T3	0.1997
		0.065	0.45	T3003-H14	0.1876
		0.083	0.709	T6061-T6	0.2432
		0.095	0.685	T6061-T6	0.2742
		0.095	0.685	T2024-T3	0.2810
		0.120	0.635	T6061-T6	0.3352
		0.120	0.635	T2024-T3	0.3436
		0.188	0.499	T6061-T6	0.4779
1	1.000	0.035	0.930	T6061-T6	0.1250
		0.035	0.930	T2024-T3	0.1281
		0.035	0.930	T3003-H14	0.1203
		0.035	0.930	T5052-0	0.1241
		0.049	0.902	T6061-T6	0.1724
		0.049	0.902	T2024-T3	0.1767
		0.049	0.902	T3003-H14	0.1660
		0.049	0.902	T5052-0	0.1712
		0.058	0.884	T6061-T6	0.2022
		0.065	0.870	T6061-T6	0.2249
		0.065	0.870	T2024-T3	0.2305
		0.065	0.870	T3003-H14	0.2165
		0.065	0.870	T5052-0	0.2233
		0.083	0.834	T6061-T6	0.2816

Aluminum Tubing – Selection Guide

Alloys • 2024 • 3003 • 5052 • 6061

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
1	1.000	0.083	0.834	T2024-T3	0.2887
		0.095	0.810	T6061-T6	0.3181
		0.095	0.810	T2024-T3	0.3261
		0.125	0.750	T6061-T6	0.4047
		0.125	0.750	T2024-T3	0.4148
		0.156	0.688	T2024-T3	0.4993
		0.188	0.624	T6061-T6	0.5648
		0.188	0.624	T2024-T3	0.5789
1-1/8	1.125	0.035	1.055	T6061-T6	0.1412
		0.035	1.055	T2024-T3	0.1447
		0.049	1.027	T6061-T6	0.1951
		0.049	1.027	T2024-T3	0.2000
		0.065	0.995	T6061-T6	0.2549
		0.065	0.995	T2024-T3	0.2613
		0.083	0.959	T6061-T6	0.3200
		0.083	0.959	T2024-T3	0.3280
		0.095	0.935	T6061-T6	0.3620
		0.095	0.935	T2024-T3	0.4526
		0.125	0.875	T6061-T6	0.4625
		0.125	0.875	T2024-T3	0.4741
		0.188	0.749	T6061-T6	0.6518
		0.019	0.749	T2024-T3	0.0789
		0.250	0.625	T6061-T6	0.8094
		0.250	0.625	T2024-T3	0.8296
1-1/4	1.250	0.035	1.180	T6061-T6	0.1573
		0.035	1.180	T2024-T3	0.1613
		0.035	1.180	T3003-H14	0.1515
		0.035	1.180	T5052-0	0.1562
		0.049	1.152	T6061-T6	0.2177
		0.049	1.152	T2024-T3	0.2232
		0.049	1.152	T5052-0	0.2162
		0.065	1.120	T6061-T6	0.2850
		0.065	1.120	T2024-T3	0.2921
		0.065	1.120	T5052-0	0.2830
		0.083	1.084	T6061-T6	0.3584
		0.083	1.084	T2024-T3	0.3673
		0.095	1.060	T6061-T6	0.4060
		0.095	1.060	T2024-T3	0.4161
		0.120	1.010	T6061-T6	0.5017
		0.120	1.010	T2024-T3	0.5143
		0.188	1.874	T6061-T6	0.7387
		0.188	1.874	T2024-T3	0.7572
		0.250	0.750	T6061-T6	0.9250
		0.250	0.750	T2024-T3	0.9481-
1-3/8	1.375	0.035	1.305	T6061-T6	0.1735
		0.035	1.305	T2024-T3	0.1779
		0.049	1.277	T6061-T6	0.2404
		0.049	1.277	T2024-T3	0.2464
		0.065	1.245	T6061-T6	0.3151
		0.065	1.245	T2024-T3	0.3229
		0.083	1.209	T6061-T6	0.3968
		0.083	1.209	T2024-T3	0.4067
		0.125	1.125	T6061-T6	0.5781
		0.125	1.125	T2024-T3	0.5926
		0.188	0.999	T6061-T6	0.8257
		0.188	0.999	T2024-T3	0.8463
		0.250	0.875	T6061-T6	1.0406
		0.250	0.875	T2024-T3	1.0666
1-1/2	1.500	0.035	1.430	T6061-T6	0.1897
		0.035	1.430	T2024-T3	0.1945
		0.035	1.430	T5052-0	0.1884
		0.049	1.402	T6061-T6	0.2631
		0.049	1.402	T2024-T3	0.2696
		0.049	1.402	T5052-0	0.2612
		0.065	1.370	T6061-T6	0.3451

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
1-1/2	1.500	0.065	1.370	T2024-T3	0.3537
		0.065	1.370	T5052-0	0.3427
		0.083	1.334	T6061-T6	0.4352
		0.083	1.334	T2024-T3	0.4460
		0.125	1.250	T6061-T6	0.6359
		0.125	1.250	T2024-T3	0.5618
		0.188	1.124	T6061-T6	0.9126
		0.188	1.124	T2024-T3	0.9354
		0.250	1.000	T6061-T6	1.1563
		0.250	1.000	T2024-T3	1.1852
		0.375	0.750	T6061-T6	1.5609
1-5/8	1.625	0.035	1.555	T6061-T6	0.2059
		0.049	1.527	T6061-T6	0.2857
		0.049	1.527	T2024-T3	0.2929
		0.065	1.495	T6061-T6	0.3752
		0.065	1.495	T2024-T3	0.3846
		0.083	1.495	T6061-T6	0.4735
		0.125	1.375	T6061-T6	0.6938
		0.125	1.375	T2024-T3	0.7111
		0.188	1.249	T6061-T6	0.9996
		0.188	1.249	T2024-T3	1.0246
		0.250	1.125	T6061-T6	1.2719
		0.250	1.125	T2024-T3	1.3037
1-3/4	1.750	0.035	1.680	T6061-T6	0.2221
		0.035	1.680	T2024-T3	0.2276
		0.035	1. 680	T5052-0	0.2205
		0.049	1.652	T6061-T6	0.3084
		0.049	1.652	T2024-T3	0.3161
		0.049	1.652	T5052-0	0.3062
		0.083	1.584	T6061-T6	0.5119
		0.083	1.584	T2024-T3	0.5247
		0.095	1.560	T2024-T3	0.5963
		0.125	1.500	T6061-T6	0.7516
		0.125	1.500	T2024-T3	0.7704
		0.188	1.374	T6061-T6	1.0865
		0.188	1.374	T2024-T3	1.1137
		0.250	1.250	T6061-T6	1.3875
		0.250	1.250	T2024-T3	1.4222
		0.375	1.000	T6061-T6	1.9078
		0.375	1.000	T2024-T3	1.9555
1-7/8	1.875	0.065	1.745	T 6061-T6	0.4358
		0.083	1.709	T6061-T6	0.5503
		0.125	1.625	T6061-T6	0.8094
		0.188	1.499	T6061-T6	1.1735
		0.250	1.375	T6061-T6	1.5031
2	2.000	0.035	1.930	T6061-T6	0.2545
		0.049	1.902	T6061-T6	0.3537
		0.049	1.902	T2024-T3	0.3626
		0.049	1.902	T3003-H14	0.3406
		0.049	1.902	T5052-0	0.3512
		0.065	1.870	T6061-T6	0.4654
		0.065	1.870	T2024-T3	0.4770
		0.065	1.870	T3003-H14	0.4481
		0.065	1.870	T5052-0	0.4621
		0.083	1.834	T6061-T6	0.5887
		0.083	1.834	T2024-T3	0.6034
		0.095	1.810	T6061-T6	0.6696
		0.095	1.810	T2024-T3	0.6863
		0.125	1.750	T6061-T6	0.8672
		0.125	1.750	T2024-T3	0.8889
		0.188	1.624	T6061-T6	1.2604
		0.188	1.624	T2024-T3	1.2919
		0.250	1.500	T6061-T6511	1.6188
		0.250	1.500	T2024-T3511	1.6592

O.D. Fraction	O.D. Decimal	Wall	I.D.	Type	Wt/ft
2	2.000	0.375	1.250	T6061-T6511	2.2547
		0.375	1.250	T2024-T3511	2.3111
		0.500	1.000	T6061-T6511	2.7750
		0.500	1.000	T2024-T3511	2.8444
2-1/8	2.125	0.125	1.875	T6061-T6	0.9250
		0.188	1.749	T6061-T6511	1.3474
		0.250	1.625	T6061-T6511	1.7344
2-1/4	2.250	0.049	2.152	T6061-T6	0.3990
		0.049	2.152	T2024-T3	0.4090
		0.065	2.120	T6061-T6	0.5255
		0.065	2.120	T2024-T3	0.5386
		0.083	2.084	T6061-T6	0.6655
		0.083	2.084	T2024-T3	0.6821
		0.125	2.000	T6061-T6	0.9828
		0.125	2.000	T2024-T3	1.0074
		0.188	1.874	T6061-T6	1.4343
		0.188	1.874	T2024-T3	1.4702
		0.250	1.750	T6061-T6511	1.8500
		0.250	1.750	T2024-T3511	1.8963
2-3/8	2.375	0.188	1.999	T6061-T6511	1.5219
		0.250	1.875	T6061-T6511	1.9656
2-1/2	2.500	0.035	2.430	T6061-T6	0.3192
		0.035	2.430	T5052-0	0.3170
		0.049	2.402	T6061-T6	0.4444
		0.049	2.402	T5052-0	0.4413
		0.065	2.370	T6061-T6	0.5856
		0.065	2.370	T2024-T3	0.6003
		0.065	2.370	T5052-0	0.5815
		0.083	2.334	T6061-T6	0.7423
		0.083	2.334	T2024-T3	0.7608
		0.095	2.310	T6061-T6	0.8454
		0.125	2.250	T6061-T6	1.0984
		0.125	2.250	T2024-T3	1.1259
		0.188	2.124	T6061-T6511	1.6082
		0.250	2.000	T6061-T6511	2.0813
		0.250	2.000	T2024-T3511	2.1333
2-5/8	2.625	0.065	2.495	T6061-T6	0.6148
2-3/4	2.750	0.065	2.620	T6061-T6	0.6457
		0.065	2.620	T2024-T3	0.6619
		0.083	2.584	T6061-T6	0.8190
		0.125	2.500	T6061-T6	1.2141
		0.125	2.500	T2024-T3	1.2444
		0.188	2.374	T6061-T6511	1.7821
		0.250	2.250	T6061-T6511	2.3125
		0.250	2.250	T2024-T3511	2.3703
		0.375	2.000	T6061-T6511	3.2953
		0.375	2.000	T2024-T3511	3.3777
3	3.000	0.035	2.930	T6061-T6	0.3840
		0.035	2.930	T2024-T3	0.3936
		0.049	2.902	T6061-T6	0.5350
		0.049	2.902	T2024-T3	0.5484
		0.065	2.870	T6061-T6	0.7059
		0.065	2.870	T2024-T3	0.7235
		0.083	2.834	T6061-T6	0.8958
		0.083	2.834	T2024-T3	0.9182
		0.095	2.810	T6061-T6	1.0211
		0.125	2.750	T6061-T6	1.3297
		0.125	2.750	T2024-T3	1.3629
		0.250	2.500	T6061-T6511	2.5438
		0.250	2.500	T2024-T3511	2.6073
		0.375	2.250	T6061-T6511	3.6422
		0.375	2.250	T2024-T3511	3.7332
		0.500	2.000	T6061-T6511	4.6250
		0.500	2.000	T2024-T3511	4.7406

PIPE

Stainless Steel

Welded or Seamless

Eagle furnishes a full line of stainless steel pipe, fittings and flanges to handle any problem involving corrosion, temperature or pressure. We serve all major industries including chemical, petrochemical, nuclear, cryogenics, food, paper and pollution control.

In addition to stainless steel, Eagle can provide corrosion resistant piping products in such materials as aluminum, nickel alloys and special alloys.

Ordering Your Piping

Pipe is ordinarily ordered by its nominal diameter (pipe size) and wall thickness which is specified by a schedule number. The convenient Pipe Selection Guide at the right shows schedules with corresponding wall thicknesses as well as weights in pounds per foot of pipe length.

Stainless Steel Pipe

Eagle seamless and welded austenitic stainless steel pipe is stocked in the annealed and pickled condition, making it suitable for welding, bending, and fabrication of all kinds. Permissible size variations are shown in Table 1-2 below.

All Eagle seamless and welded stainless steel pipe can be furnished with complete material test reports including all chemical and mechanical data. Additional testing, including 100% X-Ray Test, Charpy Test, Dye Penetrant Test, etc., is available at an additional cost.

** Note: For dimensions and weights see opposite page.*

Standard Tolerances for ASTM-A 312 Stainless Steel Pipe

Nominal Pipe Size	Outside Diameter Tolerance Over	Outside Diameter Tolerance Under	Wall
1/8 to 1-1/2 incl.	1/64 (0.015)	1/32 (0.031)	+ 0.0%/–12.5%
Over 1-1/2 to 4 incl.	1/32 (0.031)	1/32 (0.031)	+ 0.0%/–12.5%
Over 4 to 8 incl.	1/16 (0.062)	1/32 (0.031)	+ 0.0%/–12.5%
Over 8 to 18 incl.	3/32 (0.093)	1/32 (0.031)	+ 0.0%/–12.5%
Over 18 to 24 incl.	1/8 (0.125)	1/32 (0.031)	+ 0.0%/–12.5%

Seamless Stainless Steel Pipe

Pipe can be certified to ASTM A-312, ASME SA-312. When surface finish is not a critical consideration, hot finished pipe is more economical product. Selected sizes of cold drawn pipe also meet MIL P1144D, which is similar to ASTM A-312, but with the important addition of an acidified copper sulfate test. Hot finished pipe will not meet MIL P1144D because of surface finish requirements. When surface finish is not a critical consideration, hot finished pipe is a more economical product.

***Cold Drawn Pipe** – is available from 1/8" I.P.S. to 8" I.P.S. in all wall thicknesses.*

***Hot Finished Pipe** – is available in selected sizes to meet competitive market conditions.*

Welded Stainless Steel Pipe

Eagle welded stainless steel pipe is supplied in the full finished condition. It has been annealed and pickled and meets all aspects of ASTM A-312, ASME SA-312.

Pipe Selection Guide

- GREEN Figures - indicate wall thickness in inches
- BLACK Figures - indicate weight in pounds/foot

Note: Aluminum pipe weighs roughly one third as much as steel pipe.

Seamless & Welded Stainless Steel Pipe • A.S.A. Pipe Schedules

Pipe Size	O.D. (Inches)	5S	5	10S	10	20	30	40S & Standard	40	60	80S & Extra Heavy	80	100	120	140	160	Double Extra Heavy
1/8	.405		.035	.049	.049			.068	.068		.095	.095					
			.1383	.1863	.1863			.2447	.2447		.3145	.3145					
1/4	.540		.049	.065	.065			.088	.088		.119	.119					
			.2570	.3297	.3297			.4248	.4248		.5351	.5351					
3/8	.675		.049	.065	.065			.091	.091		.126	.126					
			.3276	.4235	.4235			.5676	.5676		.7388	.7388					
1/2	.840	.065	.065	.083	.083			.109	.109		.147	.147				.187	.294
		.5383	.5383	.6710	.6710			.8510	.8510		1.088	1.088				1.304	1.714
3/4	1.050	.065	.065	.083	.083			.113	113		.154	.154				.218	.308
		.6838	.6838	.8527	.8527			1.131	1.131		1.474	1.474				1.937	2.441
1	1.315	.065	.065	.109	.109			.133	.133		.179	.179				.250	.358
		.8678	.8678	1.404	1.404			1.679	1.679		2.172	2.172				2.844	3.659
1-1/4	1.660	.065	.065	.109	.109			.140	.140		.191	.191				.250	.382
		1.107	1.107	1.806	1.806			2.273	2.273		2.997	2.997				3.765	5.214
1-1/2	1.900	.065	.065	.109	.109			.145	.145		.200	.200				.281	.400
		1.274	1.274	2.085	2.085			2.718	2.718		3.631	3.631				4.859	6.408
2	2.375	.065	.065	.109	.109			.154	.154		.218	.218				.343	.436
		1.604	1.604	2.638	2.638			3.653	3.653		5.022	5.022				7.444	9.029
2-1/2	2.875	.083	.083	.120	.120			.203	.203		.276	.276				.375	.552
		2.475	2.475	3.531	3.531			5.793	5.793		7.661	7.661				10.01	13.70
3	3.500	.083	.083	.120	.120			.216	.216		.300	.300				.437	.600
		3.029	3.029	4.332	4.332			7.576	7.576		10.25	10.25				14.32	18.58
3-1/2	4.000	.083	.083	.120	.120			.226	.226		.300	.300				.437	.600
		3.472	3.472	4.973	4.973			9.109	9.109		12.51	12.51					22.85
4	4.500	.083	.083	.120	.120			.237	.237	.281	.337	.337		.437		.531	.674
		3.915	3.915	5.613	5.613			10.79	10.79	12.66	14.98	14.98		19.01		22.51	27.54
4-1/2	5.000							.247			.355						.710
								12.53			17.61						32.53
5	5.563	.109	.109	.134	.134			.258	.258		.375	.375		.500		.625	.750
		6.349	6.349	7.770	7.770			14.62	14.62		20.78	20.78		27.04		32.96	38.55
6	6.625	.109	.109	.134	.134			.280	.280		.432	.432		.562		.718	.864
		7.585	7.585	9.289	9.289			18.97	18.97		28.57	28.57		36.39		45.30	53.16
7	7.625							.301			.500						.875
								25.57			38.05						63.08
8	8.625	.109	.109	.148	.148	.250	.277	.322	.322	.406	.500	.500	.593	.718	.812	.906	.875
		9.914	9.914	13.40	13.40	22.36	24.70	28.55	28.55	35.64	43.39	43.39	50.87	60.93	67.76	74.69	72.42
9	9.625							.342			.500						
								33.90			48.72						
10	10.750	.134	.134	.165	.165	.250	.307	.365	.365	.500	.500	.593	.718	.843	1.000	1.125	
		15.19	15.19	18.70	18.70	28.04	34.24	40.48	40.48	54.74	54.74	64.33	76.93	89.20	104.1	115.7	
11	11.750							.375			.500						
								45.55			60.07						
12	12.750	.156	.165	.180	.180	.250	.330	.375	.406	.562	.500	.687	.843	1.000	1.125	1.312	
		21.07	22.18	24.20	24.20	33.38	43.77	49.56	53.53	73.16	65.42	88.51	107.2	125.5	139.7	160.3	
14	14.000	.156		.188	.250	.312	.375	.375	.437	.593	.500	.750	.937	1.093	1.250	1.406	
		23.07		27.73	36.71	45.68	54.57	54.57	63.37	84.91	72.09	106.1	130.7	150.7	170.2	189.1	
16	16.000	.165		.188	.250	.312	.375	.375	.500	.656	.500	.843	1.031	1.218	1.437	1.593	
		27.90		31.75	42.05	52.36	62.58	62.58	82.77	107.5	82.77	136.5	164.8	192.3	223.5	245.1	
18	18.000	.165		.188	.250	.312	.437	.375	.562	.750	.500	.937	1.156	1.375	1.562	1.781	
		31.43		35.76	47.39	59.03	82.06	70.59	104.8	138.2	93.45	170.8	208.0	244.1	274.2	308.5	
20	20.000	.188		.218	.250	.375	.500	.375	.593	.812	.500	1.031	1.280	1.500	1.750	1.968	
		39.78		46.05	52.73	78.60	104.1	78.60	122.9	166.4	104.1	208.9	256.1	296.4	341.1	379.0	
24	24.000	.218		.250	.250	.375	.562	.375	.687	.968	.500	1.218	1.531	1.812	2.062	2.343	
		55.37		63.41	63.41	94.62	140.8	94.62	171.2	238.1	125.5	296.4	367.4	429.4	483.1	541.9	

WIRE
Stainless Steel

*13 Gauge stainless steel wire shown **above.***

Eagle has a vast array of stainless steel wire available which is suitable for a variety of uses such as medical, aerospace and industrial. Wire is available in spools or straight lengths. Eagle also has the capability to provide value added services such as cutting, bending, beveling and forming.

Alloys: T302, T304, T304V, T316, T316V, T17-7 PH, T17-4 PH, MP35N, Alloy 600, X-750, Hastelloy, C276, T410, T420

Tempers: Annealed, Spring or Custom Tensile Range.

Surface Finish: Bright, Matte, or Centerless Ground.

Size Range: 0.002 – 0.150 (larger sizes available as round bar stock. Please see our section of bar stock sizes.)

Contact us today and let us help you with your stainless wire needs.

WIRE
Stainless Steel
- **304 Series**
- **316 Series**

Diameter	Standard Tolerance*
0.004" to 0.019"	+/- .0003"
0.020" to 0.041"	+/- .0005"
0.042" to 0.150"	+/- .001

*Tighter tolerances available upon request.

CENTERLESS GRINDING

Eagle has the ability to have tube, bar or wire stock centerless ground to a particular specification. Centerless grinding of round stock is primarily performed to either achieve a particular diameter or tolerance which might not be achievable by drawing process or to achieve a particular RMS or RA surface condition. In some cases it is done for both reasons.

Centerless grinding equipment in operation.

Eagle furnishes a full line of stainless steel bar stock in round, square and flat configurations.

BAR STOCK
Stainless Steel

Ordering Your Bar Stock

Bar is ordinarily ordered by its nominal diameter. The chart below shows nominal sizes and provides convenient weight data.

However, for centerless grinding purposes when tolerances are tight, bar stock is generally ordered "oversize" to allow for sufficient material removal.

For example, if grinding 1/4" and 1/2" stock were required, 1/4" oversize and 1/2" oversize would be specified.

Round Bar Stock – Stainless Steel • 300 Series • 400 Series 17-4PH

Size Inches	Estimated Weight (lbs.) Per Foot	12 Ft. Bar	Size Inches	Estimated Weight (lbs.) Per Foot	12 Ft. Bar	Size Inches	Estimated Weight (lbs.) Per Foot	12 Ft. Bar	Size Inches	Estimated Weight (lbs.) Per Foot	12 Ft. Bar	Size Inches	Estimated Weight (lbs.) Per Foot	12 Ft. Bar
1/16	.010	.120	.505	.680	8.33	1/16	3.014	36.2	2.520	16.957	203.5	15/16	65.10	781.2
5/64	.016	.19	.510	.694	8.33	3/32	3.194	38.3	9/16	17.53	210.4	**5 –**	66.76	801.1
3-32	.023	.28	33/64	.710	8.52	1/8	3.379	40.6	5/8	18.40	220.8	1/8	70.10	841.2
7/64	.032	.38	17/32	.754	9.05	1.135	3.440	41.3	11/16	19.29	231.5	1/4	73.60	883.2
1/8	.042	.50	9/16	.845	10.14	9/64	3.470	41.6	3/4	20.20	242.4	3/8	77.15	925.8
.130	.045	.54	.5675	.860	10.32	1.145	3.50	42.0	2.770	20.49	245.9	7/16	78.95	947.4
9/64	.053	.64	.5725	.875	10.50	5/32	3.570	42.8	13/16	21.12	253.4	1/2	80.78	969.4
5/32	.065	.78	.5775	.891	10.69	3/16	3.766	45.2	7/8	22.07	264.8	5/8	84.48	1013.8
11/64	.079	.95	37/64	.892	10.69	1/4	4.173	50.1	15/16	23.04	276.5	3/4	88.29	1059.0
3/16	.094	1.13	19/32	.941	11.29	1.260	4.240	50.9	**3 –**	24.03	288.4	15/16	94.14	1130.0
.1925	.099	1.19	5/8	1.043	12.52	17/64	4.276	51.3	3.020	24.354	292.3	**6 –**	96.13	1153.5
.1975	.104	1.25	.630	1.060	12.72	1.275	4.34	52.1	1/16	25.05	300.6	1/8	100.2	1202.4
13/64	.110	1.32	.635	1.076	12.91	9/32	4.384	52.6	1/8	26.08	312.9	1/4	104.3	1252.0
7/32	.128	1.54	.640	1.093	13.12	5/16	4.600	55.2	3/16	27.13	325.6	1/2	112.8	1353.8
15/64	.147	1.76	41/64	1.096	13.15	3/8	5.049	60.6	1/4	28.21	338.5	3/4	121.7	1460.0
1/4	.167	2.00	21/32	1.150	13.80	1.385	5.218	62.6	3.270	28.55	342.6	7	130.9	1570.8
.255	.174	2.08	11/16	1.262	15.14	13/32	5.279	63.4	5/16	29.30	351.6	1/4	140.4	1684.8
.260	.181	2.17	.6925	1.280	15.37	7/16	5.518	66.2	3/8	30.42	365.0	1/2	150.2	1802.0
17/64	.188	2.26	23/32	1.379	16.55	1/2	6.008	72.1	7/16	31.55	378.6	3/4	160.4	1924.8
9/32	.211	2.53	3/4	1.502	18.02	1.510	6.21	74.5	1/2	32.71	392.5	8	170.9	2051.0
19/64	.235	2.82	.755	1.522	18.26	1-17/32	6.261	75.1	3.520	33.09	397.0	1/4	182.7	2180.0
5/16	.261	3.13	.760	1.540	18.48	9/16	6.520	78.2	3.530	33.27	399.3	1/2	192.9	2315.0
.3175	.269	3.29	49/64	1.565	18.78	5/8	7.051	84.6	5/8	35.09	421.1	3/4	204.5	2454.0
.3225	.277	3.32	25/32	1.630	19.56	11/16	7.604	91.3	11/16	36.31	435.7	9	216.3	2596.0
21/64	.287	3.44	13/16	1.763	21.16	3/4	8.178	98.1	3/4	.7.55	405.6	1/4	228.5	2741.8
11/32	.316	3.79	.8175	1.784	21.42	1.770	8.365	100.4	3.770	37.95	455.4	1/2	241.0	2892.0
23/64	.345	4.14	27/32	1.901	22.81	16/16	8.773	105.3	7/8	40.10	481.2	3/4	253.8	3045.6
3/8	.376	4.51	7/8	2.044	24.5	7/8	9.388	112.7	15/16	41.40	496.8	10	267.0	3204.0
.380	.386	4.62	.880	2.067	24.8	15/16	10.02	120.2	**4 –**	42.73	512.8	1/2	295.2	3542.4
.385	.395	4.74	.885	2.091	25.1	**2 –**	10.68	128.2	4.020	43.15	517.8	11	324.0	3888.0
25/64	.407	4.88	57/64	2.115	25.4	2.020	10.896	130.7	4.030	43.37	520.4	1/2	354.0	4248.0
13/32	.441	5.29	29/32	2.193	26.3	1/16	11.36	136.3	1/8	45.40	544.8	12	385.6	4626.7
27-64	.475	5.70	15/16	2.347	28.2	1/8	12.06	144.7	1/4	48.23	578.7	1/2	420.0	5025.0
7/16	.511	6.13	.9425	2.372	28.5	3/16	12.78	153.4	3/8	21.11	613.3	13	451.3	5415.5
.4425	.523	6.42	31/32	2.506	30.1	1/4	13.52	162.2	7/16	52.58	631.0	14	523.3	7512.0
.4475	.535	6.42	**1 –**	2.670	32.0	2.270	13.76	165.1	1/2	54.08	648.9	15	601.0	7212.0
29/64	.548	6.57	1.005	2.696	32.4	5/16	14.28	171.4	4.530	54.80	657.5	16	684.0	8208.0
15/32	.587	7.04	1.010	2.723	32.7	3/8	15.06	180.7	5/8	57.12	685.4			
31/64	.626	7.51	1/64	2.750	33.0	7/16	15.87	190.4	3/4	60.25	723.0			
1/2	.668	8.02	1.020	2.778	33.3	1/2	16.69	200.3	7/8	63.48	761.8			