

Steel Tube & Pipe

Round, Square and Rectangular Tube & Pipe

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Square Tubing

Mechanical Tubing: Under 2" or 11 ga and under - ASTM A-513.

Structural Tubing: 2" and over 11 ga wall thickness - ASTM A-500 Grade B.

Standard Lengths: 20 ft., 24 ft., 40 ft., and 48 ft.

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
1/2 x 1/2		
18 ga	0.049	0.301
16 ga	0.065	0.385
5/8 x 5/8		
18 ga	0.049	0.400
16 ga	0.065	0.495
3/4 x 3/4		
18 ga	0.049	0.467
16 ga	0.065	0.606
14 ga	0.083	0.753
11 ga	0.120	1.028
7/8 x 7/8		
18 ga	0.049	0.550
16 ga	0.065	0.716
14 ga	0.083	0.894
1 x 1		
18 ga	0.049	0.634
16 ga	0.065	0.827
15 ga	0.072	0.909
14 ga	0.083	1.035
13 ga	0.095	1.169
12 ga	0.109	1.321
11 ga	0.120	1.436
10 ga	0.134	1.583
1-1/4 x 1-1/4		
18 ga	0.049	0.780
16 ga	0.065	1.048
14 ga	0.083	1.317
13 ga	0.095	1.492
12 ga	0.109	1.691
11 ga	0.120	1.844
3/16	0.188	2.400
1-1/2 x 1-1/2		
16 ga	0.065	1.269
14 ga	0.083	1.600
13 ga	0.095	1.815
12 ga	0.109	2.062
11 ga	0.120	2.252
10 ga	0.134	2.489
8 ga	0.165	2.760
7 ga	0.188	3.040
1/4	0.250	4.250
1-3/4 x 1-3/4		
16 ga	0.065	1.490
14 ga	0.083	1.882
12 ga	0.109	2.433
11 ga	0.120	2.660
7 ga	0.188	3.680
2 x 2		
18 ga	0.049	1.283
16 ga	0.065	1.710
14 ga	0.083	2.160

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
2 x 2		
13 ga	0.095	2.461
12 ga	0.109	2.803
11 ga	0.125	3.060
10 ga	0.134	3.400
8 ga	0.165	4.120
7 ga	0.188	4.320
1/4	0.250	5.410
2-1/8 x 2-1/8		
11 ga	0.125	3.270
2-1/4 x 2-1/4		
16 ga	0.065	1.923
11 ga	0.125	3.510
1/4	0.250	6.260
2-1/2 x 2-1/2		
16 ga	0.065	2.120
14 ga	0.083	2.728
12 ga	0.109	3.544
11 ga	0.125	3.900
10 ga	0.134	4.312
8 ga	0.165	5.240
7 ga	0.188	5.590
.238	0.238	6.830
1/4	0.250	7.110
5/16	0.312	8.440
3 x 3		
14 ga	0.083	3.240
11 ga	0.125	4.750
10 ga	0.134	5.223
8 ga	0.165	6.130
7 ga	0.188	6.870
1/4	0.250	8.810
5/16	0.312	10.580
3/8	0.375	12.170
3-1/2 x 3-1/2		
11 ga	0.125	5.610
10 ga	0.134	6.134
8 ga	0.165	7.250
7 ga	0.188	8.150
1/4	0.250	10.510
5/16	0.312	12.710
3/8	0.375	14.710
4 x 4		
14 ga	0.083	4.320
11 ga	0.125	6.460
10 ga	0.134	7.045
8 ga	0.165	8.730
7 ga	0.188	9.420
1/4	0.250	12.210
5/16	0.313	14.830
3/8	0.375	17.270
1/2	0.500	21.630

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
4-1/2 x 4-1/2		
11 ga	0.125	7.310
10 ga	0.134	7.790
8 ga	0.165	9.500
7 ga	0.188	10.700
1/4	0.250	13.910
5/16	0.313	16.960
3/8	0.375	19.820
1/2	0.500	25.030
5 x 5		
11 ga	0.125	8.160
10 ga	0.134	8.710
8 ga	0.165	10.610
7 ga	0.188	11.970
1/4	0.250	15.620
5/16	0.313	19.080
3/8	0.375	22.370
1/2	0.500	28.430
6 x 6		
11 ga	0.125	9.860
10 ga	0.134	10.530
8 ga	0.165	12.870
7 ga	0.188	14.530
1/4	0.250	19.020
5/16	0.312	23.340
3/8	0.375	27.480
1/2	0.500	35.240
5/8	0.625	42.300
7 x 7		
7 ga	0.188	17.080
1/4	0.250	22.420
5/16	0.313	27.600
3/8	0.375	32.580
1/2	0.500	42.050
5/8	0.625	50.810
8 x 8		
7 ga	0.188	19.630
1/4	0.250	25.820
5/16	0.313	31.840
3/8	0.375	37.690
1/2	0.500	48.850
5/8	0.625	59.320
10 x 10		
7 ga	0.188	24.730
1/4	0.250	32.630
5/16	0.313	40.350
3/8	0.375	47.900
1/2	0.500	62.460
5/8	0.625	76.330

Square Tubing

Mechanical Tubing: Under 2" or 11 ga and under - ASTM A-513.

Structural Tubing: 2" and over 11 ga wall thickness - ASTM A-500 Grade B.

Standard Lengths: 20 ft., 24 ft., 40 ft., and 48 ft.

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
12 x 12		
1/4	0.250	39.430
5/16	0.313	48.860
3/8	0.375	58.100
1/2	0.500	76.070
5/8	0.625	93.340

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
14 x 14		
5/16	0.313	57.360
3/8	0.375	68.310
1/2	0.500	89.680
5/8	0.625	110.360

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
16 x 16		
5/16	0.313	65.870
3/8	0.375	78.520
1/2	0.500	103.300
5/8	0.625	127.370

Rectangular Tubing

Mechanical Tubing: Under 2" or 11 ga and under - ASTM A-513.

Structural Tubing: 2" and over 11 ga wall thickness - ASTM A-500 Grade B.

Standard Lengths: 20 ft., 24 ft., 40 ft., and 48 ft.

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
1 x 1/2		
16 ga	0.065	0.606
1-1/2 x 1/2		
16 ga	0.065	0.827
1-1/2 x 3/4		
16 ga	0.065	0.937
14 ga	0.083	1.176
11 ga	0.120	1.601
1-1/2 x 1		
16 ga	0.065	1.048
14 ga	0.083	1.317
11 ga	0.120	1.844
10 ga	0.134	2.134
2 x 1		
18 ga	0.049	0.956
16 ga	0.065	1.269
14 ga	0.083	1.600
11 ga	0.120	2.252
10 ga	0.134	2.489
8 ga	0.165	2.760
7 ga	0.188	3.040
2 x 1-1/4		
14 ga	0.083	1.741
11 ga	0.120	2.456
2 x 1-1/2		
16 ga	0.065	1.500
14 ga	0.083	1.882
11 ga	0.120	2.660
10 ga	0.134	2.945
8 ga	0.165	3.320
7 ga	0.188	3.680

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
2-1/2 x 1		
16 ga	0.065	1.489
14 ga	0.083	1.882
11 ga	0.120	2.660
10 ga	0.134	2.950
8 ga	0.165	3.320
7 ga	0.188	3.680
2-1/2 x 1-1/4		
14 ga	0.083	2.023
2-1/2 x 1-1/2		
16 ga	0.065	1.710
14 ga	0.083	2.160
11 ga	0.125	3.070
10 ga	0.134	3.401
8 ga	0.165	4.118
7 ga	0.188	4.320
1/4	0.250	5.410
2-1/2 x 2		
11 ga	0.125	3.480
10 ga	0.134	3.856
8 ga	0.165	4.440
7 ga	0.188	4.960
3 x 1		
16 ga	0.065	1.710
14 ga	0.083	2.160
12 ga	0.109	2.803
11 ga	0.125	3.070
10 ga	0.134	3.401
8 ga	0.165	4.118
7 ga	0.188	4.320

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
3 x 1-1/2		
16 ga	0.065	1.932
14 ga	0.083	2.390
11 ga	0.125	3.480
10 ga	0.134	3.856
8 ga	0.165	4.440
7 ga	0.188	4.960
1/4	0.250	6.250
3 x 2		
16 ga	0.065	2.140
14 ga	0.083	2.728
13 ga	0.095	3.107
11 ga	0.125	3.900
10 ga	0.134	4.312
8 ga	0.165	5.239
7 ga	0.188	5.590
1/4	0.250	7.110
5/16	0.313	8.450
3-1/2 x 1-1/2		
11 ga	0.125	3.900
10 ga	0.134	4.312
8 ga	0.165	5.239
7 ga	0.188	5.600
3-1/2 x 2-1/2		
11 ga	0.125	4.750
10 ga	0.134	5.070
8 ga	0.165	6.130
7 ga	0.188	6.870
1/4	0.250	8.810
4 x 1-1/2		
11 ga	0.125	4.330
7 ga	0.188	6.230

Rectangular Tubing

Mechanical Tubing: Under 2" or 11 ga and under - ASTM A-513.

Structural Tubing: 2" and over 11 ga wall thickness - ASTM A-500 Grade B.

Standard Lengths: 20 ft., 24 ft., 40 ft., and 48 ft.

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)	Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)	Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
4 x 2			5 x 4			7 x 4		
14 ga	0.083	3.293	11 ga	0.125	7.310	7 ga	0.188	13.300
11 ga	0.125	4.750	10 ga	0.134	7.790	1/4	0.250	17.320
10 ga	0.134	5.070	8 ga	0.165	9.500	5/16	0.313	21.220
8 ga	0.165	6.130	7 ga	0.188	10.700	3/8	0.375	24.930
7 ga	0.188	6.870	1/4	0.250	13.910	1/2	0.500	31.840
4 x 2			5 x 4			7 x 5		
1/4	0.250	8.810	5/16	0.313	16.960	11 ga	0.125	9.860
5/16	0.313	10.580	3/8	0.375	19.820	10 ga	0.134	10.530
3/8	0.375	12.170	1/2	0.500	25.030	8 ga	0.165	12.870
4 x 2-1/2			6 x 2			7 ga	0.188	14.530
11 ga	0.125	5.180	11 ga	0.125	6.460	1/4	0.250	19.020
7 ga	0.188	7.482	10 ga	0.134	7.045	5/16	0.313	23.340
4 x 3			8 ga	0.165	8.370	3/8	0.375	27.480
11 ga	0.125	5.610	7 ga	0.188	9.420	1/2	0.500	35.240
10 ga	0.134	6.134	1/4	0.250	12.210	8 x 2		
8 ga	0.165	7.250	5/16	0.313	14.830	11 ga	0.125	8.160
7 ga	0.188	8.150	3/8	0.375	17.270	10 ga	0.134	8.710
1/4	0.250	10.510	6 x 3			8 ga	0.165	10.610
5/16	0.313	12.700	11 ga	0.125	7.300	7 ga	0.188	11.970
3/8	0.375	14.720	10 ga	0.134	7.790	1/4	0.250	15.620
4-1/2 x 3			8 ga	0.165	9.500	5/16	0.313	19.080
11 ga	0.125	6.030	7 ga	0.188	10.700	3/8	0.375	22.370
10 ga	0.134	6.589	1/4	0.250	13.910	8 x 3		
8 ga	0.165	8.045	5/16	0.313	16.960	11 ga	0.125	9.010
7 ga	0.188	8.780	3/8	0.375	19.820	10 ga	0.134	9.620
1/4	0.250	11.360	1/2	0.500	25.030	8 ga	0.165	11.740
5 x 2			6 x 4			7 ga	0.188	13.300
11 ga	0.125	5.610	11 ga	0.125	8.160	1/4	0.250	17.320
10 ga	0.134	6.134	10 ga	0.134	8.710	5/16	0.313	21.220
8 ga	0.165	7.250	8 ga	0.165	10.610	3/8	0.375	24.930
7 ga	0.188	8.150	7 ga	0.188	11.970	1/2	0.500	31.840
1/4	0.250	10.510	1/4	0.250	15.620	8 x 4		
5/16	0.313	12.700	5/16	0.313	19.080	11 ga	0.125	9.860
3/8	0.375	14.720	3/8	0.375	22.370	10 ga	0.134	10.530
5 x 2-1/2			1/2	0.500	28.430	8 ga	0.165	12.870
11 ga	0.125	6.030	7 x 3			7 ga	0.188	14.530
10 ga	0.134	6.589	11 ga	0.125	8.160	1/4	0.250	19.020
8 ga	0.165	8.045	10 ga	0.134	8.710	5/16	0.313	23.340
7 ga	0.188	8.780	8 ga	0.165	10.610	3/8	0.375	27.480
1/4	0.250	11.360	7 ga	0.188	11.970	1/2	0.500	35.240
5 x 3			1/4	0.250	15.620	5/8	0.625	42.300
11 ga	0.125	6.460	5/16	0.313	19.090	8 x 6		
10 ga	0.134	7.045	3/8	0.375	22.370	7 ga	0.188	17.080
8 ga	0.165	8.370	1/2	0.500	28.430	1/4	0.250	22.420
7 ga	0.188	9.420	7 x 4			5/16	0.313	27.590
1/4	0.250	12.210	11 ga	0.125	9.010	3/8	0.375	32.580
5/16	0.313	14.840	10 ga	0.134	9.620	1/2	0.500	42.050
3/8	0.375	17.270	8 ga	0.165	11.740	5/8	0.625	50.810
1/2	0.500	21.630						

Rectangular Tubing

Mechanical Tubing: Under 2" or 11 ga and under - ASTM A-513.

Structural Tubing: 2" and over 11 ga wall thickness - ASTM A-500 Grade B.

Standard Lengths: 20 ft., 24 ft., 40 ft., and 48 ft.

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
9 x 5		
3/8	0.375	32.580
10 x 2		
11 ga	0.125	9.860
10 ga	0.134	10.530
8 ga	0.165	12.850
10 x 2		
7 ga	0.188	14.530
1/4	0.250	19.020
5/16	0.313	23.340
3/8	0.375	27.480
10 x 3		
11 ga	0.125	10.710
10 ga	0.134	11.440
8 ga	0.165	13.990
7 ga	0.188	15.840
1/4	0.250	20.720
5/16	0.313	25.460
3/8	0.375	30.030
10 x 3-1/2		
11 ga	0.125	11.130
10 ga	0.134	12.000
8 ga	0.165	14.550
7 ga	0.188	16.440
1/4	0.250	21.570
5/16	0.313	26.530
3/8	0.375	31.310
10 x 4		
7 ga	0.188	17.080
1/4	0.250	22.420
5/16	0.313	27.590
3/8	0.375	32.580
1/2	0.500	42.050
10 x 5		
1/4	0.250	24.120
3/8	0.375	35.140
10 x 6		
7 ga	0.188	19.630
1/4	0.250	25.820
5/16	0.313	31.840
3/8	0.375	37.690
1/2	0.500	48.850
5/8	0.625	59.320
10 x 8		
7 ga	0.188	22.180
1/4	0.250	29.230
5/16	0.313	36.100
3/8	0.375	42.790
1/2	0.500	55.660
5/8	0.625	67.820

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
12 x 2		
7 ga	0.188	17.080
1/4	0.250	22.420
12 x 3		
7 ga	0.188	18.400
1/4	0.250	24.120
12 x 4		
7 ga	0.188	19.630
1/4	0.250	25.820
5/16	0.313	31.840
3/8	0.375	37.690
1/2	0.500	48.850
12 x 6		
7 ga	0.188	22.180
1/4	0.250	29.230
5/16	0.313	36.100
3/8	0.375	42.790
1/2	0.500	55.660
5/8	0.625	67.820
12 x 8		
7 ga	0.188	24.730
1/4	0.250	32.630
5/16	0.313	40.350
3/8	0.375	47.900
1/2	0.500	62.460
5/8	0.625	76.330
14 x 4		
7 ga	0.188	22.180
1/4	0.250	29.230
5/16	0.313	36.100
3/8	0.375	42.790
1/2	0.500	55.660
14 x 6		
7 ga	0.188	24.730
1/4	0.250	32.630
5/16	0.313	40.350
3/8	0.375	47.900
1/2	0.500	62.460
5/8	0.625	76.330
14 x 10		
1/4	0.250	39.430
5/16	0.313	48.860
3/8	0.375	58.100
1/2	0.500	76.070
5/8	0.625	93.340

Outside Dimension & Gauge (inches)	Wall Thickness (inches)	Weight (lbs./ft.)
16 x 4		
7 ga	0.188	24.730
1/4	0.250	32.630
5/16	0.313	40.350
3/8	0.375	47.900
1/2	0.500	62.460
16 x 8		
1/4	0.250	39.430
5/16	0.313	48.860
3/8	0.375	58.100
1/2	0.500	76.070
5/8	0.625	93.360
16 x 12		
5/16	0.313	57.360
3/8	0.375	68.310
1/2	0.500	89.680
5/8	0.625	110.360
18 x 6		
1/4	0.250	39.430
5/16	0.313	48.860
3/8	0.375	58.100
1/2	0.500	76.070
5/8	0.625	93.340
20 x 4		
1/4	0.250	39.430
5/16	0.313	48.860
3/8	0.375	58.100
1/2	0.500	76.070
20 x 8		
5/16	0.313	57.360
3/8	0.375	68.310
1/2	0.500	89.680
5/8	0.625	110.360
20 x 12		
5/16	0.313	65.870
3/8	0.375	78.520
1/2	0.500	103.300
5/8	0.625	127.370

Epoxzkote® Tubing

Product Description

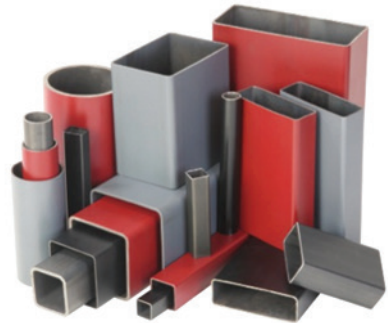
Steel tubing produced to A513 and A500 B/C specifications that is phosphate pretreated and coated with a fully cured weldable epoxy powder coat primer.

Performance Values

- Salt Spray - ASTM B117 1,000 hours @ 1 mil with zero creepage @ scribe
- Adhesion - ASTM D3359-90 5B
- Impact - 100 inch lbs without any de-lamination of coating
- Flexible - Forming and bending without cracking or flaking
- DFT - 0.5 mil average dry film thickness

Available Colors

- Red
- Gray
- Black
- Clear



Epoxzkote® Square Tubing

Outside Dimension (Inches)	Epoxzkote® Square Tubing Available Gauges							
	.083	.120	.125	.188	.250	.313	.375	.500
1-1/4	●	●						
1-1/2	●	●	●	●	●			
2	●	●	●	●	●			
2-1/2			●	●	●			
3			●	●	●	●	●	
3-1/2			●	●	●	●	●	
4			●	●	●	●	●	●
4-1/2			●	●	●	●	●	●
5			●	●	●	●	●	●
6				●	●	●	●	●
7				●	●	●	●	
8				●	●	●	●	

Available in Structural (A500) and Mechanical (A513) grades

Epoxzkote® Rectangular Tubing

Outside Dimension (inches)	Epoxzkote® Square Tubing Available Gauges							
	.083	.120	.125	.188	.250	.313	.375	.500
1.5 x 1								
2 x 1	●	●	●	●				
2 x 1.5			●	●				
2.5 x 1.5	●	●	●	●	●			
3 x 1	●	●	●	●				
3 x 2			●	●	●			
4 x 2			●	●	●	●	●	
4 x 3			●	●	●	●	●	
5 x 2			●	●	●	●	●	
5 x 2.5			●	●	●	●	●	
5 x 3			●	●	●	●	●	●
5 x 4			●	●	●	●	●	●
6 x 2			●	●	●	●	●	●
6 x 3			●	●	●	●	●	●
6 x 4			●	●	●	●	●	●
7 x 3			●	●	●	●	●	●
7 x 4			●	●	●	●	●	●
7 x 5				●	●	●	●	●
8 x 2			●	●	●	●	●	
8 x 3			●	●	●	●	●	
8 x 4				●	●	●	●	●
8 x 6				●	●	●	●	
10 x 2				●	●	●	●	
10 x 4				●	●	●	●	

Available in Structural (A500) and Mechanical (A513) grades

Epoxzkote® Pipe

Epoxzkote® Nominal Pipe Sizes in Inches	
1-1/2	4
2	5
2-1/2	6
3	8
3-1/2	

Most sizes are available in schedule 40 & schedule 80.
Contact your Alro representative for more details.

Electric Resistance Weld (ERW)

ASTM A-513 T-1 (HREW) + A-513 T-2 (CREW)

Carbon: 1010 - 1026 (may vary by size)

Cold Drawn Seamless (CDS)

ASTM A-519

Carbon: 1026

Drawn-Over-Mandrel (DOM)

ASTM A-513 Type 5

Carbon: 1010 - 1026 (may vary by size)

Hot Finished Seamless (HFS)

ASTM A-519 and/or A-106

Carbon: 1026

ERW - Electric Resistance Weld

CDS - Cold Drawn Seamless

DOM - Drawn Over Mandrel

HFS - Hot Finished Seamless

20 foot - ERW

x - Stock Size

17 - 24 ft. random lengths DOM/CDS

12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
1/4 OD							
24 ga	0.022	0.206	0.0536	-	-	-	-
22 ga	0.028	0.194	0.0664	-	-	●	-
21 ga	0.032	0.187	0.0745	-	-	-	-
20 ga	0.035	0.180	0.0804	-	-	●	-
19 ga	0.042	0.166	0.0933	-	-	-	-
18 ga	0.049	0.152	0.1052	-	-	-	-
16 ga	0.065	0.120	0.1284	-	-	●	-
5/16 OD							
23 ga	0.025	0.263	0.0770	-	-	-	-
21 ga	0.032	0.249	0.0960	-	-	-	-
20 ga	0.035	0.242	0.1039	-	-	-	-
18 ga	0.049	0.214	0.1382	-	-	●	-
16 ga	0.065	0.182	0.1722	-	-	●	-
3/8 OD							
20 ga	0.035	0.305	0.1271	-	-	●	-
18 ga	0.049	0.277	0.1706	-	-	●	-
17 ga	0.058	0.259	0.1964	-	-	●	-
16 ga	0.065	0.245	0.2152	-	-	●	-
14 ga	0.083	0.209	0.2588	-	-	●	-
13 ga	0.095	0.185	0.2840	-	-	-	-
7/16 OD							
20 ga	0.035	0.368	0.1506	-	-	-	-
18 ga	0.049	0.340	0.2036	-	-	●	-
17 ga	0.058	0.322	0.2354	-	-	●	-
16 ga	0.065	0.307	0.2589	-	-	●	-
14 ga	0.083	0.271	0.3147	-	-	●	-
13 ga	0.095	0.248	0.3480	-	-	-	-
12 ga	0.109	0.220	0.3830	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

- Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
1/2 OD							
20 ga	0.035	0.430	0.1738	-	-	●	-
18 ga	0.049	0.402	0.2360	-	-	●	-
17 ga	0.058	0.384	0.2738	-	-	●	-
16 ga	0.065	0.370	0.3020	●	-	●	-
15 ga	0.072	0.356	0.3291	-	-	●	-
14 ga	0.083	0.334	0.3696	-	-	●	-
13 ga	0.095	0.310	0.4109	-	-	●	-
12 ga	0.109	0.282	0.4552	-	-	●	-
11 ga	0.120	0.260	0.4870	-	-	●	-
1/8	0.125	0.250	0.5010	-	-	●	-
10 ga	0.134	0.232	0.5238	-	-	-	-
8 ga	0.156	0.188	0.5660	-	-	●	-
9/16 OD							
16 ga	0.065	0.432	0.3460	-	-	●	-
14 ga	0.083	0.396	0.4255	-	-	●	-
13 ga	0.095	0.372	0.4748	-	-	●	-
12 ga	0.109	0.344	0.5285	-	-	-	-
11 ga	0.120	0.322	0.5677	-	-	●	-
5/8 OD							
20 ga	0.035	0.555	0.2210	-	-	●	-
18 ga	0.049	0.527	0.3014	-	-	●	-
17 ga	0.058	0.509	0.3512	-	-	●	-
16 ga	0.065	0.495	0.3888	-	-	●	-
14 ga	0.083	0.459	0.4805	-	-	●	-
13 ga	0.095	0.435	0.5377	-	-	●	-
12 ga	0.109	0.407	0.6007	-	-	●	-
11 ga	0.120	0.385	0.6472	-	-	●	-
1/8	0.125	0.375	0.6675	-	-	●	-
10 ga	0.134	0.357	0.7027	-	-	●	-
5/32	0.156	0.312	0.7814	-	-	●	-
3/16	0.188	0.250	0.8774	-	-	●	-
11/16 OD							
16 ga	0.065	0.558	0.4325	-	-	●	-
14 ga	0.083	0.521	0.5363	-	-	●	-
13 ga	0.095	0.497	0.6017	-	-	●	-
12 ga	0.109	0.469	0.6740	-	-	●	-
11 ga	0.120	0.447	0.7279	-	-	●	-
10 ga	0.134	0.419	0.7928	-	-	●	-
5/32	0.156	0.375	0.8864	-	-	-	-
3/16	0.188	0.312	1.0040	-	-	-	-
7/32	0.218	0.252	1.0950	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
3/4 OD							
20 ga	0.035	0.680	0.2673	-	-	●	-
18 ga	0.049	0.652	0.3668	●	-	●	-
17 ga	0.058	0.634	0.4287	-	-	●	-
16 ga	0.065	0.620	0.4755	●	-	●	-
15 ga	0.072	0.606	0.5214	-	-	-	-
14 ga	0.083	0.584	0.5913	-	-	●	-
13 ga	0.095	0.560	0.6646	-	-	●	-
12 ga	0.109	0.532	0.7462	-	-	●	-
11 ga	0.120	0.510	0.8074	-	-	●	-
1/8	0.125	0.500	0.8344	-	-	●	-
10 ga	0.134	0.482	0.8816	-	-	●	-
5/32	0.156	0.437	0.9897	-	-	●	-
11/64	0.172	0.406	1.0620	-	-	●	-
3/16	0.188	0.375	1.1280	-	-	●	-
7/32	0.219	0.312	1.2420	-	-	●	-
1/4	0.250	0.250	1.3350	-	-	●	-
13/16 OD							
22 ga	0.028	0.757	0.2347	-	-	-	-
20 ga	0.035	0.742	0.2908	-	-	-	-
18 ga	0.049	0.714	0.3998	-	-	-	-
16 ga	0.065	0.682	0.5193	-	-	●	-
14 ga	0.083	0.647	0.6471	-	-	●	-
13 ga	0.095	0.622	0.7260	-	-	●	-
11 ga	0.120	0.572	0.8881	-	-	●	-
10 ga	0.134	0.544	0.9717	-	-	-	-
5/32	0.156	0.500	1.0950	-	-	●	-
3/16	0.188	0.437	1.2550	-	-	●	-
7/8 OD							
20 ga	0.035	0.805	0.3140	-	-	-	-
18 ga	0.049	0.777	0.4323	-	-	●	-
17 ga	0.058	0.759	0.5061	-	-	●	-
16 ga	0.065	0.745	0.5623	-	-	●	-
14 ga	0.083	0.709	0.7021	-	-	●	-
13 ga	0.095	0.685	0.7914	-	-	●	-
12 ga	0.109	0.657	0.8917	-	-	●	-
11 ga	0.120	0.635	0.9676	-	-	●	-
1/8	0.125	0.625	1.0013	-	-	●	-
10 ga	0.134	0.607	1.0600	-	-	●	-
5/32	0.156	0.562	1.1980	-	-	●	-
3/16	0.188	0.500	1.3790	-	-	●	-
7/32	0.219	0.437	1.5340	-	-	●	-
1/4	0.250	0.375	1.6690	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
15/16 OD							
16 ga	0.065	0.808	0.6060	-	-	●	-
14 ga	0.083	0.771	0.7579	-	-	-	-
13 ga	0.095	0.747	0.8553	-	-	-	-
11 ga	0.120	0.697	1.0480	-	-	●	-
10 ga	0.134	0.669	1.1510	-	-	●	-
5/32	0.156	0.625	1.3030	-	-	-	-
3/16	0.188	0.562	1.5060	-	-	-	-
7/32	0.219	0.500	1.6820	-	-	-	-
1/4	0.250	0.437	1.8370	-	-	-	-
1 OD							
22 ga	0.028	0.944	0.2907	-	-	-	-
20 ga	0.035	0.930	0.3607	-	-	●	-
18 ga	0.049	0.902	0.4977	-	-	●	-
17 ga	0.058	0.884	0.5835	-	-	●	-
16 ga	0.065	0.870	0.6491	●	-	●	-
15 ga	0.072	0.856	0.7136	-	-	●	-
14 ga	0.083	0.834	0.8129	●	-	●	-
13 ga	0.095	0.810	0.9182	-	-	●	-
12 ga	0.109	0.782	1.0370	-	-	●	-
11 ga	0.120	0.760	1.1280	●	-	●	-
1/8	0.125	0.750	1.1680	-	-	●	-
10 ga	0.134	0.732	1.2390	-	-	●	-
5/32	0.156	0.687	1.4060	-	-	●	-
11/64	0.172	0.656	1.5210	-	-	-	-
7 ga	0.180	0.640	1.576	-	-	●	-
3/16	0.188	0.625	1.8810	-	-	●	-
7/32	0.219	0.562	1.8270	-	-	●	-
1/4	0.250	0.500	2.0030	-	-	●	-
9/32	0.281	0.437	2.1580	-	-	●	-
5/16	0.313	0.375	2.2970	-	●	-	-
3/8	0.375	0.250	2.5030	-	●	-	-
1-1/16 OD							
16 ga	0.065	0.933	0.6928	-	-	●	-
14 ga	0.083	0.897	0.8687	-	-	●	-
13 ga	0.095	0.872	0.9821	-	-	●	-
12 ga	0.109	0.844	1.1110	-	-	●	-
11 ga	0.120	0.822	1.2090	-	-	●	-
10 ga	0.134	0.794	1.3300	-	-	●	-
5/32	0.156	0.750	1.5110	-	-	●	-
3/16	0.188	0.687	1.7570	-	-	●	-
7/32	0.219	0.625	1.9740	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
1-1/16 OD							
1/4	0.250	0.562	2.1710	-	-	●	-
9/32	0.281	0.500	2.3470	-	-	-	-
5/16	0.313	0.437	2.5070	-	-	-	-
3/8	0.375	0.312	2.7550	-	-	-	-
1-1/8 OD							
20 ga	0.035	1.055	0.4074	-	-	-	-
18 ga	0.049	1.027	0.5631	-	-	●	-
17 ga	0.058	1.009	0.6609	-	-	-	-
16 ga	0.065	0.995	0.7359	●	-	●	-
14 ga	0.083	0.959	0.9237	●	-	●	-
13 ga	0.095	0.935	1.0450	-	-	●	-
12 ga	0.109	0.907	1.1830	-	-	●	-
11 ga	0.120	0.885	1.2880	●	-	●	-
1/8	0.125	0.875	1.3350	-	-	●	-
10 ga	0.134	0.857	1.4180	-	-	●	-
5/32	0.156	0.812	1.6140	-	-	●	-
11/64	0.172	0.781	1.7510	-	-	●	-
3/16	0.188	0.750	1.8810	-	-	●	-
7/32	0.219	0.687	2.1190	-	-	●	-
1/4	0.250	0.625	2.3360	-	-	●	-
9/32	0.281	0.563	2.5330	-	-	●	-
5/16	0.313	0.500	2.7140	-	-	-	-
3/8	0.375	0.375	3.0040	-	-	-	-
1-3/16 OD							
16 ga	0.065	1.057	0.7796	-	-	●	-
14 ga	0.083	1.021	0.9795	-	-	●	-
11 ga	0.120	0.948	1.3690	-	-	●	-
1/8	0.125	0.938	1.4184	-	-	●	-
5/32	0.156	0.875	1.7190	-	-	●	-
3/16	0.188	0.812	2.0080	-	-	●	-
7/32	0.219	0.750	2.2660	-	-	●	-
1/4	0.250	0.687	2.5040	-	-	●	-
1-1/4 OD							
20 ga	0.035	1.180	0.4542	-	-	-	-
18 ga	0.049	1.152	0.6285	-	-	●	-
16 ga	0.065	1.120	0.8226	●	-	●	-
14 ga	0.083	1.084	1.0340	●	-	●	-
13 ga	0.095	1.060	1.1720	-	-	●	-
12 ga	0.109	1.032	1.3280	-	-	●	-
11 ga	0.120	1.010	1.4480	●	-	●	-
1/8	0.125	1.000	1.5020	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:
• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
1-1/4 OD							
10 ga	0.134	0.982	1.5970	-	-	●	-
5/32	0.156	0.937	1.8230	-	-	●	-
3/16	0.188	0.875	2.1320	-	-	●	-
7/32	0.219	0.812	2.4110	-	-	●	-
1/4	0.250	0.750	2.6700	-	-	●	-
9/32	0.281	0.687	2.9080	-	-	●	-
5/16	0.313	0.625	3.1320	-	-	●	-
3/8	0.375	0.500	3.5040	-	●	●	-
7/16	0.438	0.375	3.8000	-	●	●	-
1-5/16 OD							
20 ga	0.035	1.242	0.4777	-	-	-	-
16 ga	0.065	1.182	0.8664	-	-	●	-
14 ga	0.083	1.146	1.0900	-	-	●	-
13 ga	0.095	1.122	1.2360	-	-	●	-
12 ga	0.109	1.094	1.4020	-	-	●	-
11 ga	0.120	1.072	1.5290	-	-	●	-
10 ga	0.134	1.044	1.6870	-	-	●	-
5/32	0.156	1.000	1.9280	-	-	●	-
3/16	0.188	0.937	2.1590	-	-	●	-
7/32	0.219	0.875	2.5590	-	-	●	-
1/4	0.250	0.812	2.8380	-	-	●	-
9/32	0.281	0.750	3.0970	-	-	●	-
5/16	0.313	0.687	3.3430	-	-	●	-
1-3/8 OD							
20 ga	0.035	1.305	0.5009	-	-	-	-
18 ga	0.049	1.277	0.6939	-	-	●	-
16 ga	0.065	1.245	0.9094	●	-	●	-
14 ga	0.083	1.209	1.1450	●	-	●	-
13 ga	0.095	1.185	1.2990	-	-	●	-
12 ga	0.109	1.157	1.4740	-	-	●	-
11 ga	0.120	1.135	1.6080	●	-	●	-
1/8	0.125	1.125	1.6690	-	-	●	-
10 ga	0.134	1.107	1.7760	-	-	●	-
5/32	0.156	1.062	2.0310	-	-	●	-
11/64	0.172	1.031	2.2100	-	-	●	-
3/16	0.188	1.000	2.3830	-	-	●	-
7/32	0.219	0.937	2.7040	-	-	●	-
1/4	0.250	0.875	3.0040	-	-	●	-
9/32	0.281	0.813	3.2830	-	-	●	-
5/16	0.313	0.750	3.5500	-	-	●	-
3/8	0.375	0.625	4.0050	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Steel Tube and Pipe

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
1-7/16 OD							
18 ga	0.049	1.339	0.7269	-	-	-	-
16 ga	0.065	1.308	0.9531	-	-	-	-
14 ga	0.083	1.271	1.2010	-	-	-	-
13 ga	0.095	1.247	1.3630	-	-	-	-
11 ga	0.120	1.197	1.6890	-	-	●	-
10 ga	0.134	1.170	1.8660	-	-	-	-
5/32	0.156	1.125	2.1360	-	-	-	-
3/16	0.188	1.062	2.5100	-	-	●	-
7/32	0.219	1.000	2.8510	-	-	-	-
1/4	0.250	0.937	3.1720	-	-	-	-
1-1/2 OD							
20 ga	0.035	1.430	0.5476	-	-	-	-
18 ga	0.049	1.402	0.7593	-	-	●	-
17 ga	0.058	1.384	0.8932	-	-	●	-
16 ga	0.065	1.370	0.9962	●	-	●	-
15 ga	0.072	1.356	1.0980	-	-	-	-
14 ga	0.083	1.334	1.2560	●	-	●	-
13 ga	0.095	1.310	1.4260	●	-	●	-
12 ga	0.109	1.282	1.6190	-	-	●	-
11 ga	0.120	1.260	1.7690	●	-	●	-
1/8	0.125	1.250	1.8360	-	-	●	-
10 ga	0.134	1.232	1.9550	-	-	●	-
5/32	0.156	1.187	2.2390	-	-	●	-
11/64	0.172	1.156	2.4390	-	-	-	-
3/16	0.188	1.125	2.6340	-	-	●	-
7/32	0.219	1.062	2.9960	-	-	●	-
15/64	0.234	1.032	3.1640	-	-	●	-
1/4	0.250	1.000	3.3380	-	-	●	-
9/32	0.281	0.938	3.6580	-	-	●	-
5/16	0.313	0.875	3.9680	-	-	●	-
11/32	0.344	0.812	4.2470	-	-	●	-
3/8	0.375	0.750	4.5060	-	-	●	-
7/16	0.438	0.625	4.9680	-	●	-	-
1/2	0.500	0.500	5.3400	-	●	-	-
1-9/16 OD							
16 ga	0.065	1.433	1.0399	-	-	-	-
13 ga	0.095	1.372	1.4890	-	-	-	-
11 ga	0.120	1.322	1.8490	-	-	●	-
1/8	0.125	1.313	1.9200	-	-	●	-
10 ga	0.134	1.295	2.0450	-	-	-	-
5/32	0.156	1.250	2.3440	-	-	●	-
3/16	0.188	1.187	2.7610	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Continued on next page ►

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
1-9/16 OD							
7/32	0.219	1.125	3.1440	-	-	-	-
1/4	0.250	1.062	3.5060	-	-	●	-
3/8	0.375	0.813	4.7580	-	-	●	-
1-5/8 OD							
20 ga	0.035	1.555	0.5943	-	-	-	-
18 ga	0.049	1.527	0.8248	-	-	-	-
17 ga	0.058	1.509	0.9707	-	-	●	-
16 ga	0.065	1.495	1.0830	-	-	●	-
14 ga	0.083	1.459	1.3670	-	-	●	-
13 ga	0.095	1.435	1.5520	-	-	●	-
12 ga	0.109	1.407	1.7650	-	-	●	-
11 ga	0.120	1.385	1.9290	●	-	●	-
1/8	0.125	1.375	2.0030	-	-	●	-
10 ga	0.134	1.357	2.1340	-	-	●	-
5/32	0.156	1.312	2.4470	-	-	●	-
11/64	0.172	1.281	2.6690	-	-	●	-
3/16	0.188	1.250	2.8850	-	-	●	-
7/32	0.219	1.187	3.2890	-	-	●	-
1/4	0.250	1.125	3.6710	-	-	●	-
9/32	0.281	1.063	4.0330	-	-	●	-
5/16	0.313	1.000	4.3860	-	-	●	-
3/8	0.375	0.875	5.0060	-	-	●	-
1/2	0.500	0.625	6.0070	-	-	-	-
1-11/16 OD							
16 ga	0.065	1.557	1.1270	-	-	-	-
11 ga	0.120	1.447	2.0100	-	-	●	-
3/16	0.188	1.313	3.0120	-	-	-	-
7/32	0.219	1.250	3.4360	-	-	-	-
1/4	0.250	1.187	3.8390	-	-	●	-
1-3/4 OD							
20 ga	0.035	1.680	0.6411	-	-	-	-
18 ga	0.049	1.652	0.8902	-	-	●	-
16 ga	0.065	1.620	1.1700	●	-	●	-
14 ga	0.083	1.584	1.4780	●	-	●	-
13 ga	0.095	1.560	1.6790	-	-	●	-
12 ga	0.109	1.532	1.9100	-	-	●	-
11 ga	0.120	1.510	2.0890	●	-	●	-
1/8	0.125	1.500	2.1690	-	-	●	-
10 ga	0.134	1.482	2.3130	-	-	●	-
5/32	0.156	1.437	2.6560	-	-	●	-
3/16	0.188	1.375	3.1360	-	-	●	-
7/32	0.219	1.312	3.5810	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
1-3/4 OD							
1/4	0.250	1.250	4.0050	-	-	●	-
9/32	0.281	1.188	4.4090	-	-	●	-
5/16	0.313	1.125	4.8040	-	-	●	-
3/8	0.375	1.000	5.5070	-	-	●	-
7/16	0.438	0.874	6.1370	-	●	-	-
1/2	0.500	0.750	6.6750	-	●	-	-
1-13/16 OD							
3/16	0.188	1.437	3.2630	-	-	-	-
7/32	0.219	1.375	3.7280	-	-	-	-
1/4	0.250	1.313	4.1730	-	-	-	-
1-7/8 OD							
20 ga	0.035	1.805	0.6880	-	-	-	-
18 ga	0.049	1.777	0.9556	-	-	-	-
16 ga	0.065	1.745	1.2570	●	-	●	-
14 ga	0.083	1.709	1.5890	-	-	-	-
13 ga	0.095	1.685	1.8060	-	-	●	-
12 ga	0.109	1.657	2.0560	-	-	●	-
11 ga	0.120	1.635	2.2490	●	-	●	-
1/8	0.125	1.625	2.3360	-	-	●	-
10 ga	0.134	1.607	2.4920	-	-	●	-
5/32	0.156	1.562	2.8640	-	-	●	-
3/16	0.188	1.500	3.3870	-	-	●	-
7/32	0.219	1.437	3.8730	-	-	●	-
1/4	0.250	1.375	4.3390	-	-	●	-
9/32	0.281	1.313	4.7840	-	-	●	-
5/16	0.313	1.250	5.2220	-	-	●	-
3/8	0.375	1.125	6.0080	-	-	●	-
1-15/16 OD							
16 ga	0.065	1.808	1.3000	-	-	-	-
1/8	0.125	1.688	2.4200	-	-	-	-
5/32	0.156	1.625	2.9690	-	-	-	-
7/32	0.219	1.500	4.0210	-	-	-	-
1/4	0.250	1.438	4.5070	-	-	-	-
3/8	0.375	1.188	6.2600	-	-	-	-
2 OD							
20 ga	0.035	1.930	0.7345	-	-	-	-
18 ga	0.049	1.902	1.0210	-	-	-	-
16 ga	0.065	1.870	1.3430	●	-	●	-
14 ga	0.083	1.834	1.6990	●	-	●	-
13 ga	0.095	1.810	1.9330	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
2 OD							
12 ga	0.109	1.782	2.0210	-	-	●	-
11 ga	0.120	1.760	2.4090	●	-	●	-
1/8	0.125	1.750	2.5030	-	-	●	-
10 ga	0.134	1.732	2.6700	-	-	●	-
5/32	0.156	1.688	3.0720	-	-	●	-
3/16	0.188	1.625	3.6380	-	-	●	-
7/32	0.219	1.562	4.1660	-	-	●	-
1/4	0.250	1.500	4.6730	-	-	●	-
9/32	0.281	1.438	5.1590	-	-	●	-
5/16	0.313	1.375	5.6390	-	-	●	-
11/32	0.344	1.312	6.0840	-	-	●	-
3/8	0.375	1.250	6.5080	-	●	●	-
13/32	0.406	1.188	6.9100	-	●	-	-
7/16	0.438	1.124	7.3070	-	●	●	-
1/2	0.500	1.000	8.0100	-	-	●	-
9/16	0.563	0.874	8.6400	-	-	●	-
5/8	0.625	0.750	9.1780	-	●	-	-
2-1/16 OD							
3/16	0.188	1.689	3.7650	-	-	-	-
1/4	0.250	1.562	4.8410	-	-	-	-
2-1/8 OD							
18 ga	0.049	2.027	1.0860	-	-	-	-
16 ga	0.065	1.995	1.4300	-	-	●	-
14 ga	0.083	1.959	1.8100	-	-	-	-
13 ga	0.095	1.935	2.0600	-	-	●	-
11 ga	0.120	1.885	2.5700	-	-	●	-
1/8	0.125	1.875	2.6700	-	-	●	-
5/32	0.156	1.812	3.2810	-	-	●	-
3/16	0.188	1.750	3.8890	-	-	●	-
7/32	0.219	1.687	4.4580	-	-	●	-
1/4	0.250	1.625	5.0060	-	-	●	-
9/32	0.281	1.563	5.5340	-	-	●	-
5/16	0.313	1.500	6.0570	-	-	●	-
3/8	0.375	1.375	7.0090	-	-	●	-
7/16	0.438	1.249	7.8920	-	●	-	-
15/32	0.469	1.187	8.2950	-	●	-	-
1/2	0.500	1.125	8.6780	-	●	-	-
2-3/16 OD							
1/4	0.250	1.688	5.174	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
2-1/4 OD							
18 ga	0.049	2.152	1.1520	-	-	-	-
16 ga	0.065	2.120	1.5170	●	-	●	-
14 ga	0.083	2.084	1.9210	-	-	●	-
13 ga	0.095	2.060	2.1860	-	-	●	-
12 ga	0.109	2.032	2.4920	-	-	●	-
11 ga	0.120	2.010	2.7300	●	-	●	-
1/8	0.125	2.000	2.8370	-	-	●	-
10 ga	0.134	1.982	3.0280	-	-	●	-
5/32	0.156	1.937	3.4890	-	-	●	-
3/16	0.188	1.875	4.1400	-	-	●	-
7/32	0.219	1.812	4.7500	-	-	●	-
1/4	0.250	1.750	5.3400	-	-	●	-
9/32	0.281	1.688	5.9090	-	-	●	-
5/16	0.313	1.625	6.4750	-	-	●	-
11/32	0.344	1.562	7.0020	-	-	●	-
3/8	0.375	1.500	7.5090	-	-	●	-
7/16	0.438	1.374	8.4760	-	●	●	-
1/2	0.500	1.250	9.3450	-	●	●	-
9/16	0.563	1.124	10.1440	-	-	●	-
5/8	0.625	1.000	10.8500	-	●	-	-
3/4	0.750	0.750	12.0200	-	●	-	-
2-5/16 OD							
3/16	0.188	1.936	4.2670	-	-	-	-
1/4	0.250	1.813	5.5080	-	-	-	-
2-3/8 OD							
16 ga	0.065	2.245	1.6040	●	-	●	-
14 ga	0.083	2.209	2.0320	-	-	●	-
13 ga	0.095	2.185	2.3130	-	-	●	-
12 ga	0.109	2.157	2.6380	-	-	●	-
11 ga	0.120	2.135	2.8900	●	-	●	-
1/8	0.125	2.125	3.0040	-	-	●	-
5/32	0.156	2.063	3.6970	-	-	●	-
7 ga	0.180	2.015	4.2200	-	-	●	-
3/16	0.188	2.000	4.3910	-	-	●	-
13/64	0.203	1.969	4.7090	-	-	●	-
7/32	0.219	1.937	5.0430	-	-	●	-
1/4	0.250	1.875	5.6740	-	-	●	-
9/32	0.281	1.813	6.2840	-	-	●	-
5/16	0.313	1.750	6.8930	-	-	●	-
3/8	0.375	1.625	8.0100	-	-	●	-
7/16	0.438	1.499	9.0610	-	-	●	-
1/2	0.500	1.375	10.0013	-	-	●	-
9/16	0.563	1.249	10.9000	-	-	●	-
5/8	0.625	1.125	11.6810	-	●	-	-

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
2-1/2 OD							
18 ga	0.049	2.402	1.2830	-	-	-	-
16 ga	0.065	2.370	1.6900	●	-	●	-
14 ga	0.083	2.334	2.1430	●	-	●	-
13 ga	0.095	2.310	2.4400	-	-	●	-
12 ga	0.109	2.282	2.7830	-	-	●	-
11 ga	0.120	2.260	3.0500	●	-	●	-
1/8	0.125	2.250	3.1710	-	-	●	-
10 ga	0.134	2.232	3.3860	-	-	●	-
5/32	0.156	2.187	3.9050	-	-	●	-
3/16	0.188	2.125	4.6420	-	-	●	-
7/32	0.219	2.062	5.3350	-	-	●	-
1/4	0.250	2.000	6.0080	-	-	●	-
9/32	0.281	1.938	6.6590	-	-	●	-
5/16	0.313	1.875	7.3110	-	-	●	-
11/32	0.344	1.812	7.9210	-	-	●	-
3/8	0.375	1.750	8.5110	-	-	●	-
7/16	0.438	1.624	9.6460	-	●	●	-
1/2	0.500	1.500	10.6800	-	●	●	-
9/16	0.563	1.375	11.6469	-	●	●	-
5/8	0.625	1.250	12.5156	-	●	-	-
3/4	0.750	1.000	14.0200	-	●	-	-
2-9/16 OD							
1/4	0.250	2.063	6.1760	-	-	●	-
2-5/8 OD							
16 ga	0.065	2.495	1.7770	-	-	●	-
14 ga	0.083	2.459	2.2530	-	-	-	-
13 ga	0.095	2.435	2.5670	-	-	●	-
12 ga	0.109	2.407	2.9290	-	-	●	-
11 ga	0.120	2.385	3.2100	-	-	●	-
5/32	0.156	2.312	4.1140	-	-	●	-
3/16	0.188	2.250	4.8930	-	-	●	-
7/32	0.219	2.187	5.6270	-	-	●	-
1/4	0.250	2.125	6.3410	-	-	●	-
9/32	0.281	2.063	7.0350	-	-	-	-
5/16	0.313	2.000	7.7290	-	-	●	-
3/8	0.375	1.875	9.0110	-	-	●	-
7/16	0.438	1.750	10.2300	-	-	-	-
1/2	0.500	1.625	11.3475	-	-	●	-
9/16	0.563	1.500	12.4000	-	-	-	-
5/8	0.625	1.375	13.3500	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
2-3/4 OD							
16 ga	0.065	2.620	1.8640	-	-	●	-
14 ga	0.083	2.584	2.3640	-	-	●	-
13 ga	0.095	2.560	2.6940	-	-	●	-
11 ga	0.120	2.510	3.3710	-	-	●	-
1/8	0.125	2.500	3.5040	-	-	●	-
10 ga	0.134	2.482	3.7440	-	-	-	-
5/32	0.156	2.438	4.3220	-	-	●	-
3/16	0.188	2.375	5.1440	-	-	●	-
7/32	0.219	2.312	5.9200	-	-	●	-
1/4	0.250	2.250	6.6750	-	-	●	-
9/32	0.281	2.188	7.4100	-	-	●	-
5/16	0.313	2.125	8.1470	-	-	●	-
11/32	0.344	2.062	8.8390	-	-	●	-
3/8	0.375	2.000	9.5120	-	-	●	-
7/16	0.438	1.874	10.8150	-	-	●	-
1/2	0.500	1.750	12.0200	-	●	●	-
9/16	0.563	1.625	13.1500	-	-	●	-
5/8	0.625	1.500	14.1840	-	●	-	-
11/16	0.688	1.375	15.1500	-	-	-	-
3/4	0.750	1.250	16.0200	-	●	-	-
7/8	0.875	1.000	17.5200	-	●	-	-
2-7/8 OD							
16 ga	0.065	2.745	1.9510	-	-	●	-
14 ga	0.083	2.709	2.4750	-	-	-	-
13 ga	0.095	2.685	2.8210	-	-	-	-
11 ga	0.120	2.635	3.5310	-	-	●	-
1/8	0.125	2.625	3.6710	-	-	●	-
5/32	0.156	2.563	4.5300	-	-	●	-
3/16	0.188	2.500	5.3950	-	-	●	-
7/32	0.219	2.437	6.2120	-	-	●	-
1/4	0.250	2.375	7.0090	-	-	●	-
9/32	0.281	2.313	7.7850	-	-	●	-
5/16	0.313	2.250	8.5640	-	-	●	-
3/8	0.375	2.125	10.0100	-	-	●	-
7/16	0.438	1.999	11.4000	-	-	●	-
1/2	0.500	1.875	12.6830	-	-	●	-
9/16	0.563	1.749	13.9000	-	-	-	-
5/8	0.625	1.625	15.0190	-	-	-	-
3/4	0.750	1.375	17.0200	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
3 OD							
18 ga	0.049	2.902	1.5440	-	-	-	-
16 ga	0.065	2.870	2.0370	●	-	●	-
14 ga	0.083	2.834	2.5860	●	-	●	-
13 ga	0.095	2.810	2.9470	-	-	●	-
12 ga	0.109	2.782	3.3650	-	-	●	-
11 ga	0.120	2.760	3.6910	●	-	●	-
1/8	0.125	2.750	3.8380	-	-	●	-
10 ga	0.134	2.732	4.1020	-	-	●	-
5/32	0.156	2.687	4.7380	-	-	●	-
3/16	0.188	2.625	5.6460	-	-	●	-
7/32	0.219	2.562	6.5050	-	-	●	-
1/4	0.250	2.500	7.3430	-	-	●	-
9/32	0.281	2.438	8.1600	-	-	●	-
5/16	0.313	2.375	8.9820	-	-	●	-
11/32	0.344	2.312	9.7580	-	-	●	-
3/8	0.375	2.250	10.5100	-	-	●	-
7/16	0.438	2.124	11.9850	-	-	●	-
1/2	0.500	2.000	13.3500	-	●	●	-
9/16	0.563	1.875	14.6500	-	-	●	-
5/8	0.625	1.750	15.8530	-	●	●	-
11/16	0.688	1.624	16.9900	-	●	-	-
3/4	0.750	1.500	18.0220	-	●	-	-
7/8	0.875	1.250	19.8600	-	●	-	-
1	1.000	1.000	21.3600	-	●	-	-
3-1/8 OD							
16 ga	0.065	2.995	2.1240	-	-	-	-
11 ga	0.120	2.885	3.8510	-	-	●	-
1/8	0.125	2.875	4.0050	-	-	-	-
3/16	0.188	2.750	5.8970	-	-	●	-
7/32	0.219	2.687	6.7969	-	-	-	-
1/4	0.250	2.625	7.6760	-	-	●	-
5/16	0.313	2.500	9.4000	-	-	●	-
3/8	0.375	2.375	11.0138	-	-	●	-
7/16	0.438	2.249	12.5690	-	-	-	-
1/2	0.500	2.125	14.0175	-	-	●	-
9/16	0.563	2.000	15.4049	-	-	●	-
5/8	0.625	1.875	16.6875	-	-	●	-
3/4	0.750	1.625	19.0200	-	-	-	-
7/8	0.875	1.375	21.0300	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
3-1/4 OD							
16 ga	0.065	3.120	2.2100	-	-	●	-
14 ga	0.083	3.084	2.8070	-	-	-	-
13 ga	0.095	3.060	3.2010	-	-	●	-
11 ga	0.120	3.010	4.0110	-	-	●	-
1/8	0.125	3.000	4.1720	-	-	●	-
10 ga	0.134	2.982	4.4590	-	-	-	-
5/32	0.156	2.938	5.1550	-	-	●	-
3/16	0.188	2.875	6.1480	-	-	●	-
7/32	0.219	2.812	7.0890	-	-	●	-
1/4	0.250	2.750	8.0100	-	-	●	-
9/32	0.281	2.688	8.9100	-	-	-	-
5/16	0.313	2.625	9.8180	-	-	●	-
11/32	0.344	2.562	10.6800	-	-	-	-
3/8	0.375	2.500	11.5100	-	-	●	-
7/16	0.438	2.376	13.1500	-	-	●	-
1/2	0.500	2.250	14.6900	-	●	●	-
9/16	0.563	2.126	16.1565	-	-	●	-
19/32	0.594	2.062	16.8500	-	-	-	-
5/8	0.625	2.000	17.5200	-	-	●	-
3/4	0.750	1.750	20.0300	-	●	-	-
7/8	0.875	1.500	22.1900	-	●	-	-
1	1.000	1.250	24.0300	-	●	-	-
3-3/8 OD							
1/8	0.125	3.125	4.1750	-	-	●	-
3/16	0.188	3.000	6.3990	-	-	●	-
1/4	0.250	2.875	8.3440	-	-	●	-
5/16	0.313	2.750	10.2360	-	-	●	-
3/8	0.375	2.625	12.0150	-	-	●	-
7/16	0.438	2.499	13.7400	-	-	-	-
1/2	0.500	2.375	15.3500	-	-	●	-
9/16	0.563	2.249	16.9100	-	-	-	-
5/8	0.625	2.125	18.3600	-	-	●	-
3/4	0.750	1.875	21.0300	-	-	-	-
3-1/2 OD							
16 ga	0.065	3.370	2.3850	●	-	●	-
14 ga	0.083	3.334	3.0290	●	-	●	-
13 ga	0.095	3.310	3.4550	-	-	●	-
11 ga	0.120	3.260	4.3320	●	-	●	-
1/8	0.125	3.250	4.5060	-	-	●	-
10 ga	0.134	3.232	4.8170	-	-	●	-
5/32	0.156	3.187	5.5710	-	-	●	-
3/16	0.188	3.125	6.6500	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
3-1/2 OD							
7/32	0.219	3.062	7.6740	-	-	●	-
1/4	0.250	3.000	8.6780	-	-	●	-
9/32	0.281	2.938	9.6600	-	-	●	-
5/16	0.313	2.875	10.6500	-	-	●	-
3/8	0.375	2.750	12.5200	-	-	●	-
7/16	0.438	2.624	14.3200	-	-	●	-
1/2	0.500	2.500	16.0200	-	●	●	-
9/16	0.563	2.374	17.6600	-	-	●	-
5/8	0.625	2.250	19.1900	-	-	●	-
3/4	0.750	2.000	22.0300	-	●	-	-
7/8	0.875	1.750	24.5300	-	●	-	-
1	1.000	1.500	26.7000	-	●	-	-
3-5/8 OD							
16 ga	0.065	3.495	2.4710	-	-	-	-
3/16	0.188	3.250	6.9010	-	-	●	-
1/4	0.250	3.125	9.0110	-	-	●	-
9/32	0.281	3.063	10.0400	-	-	●	-
5/16	0.313	3.000	11.0700	-	-	●	-
3/8	0.375	2.875	13.0200	-	-	●	-
7/16	0.438	2.749	14.9100	-	-	-	-
1/2	0.500	2.625	16.6880	-	-	-	-
9/16	0.563	2.500	18.4100	-	-	-	-
5/8	0.625	2.375	20.0300	-	-	●	-
3/4	0.750	2.125	23.0300	-	-	-	-
3-3/4 OD							
16 ga	0.065	3.620	2.5580	-	-	-	-
14 ga	0.083	3.584	3.2510	-	-	-	-
13 ga	0.095	3.560	3.7080	-	-	●	-
11 ga	0.120	3.510	4.6520	-	-	-	-
1/8	0.125	3.500	4.8390	-	-	●	-
3/16	0.188	3.375	7.1520	-	-	●	-
1/4	0.250	3.250	9.3450	-	-	●	-
9/32	0.281	3.188	10.4100	-	-	-	-
5/16	0.313	3.125	11.4900	-	-	●	-
11/32	0.344	3.062	12.5100	-	-	-	-
3/8	0.375	3.000	13.5200	-	-	●	-
7/16	0.438	2.874	15.4900	-	-	●	-
1/2	0.500	2.750	17.3600	-	●	-	-
9/16	0.563	2.624	19.1600	-	-	-	-
5/8	0.625	2.500	20.8600	-	-	●	-
11/16	0.688	2.374	22.5000	-	-	-	-
3/4	0.750	2.250	24.0300	-	●	-	-
7/8	0.875	2.000	26.8700	-	●	-	-
1	1.000	1.750	29.3700	-	●	-	-

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
3-7/8 OD							
3/16	0.188	3.500	7.4030	-	-	●	-
1/4	0.250	3.375	9.6790	-	-	●	-
3/8	0.375	3.125	14.0200	-	-	●	-
7/16	0.438	2.999	16.0800	-	-	-	-
1/2	0.500	2.875	18.0200	-	-	-	-
5/8	0.625	2.625	21.6900	-	-	-	-
3/4	0.750	2.375	25.0300	-	-	-	-
4 OD							
16 ga	0.065	3.870	2.7320	●	-	●	-
14 ga	0.083	3.834	3.4720	●	-	●	-
13 ga	0.095	3.810	3.9620	-	-	●	-
12 ga	0.109	3.782	4.5300	-	-	-	-
11 ga	0.120	3.760	4.7930	●	-	-	-
1/8	0.125	3.750	5.1730	-	-	●	-
10 ga	0.134	3.732	5.5330	-	-	●	-
5/32	0.156	3.687	6.4040	-	-	-	-
3/16	0.188	3.625	7.6540	-	-	●	-
7/32	0.219	3.562	8.8430	-	-	●	-
1/4	0.250	3.500	10.0100	-	-	●	-
9/32	0.281	3.438	11.1600	-	-	-	-
5/16	0.313	3.375	12.3300	-	-	●	-
3/8	0.375	3.250	14.5200	-	-	●	-
7/16	0.438	3.124	16.6600	-	-	●	-
1/2	0.500	3.000	18.6900	-	●	-	-
9/16	0.563	2.874	20.6700	-	-	●	-
5/8	0.625	2.750	22.5300	-	●	●	-
11/16	0.688	2.624	24.3400	-	-	-	-
3/4	0.750	2.500	26.0300	-	●	-	●
7/8	0.875	2.250	29.2000	-	●	-	●
1	1.000	2.000	32.0400	-	●	-	●
1-1/8	1.125	1.750	34.5400	-	-	-	-
1-1/4	1.250	1.500	36.7100	-	-	-	●
4-1/8 OD							
3/16	0.188	3.750	7.9050	-	-	●	-
1/4	0.250	3.625	10.3500	-	-	●	-
5/16	0.313	3.500	12.7400	-	-	●	-
3/8	0.375	3.375	15.0200	-	-	-	-
7/16	0.438	3.249	17.2500	-	-	-	-
1/2	0.500	3.125	19.3600	-	-	●	-
9/16	0.563	3.000	21.4180	-	-	●	-
5/8	0.625	2.875	23.3600	-	-	●	-
3/4	0.750	2.625	27.0300	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
4-1/4 OD							
16 ga	0.065	4.120	2.9050	-	-	-	-
13 ga	0.095	4.060	4.2160	-	-	●	-
11 ga	0.120	4.010	5.2930	-	-	-	-
1/8	0.125	4.000	5.5070	-	-	●	-
5/32	0.156	3.937	6.8210	-	-	-	-
3/16	0.188	3.875	8.1560	-	-	●	-
1/4	0.250	3.750	10.6800	-	-	●	-
5/16	0.313	3.625	13.1600	-	-	●	-
11/32	0.344	3.562	14.3500	-	-	-	-
3/8	0.375	3.500	15.5200	-	-	●	-
7/16	0.438	3.374	17.8300	-	-	-	-
1/2	0.500	3.250	20.0300	-	-	●	-
9/16	0.563	3.125	22.1700	-	-	-	-
5/8	0.625	3.000	24.2000	-	-	●	-
11/16	0.688	2.875	26.1700	-	-	-	-
3/4	0.750	2.750	28.0400	-	●	-	-
7/8	0.875	2.500	31.5400	-	●	-	-
1	1.000	2.250	34.7100	-	●	-	-
1-1/8	1.125	2.000	37.5500	-	-	-	-
1-1/4	1.250	1.750	40.0500	-	-	-	-
4-3/8 OD							
3/16	0.188	4.000	8.4070	-	-	●	-
1/4	0.250	3.875	11.0100	-	-	●	-
5/16	0.313	3.750	13.5800	-	-	-	-
3/8	0.375	3.625	16.0200	-	-	●	-
7/16	0.438	3.499	18.4200	-	-	-	-
1/2	0.500	3.375	20.6900	-	-	●	-
5/8	0.625	3.125	25.0300	-	-	-	-
3/4	0.750	2.875	29.0400	-	-	-	-
4-1/2 OD							
16 ga	0.065	4.370	3.0790	-	-	-	-
14 ga	0.083	4.334	3.9150	●	-	-	-
13 ga	0.095	4.310	4.4690	-	-	●	-
11 ga	0.120	4.260	5.6130	●	-	-	-
1/8	0.125	4.250	5.8400	-	-	●	-
10 ga	0.134	4.232	6.2480	-	-	-	-
5/32	0.156	4.188	7.2370	-	-	●	-
3/16	0.188	4.125	8.6580	-	-	●	-
7/32	0.219	4.052	10.0100	-	-	●	-
1/4	0.250	4.000	11.3500	-	-	●	-
5/16	0.313	3.875	13.9960	-	-	●	-
3/8	0.375	3.750	16.5200	-	-	●	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Steel Tube
and Pipe

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
4-1/2 OD							
7/16	0.438	3.624	19.0000	-	-	●	-
1/2	0.500	3.500	21.3600	-	-	●	-
9/16	0.563	3.375	23.6700	-	-	●	-
5/8	0.625	3.250	25.8700	-	-	●	-
11/16	0.688	3.124	28.0100	-	-	-	-
3/4	0.750	3.000	30.0400	-	●	-	-
7/8	0.875	2.750	33.8760	-	●	-	-
1	1.000	2.500	37.3800	-	●	-	-
1-1/8	1.125	2.250	40.5510	-	-	-	●
1-1/4	1.250	2.000	43.3900	-	-	-	●
1-1/2	1.500	1.500	48.0600	-	-	-	●
4-5/8 OD							
3/16	0.188	4.249	8.9090	-	-	●	-
1/4	0.250	4.125	11.6800	-	-	●	-
5/16	0.313	4.000	14.4100	-	-	●	-
3/8	0.375	3.875	17.0200	-	-	-	-
7/16	0.438	3.748	19.5900	-	-	-	-
1/2	0.500	3.625	22.0300	-	-	●	-
5/8	0.625	3.375	26.7000	-	-	●	-
3/4	0.750	3.125	31.0400	-	-	-	-
4-3/4 OD							
11 ga	0.120	4.510	5.9340	-	-	-	-
1/8	0.125	4.500	6.1740	-	-	●	-
3/16	0.188	4.375	9.1600	-	-	●	-
1/4	0.250	4.250	12.0200	-	-	●	-
5/16	0.313	4.125	14.8300	-	-	●	-
3/8	0.375	4.000	17.5200	-	-	●	-
7/16	0.438	3.874	20.1710	-	-	-	-
1/2	0.500	3.750	22.7000	-	-	●	-
9/16	0.563	3.624	25.1800	-	-	-	-
5/8	0.625	3.500	27.5340	-	-	●	-
3/4	0.750	3.250	32.0400	-	●	-	-
7/8	0.875	3.000	36.2100	-	●	-	-
1	1.000	2.750	40.0500	-	●	-	-
1-1/4	1.250	2.250	46.7300	-	-	-	-
4-7/8 OD							
3/16	0.188	4.500	9.4110	-	-	-	-
1/4	0.250	4.375	12.3500	-	-	-	-
3/8	0.375	4.125	18.0200	-	-	-	-
7/16	0.438	3.999	20.7600	-	-	-	-
1/2	0.500	3.875	23.3600	-	-	-	-
3/4	0.750	3.375	33.0400	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
5 OD							
16 ga	0.065	4.870	3.4260	●	-	-	-
14 ga	0.083	4.834	4.3590	●	-	-	-
13 ga	0.095	4.810	4.9770	-	-	-	-
11 ga	0.120	4.760	6.2542	●	-	●	-
1/8	0.125	4.750	6.5080	-	-	●	-
5/32	0.156	4.688	8.0700	-	-	-	-
3/16	0.188	4.625	9.6620	-	-	●	-
1/4	0.250	4.500	12.6800	-	-	●	-
5/16	0.313	4.375	15.6700	-	-	●	-
3/8	0.375	4.250	18.5200	-	-	●	-
7/16	0.438	4.124	21.3400	-	-	●	-
1/2	0.500	4.000	24.0300	-	-	●	-
9/16	0.563	3.875	26.6800	-	-	●	-
5/8	0.625	3.750	29.2000	-	-	●	-
3/4	0.750	3.500	34.0400	-	●	-	-
7/8	0.875	3.250	38.5500	-	●	-	-
1	1.000	3.000	42.7200	-	●	-	●
1-1/4	1.250	2.500	50.0600	-	●	-	●
1-1/2	1.500	2.000	56.0700	-	-	-	●
1-5/8	1.625	1.750	58.5700	-	-	-	-
5-1/8 OD							
3/8	0.375	4.375	19.0200	-	-	-	-
1/2	0.500	4.125	24.6980	-	-	-	-
5/8	0.625	3.875	30.0400	-	-	-	-
1	1.000	3.125	44.0600	-	-	-	-
5-1/4 OD							
11 ga	0.120	5.010	6.5750	-	-	-	-
1/8	0.125	5.000	6.8420	-	-	●	-
3/16	0.188	4.875	10.1600	-	-	●	-
1/4	0.250	4.750	13.3500	-	-	●	-
5/16	0.313	4.625	16.5000	-	-	●	-
3/8	0.375	4.500	19.5200	-	-	●	-
1/2	0.500	4.250	25.3700	-	-	●	-
5/8	0.625	4.000	30.8700	-	-	●	-
3/4	0.750	3.750	30.0500	-	●	-	●
7/8	0.875	3.500	40.8800	-	●	-	-
1	1.000	3.250	45.3900	-	●	-	-
1-1/8	1.125	3.000	49.5600	-	-	-	-
1-1/4	1.250	2.750	53.4000	-	-	-	-
1-1/2	1.500	2.250	60.0750	-	-	-	●

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
5-1/2 OD							
16 ga	0.065	5.370	3.7730	-	-	-	-
14 ga	0.083	5.334	4.8020	-	-	-	-
11 ga	0.120	5.260	6.8950	●	-	●	-
3/16	0.188	5.125	10.6700	-	-	●	-
1/4	0.250	5.000	14.0200	-	-	●	-
5/16	0.313	4.875	17.3400	-	-	-	-
3/8	0.375	4.750	20.5300	-	-	●	-
7/16	0.438	4.624	23.6800	-	-	-	-
1/2	0.500	4.500	26.7000	-	-	●	-
5/8	0.625	4.250	32.5400	-	-	●	-
3/4	0.750	4.000	38.0500	-	●	-	●
7/8	0.875	3.750	43.2200	-	●	-	-
1	1.000	3.500	48.0600	-	●	-	●
1-1/4	1.250	3.000	56.7400	-	●	-	●
1-1/2	1.500	2.500	64.0800	-	-	-	●
5-5/8 OD							
5/16	0.313	5.000	17.7600	-	-	●	-
3/8	0.375	4.875	21.0300	-	-	-	-
1/2	0.500	4.625	27.3700	-	-	-	-
5/8	0.625	4.375	33.3800	-	-	-	-
3/4	0.750	4.125	39.0500	-	-	-	-
5-3/4 OD							
11 ga	0.120	5.510	7.2150	-	-	-	-
1/8	0.125	5.500	7.5090	-	-	●	-
3/16	0.188	5.375	11.1700	-	-	●	-
1/4	0.250	5.250	14.6900	-	-	●	-
5/16	0.313	5.125	18.1800	-	-	●	-
3/8	0.375	5.000	21.5300	-	-	●	-
1/2	0.500	4.750	28.0400	-	-	●	-
5/8	0.625	4.500	34.2100	-	-	●	-
3/4	0.750	4.250	40.0500	-	●	-	-
7/8	0.875	4.000	45.5600	-	●	-	-
1	1.000	3.750	50.7300	-	●	-	-
1-1/4	1.250	3.250	60.0800	-	-	-	-
6 OD							
16 ga	0.065	5.870	4.1200	●	-	-	-
14 ga	0.083	5.834	5.2450	●	-	-	-
12 ga	0.109	5.782	6.8580	-	-	-	-
11 ga	0.120	5.760	7.5360	●	-	●	-
1/8	0.125	5.750	7.8430	-	-	●	-
10 ga	0.134	5.732	8.3950	-	-	-	-
7 ga	0.180	5.640	11.1900	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
6 OD							
3/16	0.188	5.625	11.6700	-	-	●	-
1/4	0.250	5.500	15.3500	-	-	●	-
5/16	0.313	5.375	19.0100	-	-	●	-
3/8	0.375	5.250	22.5300	-	-	●	-
1/2	0.500	5.000	29.3700	-	-	●	-
5/8	0.625	4.750	35.8800	-	-	●	-
3/4	0.750	4.500	42.0500	-	●	-	●
7/8	0.875	4.250	47.8900	-	●	-	-
1	1.000	4.000	53.4000	-	●	-	●
1-1/4	1.250	3.500	63.4100	-	●	-	●
1-1/2	1.500	3.000	72.0900	-	-	-	●
1-3/4	1.750	2.500	79.4330	-	-	-	●
2	2.000	2.000	85.4400	-	-	-	●
6-1/4 OD							
3/16	0.188	5.875	12.1700	-	-	●	-
1/4	0.250	5.750	16.0200	-	-	●	-
3/8	0.375	5.500	23.5300	-	-	●	-
1/2	0.500	5.250	30.7100	-	-	●	-
5/8	0.625	5.000	37.5500	-	-	●	-
3/4	0.750	4.750	44.0600	-	●	-	-
7/8	0.875	4.500	50.2300	-	-	-	-
1	1.000	4.250	56.0700	-	-	-	●
1-1/8	1.125	4.000	61.5800	-	-	-	-
1-1/4	1.250	3.750	66.7500	-	-	-	●
6-1/2 OD							
10 ga	0.134	6.232	9.1110	-	-	-	-
3/16	0.188	6.124	12.6700	-	-	●	-
1/4	0.250	6.000	16.6900	-	-	●	-
3/8	0.375	5.750	24.5300	-	-	●	-
1/2	0.500	5.500	32.0400	-	-	●	-
5/8	0.625	5.250	39.2200	-	-	●	-
3/4	0.750	5.000	46.0600	-	●	-	●
7/8	0.875	4.750	52.2700	-	-	-	-
1	1.000	4.500	58.7400	-	●	-	●
1-1/8	1.125	4.250	64.5800	-	-	-	-
1-1/4	1.250	4.000	70.0900	-	-	-	●
1-1/2	1.500	3.500	80.1000	-	-	-	●
1-3/4	1.750	3.000	88.7780	-	-	-	●
2	2.000	2.500	96.1200	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
6-5/8 OD							
16 ga	0.059	6.507	4.3800	-	-	-	-
12 ga	0.105	6.415	7.2900	-	-	-	-
1/8	0.125	6.375	8.6700	-	-	-	-
10 ga	0.135	6.355	9.3200	-	-	-	-
3/16	0.188	6.250	12.9200	-	-	-	-
1/4	0.250	6.125	17.0200	-	-	-	-
5/16	0.313	6.000	21.1000	-	-	●	-
6-3/4 OD							
1/4	0.250	6.250	17.3600	-	-	●	-
3/8	0.375	6.000	25.5300	-	-	●	-
1/2	0.500	5.750	33.3800	-	-	●	-
5/8	0.625	5.500	40.8800	-	-	●	-
3/4	0.750	5.250	48.0600	-	-	-	●
7/8	0.875	5.000	54.9000	-	-	-	-
1	1.000	4.750	61.4100	-	-	-	-
1-1/8	1.125	4.500	67.5800	-	-	-	-
1-1/4	1.250	4.250	73.4300	-	-	-	●
1-1/2	1.500	3.750	84.1100	-	-	-	-
7 OD							
16 ga	0.059	6.882	4.5900	-	-	-	-
14 ga	0.075	6.850	5.6600	-	-	-	-
1/8	0.125	6.750	9.3800	●	-	-	-
3/16	0.188	6.625	13.6800	-	-	●	-
1/4	0.250	6.500	18.0200	-	-	●	-
3/8	0.375	6.250	26.5300	-	-	●	-
1/2	0.500	6.000	34.7100	-	-	●	-
5/8	0.625	5.750	42.5500	-	-	●	-
3/4	0.750	5.500	50.0600	-	●	-	-
7/8	0.875	5.250	57.2300	-	-	-	-
1	1.000	5.000	64.0800	-	●	-	-
1-1/4	1.250	4.500	76.9000	-	-	-	●
1-1/2	1.500	4.000	88.1100	-	-	-	●
1-3/4	1.750	3.500	98.1230	-	-	-	●
2	2.000	3.000	106.8000	-	-	-	●
7-1/4 OD							
3/16	0.188	6.874	14.1790	-	-	-	-
1/4	0.250	6.750	18.6900	-	-	●	-
3/8	0.375	6.500	27.5300	-	-	●	-
1/2	0.500	6.250	36.0500	-	-	●	-
5/8	0.625	6.000	44.2200	-	-	●	-
3/4	0.750	5.750	52.0700	-	-	-	-
7/8	0.875	5.500	59.5700	-	-	-	-
1	1.000	5.250	66.7500	-	-	-	●

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
7-1/2 OD							
1/4	0.250	7.000	19.3600	-	-	●	-
3/8	0.375	6.750	28.5400	-	-	●	-
1/2	0.500	6.500	37.3800	-	-	●	-
5/8	0.625	6.250	45.8900	-	-	●	-
3/4	0.750	6.000	54.0700	-	-	-	●
1	1.000	5.500	69.4200	-	-	-	●
1-1/8	1.125	5.250	57.2300	-	-	-	●
1-1/4	1.250	5.000	83.4400	-	-	-	●
1-1/2	1.500	4.500	96.1200	-	-	-	●
1-3/4	1.750	4.000	107.468	-	-	-	●
2	2.000	3.500	117.5000	-	-	-	●
7-5/8 OD							
1/2	0.500	6.625	38.0500	-	-	-	-
7/8	0.875	5.875	63.0800	-	-	-	-
1	1.000	5.625	70.7600	-	-	-	-
7-3/4 OD							
1/4	0.250	7.250	20.0300	-	-	●	-
3/8	0.375	7.000	29.5400	-	-	●	-
1/2	0.500	6.750	38.7200	-	-	●	-
5/8	0.625	6.500	47.5600	-	-	●	-
3/4	0.750	6.250	56.0600	-	-	-	●
7/8	0.875	6.000	64.2500	-	-	-	-
1	1.000	5.750	72.0900	-	-	-	-
8 OD							
16 ga	0.065	7.780	5.2900	●	-	-	-
14 ga	0.075	7.850	6.4800	-	-	-	-
12 ga	0.105	7.790	9.0500	-	-	-	-
1/8	0.125	7.750	10.7700	●	-	-	-
10 ga	0.135	7.730	11.5800	-	-	-	-
3/16	0.188	7.624	15.6400	-	-	-	-
1/4	0.250	7.500	20.6900	-	-	●	-
3/8	0.375	7.250	30.5400	-	-	●	-
1/2	0.500	7.000	40.0500	-	-	●	-
5/8	0.625	6.750	49.2300	-	-	●	-
3/4	0.750	6.500	58.0700	-	●	-	●
1	1.000	6.000	74.7600	-	●	-	●
1-1/4	1.250	5.500	90.1100	-	-	-	●
1-1/2	1.500	5.000	104.1000	-	-	-	●
1-3/4	1.750	4.500	116.8200	-	-	-	●
2	2.000	4.000	128.1600	-	-	-	●
2-1/4	2.250	3.500	138.2000	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:
• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

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Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
8-1/4 OD							
1/4	0.250	7.750	21.3600	-	-	●	-
3/8	0.375	7.500	31.5400	-	-	●	-
1/2	0.500	7.250	41.3900	-	-	●	-
3/4	0.750	6.750	60.0800	-	-	-	-
7/8	0.875	6.500	68.9200	-	-	-	-
1	1.000	6.250	77.4300	-	-	-	-
1-1/8	1.125	6.000	85.6100	-	-	-	-
1-3/16	1.188	5.875	89.6100	-	-	-	-
1-1/4	1.250	5.750	93.4500	-	-	-	-
8-1/2 OD							
1/4	0.250	8.000	22.0300	-	-	●	-
3/8	0.375	7.750	32.5400	-	-	●	-
1/2	0.500	7.500	42.7200	-	-	●	-
3/4	0.750	7.000	62.0800	-	-	-	●
1	1.000	6.500	80.1000	-	-	-	●
1-1/4	1.250	6.000	96.7900	-	-	-	●
1-1/2	1.500	5.500	112.1000	-	-	-	●
1-3/4	1.750	5.000	126.1600	-	-	-	●
2	2.000	4.500	138.8400	-	-	-	-
8-3/4 OD							
3/8	0.375	8.000	33.5400	-	-	●	-
1/2	0.500	7.750	44.0600	-	-	●	-
3/4	0.750	7.250	64.0800	-	-	-	●
7/8	0.875	7.000	73.6000	-	-	-	-
1	1.000	6.750	82.7700	-	-	-	●
1-1/4	1.250	6.250	100.1300	-	-	-	-
1-1/2	1.500	5.750	116.1100	-	-	-	-
9 OD							
1/4	0.250	8.500	23.3600	-	-	●	-
3/8	0.375	8.250	34.5400	-	-	●	-
1/2	0.500	8.000	45.3900	-	-	●	-
3/4	0.750	7.500	66.0800	-	-	-	●
7/8	0.875	7.250	75.9200	-	-	-	-
1	1.000	7.000	85.4400	-	-	-	●
1-1/4	1.250	6.500	103.5000	-	-	-	●
1-1/2	1.500	6.000	120.5000	-	-	-	●
2	2.000	5.000	149.7000	-	-	-	●
2-1/2	2.500	4.000	173.5500	-	-	-	-
3	3.000	3.000	192.2400	-	-	-	●

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
9-1/4 OD							
1/4	0.250	8.750	24.0300	-	-	●	-
1/2	0.500	8.250	46.7300	-	-	-	-
3/4	0.750	7.750	68.0900	-	-	-	-
1	1.000	7.250	88.1100	-	-	-	-
1-1/2	1.500	6.250	124.2000	-	-	-	-
9-1/2 OD							
1/4	0.250	9.000	24.6980	-	-	●	-
3/8	0.375	8.750	36.5500	-	-	●	-
1/2	0.500	8.500	48.0600	-	-	●	-
3/4	0.750	8.000	70.0880	-	-	-	●
1	1.000	7.500	90.7800	-	-	-	●
1-1/8	1.125	7.250	100.8000	-	-	-	-
1-1/4	1.250	7.000	110.1000	-	-	-	-
1-1/2	1.500	6.500	128.2000	-	-	-	●
2	2.000	5.500	160.2000	-	-	-	●
2-1/2	2.500	4.500	186.9000	-	-	-	-
9-3/4 OD							
1/4	0.250	9.250	25.3700	-	-	-	-
3/8	0.375	9.000	37.5500	-	-	-	-
3/4	0.750	8.250	72.0900	-	-	-	-
1	1.000	7.750	93.4500	-	-	-	-
1-1/2	1.500	6.750	132.2000	-	-	-	-
10 OD							
14 ga	0.075	9.850	8.1700	-	-	-	-
12 ga	0.105	9.790	11.1000	-	-	-	-
1/8	0.125	9.750	13.4900	●	-	-	-
10 ga	0.134	9.732	14.5200	-	-	-	-
3/16	0.188	9.625	19.7000	-	-	-	-
1/4	0.250	9.500	26.0300	-	-	●	-
3/8	0.375	9.250	38.5500	-	-	●	-
1/2	0.500	9.000	50.7300	-	-	●	-
5/8	0.625	8.750	62.5800	-	-	-	-
3/4	0.750	8.500	74.0900	-	-	-	●
7/8	0.875	8.250	85.2600	-	-	-	-
1	1.000	8.000	96.1200	-	-	-	●
1-1/8	1.125	7.750	106.6000	-	-	-	-
1-1/4	1.250	7.500	116.8000	-	-	-	-
1-5/16	1.313	7.375	121.8200	-	-	-	-
1-1/2	1.500	7.000	136.2000	-	-	-	●
1-3/4	1.750	6.500	154.2000	-	-	-	●
2	2.000	6.000	170.9000	-	-	-	●
3	3.000	4.000	224.2800	-	-	-	●

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Continued on next page ►

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)	ERW	CDS	DOM	HFS
10-1/2 OD							
1/4	0.250	10.000	27.3700	-	-	●	-
3/8	0.375	9.750	40.5500	-	-	●	-
1/2	0.500	9.500	53.4000	-	-	●	-
3/4	0.750	9.000	78.1000	-	-	-	-
1	1.000	8.500	101.5000	-	-	-	●
1-1/4	1.250	8.000	123.5000	-	-	-	-
1-1/2	1.500	7.500	144.2000	-	-	-	●
10-3/4 OD							
1/2	0.500	9.750	54.7400	-	-	-	-
3/4	0.750	9.250	80.1000	-	-	-	-
7/8	0.875	9.000	92.3000	-	-	-	-
1	1.000	8.750	104.1000	-	-	-	-
1-1/4	1.250	8.250	126.8300	-	-	-	-
1-1/2	1.500	7.750	148.2000	-	-	-	-
11 OD							
1/4	0.250	10.500	27.368	-	-	●	-
3/8	0.375	10.250	42.553	-	-	●	-
1/2	0.500	10.000	56.0700	-	-	●	-
3/4	0.750	9.500	82.1000	-	-	-	-
1	1.000	9.000	106.8000	-	-	-	●
1-1/2	1.500	8.000	152.1900	-	-	-	-
2	2.000	7.000	192.2000	-	-	-	●
3	3.000	5.000	256.3200	-	-	-	-
11-1/2 OD							
1/4	0.250	11.000	30.0400	-	-	-	-
1/2	0.500	10.500	58.7400	-	-	●	-
3/4	0.750	10.000	86.1100	-	-	-	-
1	1.000	9.500	112.1000	-	-	-	-
1-1/2	1.500	8.500	106.2000	-	-	-	-
12 OD							
12 ga	0.105	11.790	13.6500	-	-	-	-
10 ga	0.135	11.730	17.5500	-	-	-	-
3/16	0.188	11.625	24.3000	-	-	-	-
1/4	0.250	11.500	31.3730	-	-	●	-
3/8	0.375	11.250	45.5600	-	-	●	-
1/2	0.500	11.000	61.4100	-	-	●	-
3/4	0.750	10.500	90.1100	-	-	-	●
1	1.000	10.000	117.5000	-	-	-	●
1-1/4	1.250	9.500	143.5000	-	-	-	-
1-1/2	1.500	9.000	168.2000	-	-	-	●
2	2.000	8.000	213.6000	-	-	-	●
2-1/4	2.250	7.500	234.3000	-	-	-	-

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• Inside Diameter (ID) • Outside Diameter (OD) • Wall Thickness

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Continued on next page ►

Electric Resistance Weld (ERW) Cold Drawn Seamless (CDS) Drawn-Over-Mandrel (DOM) Hot Finished Seamless (HFS)

ERW - Electric Resistance Weld
CDS - Cold Drawn Seamless
DOM - Drawn Over Mandrel
HFS - Hot Finished Seamless

20 foot - ERW
x - Stock Size
17 - 24 ft. random lengths DOM/CDS
12 - 24 ft. - HFS

Outside Dimension (OD) & Gauge (inches)	Wall Thickness Dec-In.	Inside Diameter (ID)	Weight (lbs./ft.)				
				ERW	CDS	DOM	HFS
12-1/2 OD 1	1.000	10.500	122.8200	-	-	-	●
13 OD 1/2	0.500	12.000	66.7500	-	-	-	●
14 OD 3/4	0.750	12.500	106.1330	-	-	-	●
1	1.000	12.000	138.8400	-	-	-	●
1-1/2	1.500	11.000	200.2500	-	-	-	●
15 OD 1/2	0.500	14.000	77.4300	-	-	-	●
16 OD 1/2	0.500	15.000	82.7700	-	-	-	●
17 OD 1/2	0.500	16.000	88.1100	-	-	-	●

Drawn over Mandrel (DOM) tubing is defined by 3 different dimensions:

• **Inside Diameter (ID)** • **Outside Diameter (OD)** • **Wall Thickness**

When ordering, only 2 of the 3 tolerances must be defined. Alro Steel purchases DOM tubing, for general inventory, to the outside diameter and inside diameter.

If you do not see a size listed, please contact your Alro representative.

Hydraulic Tubing (Seamless)

SAE - J524

This SAE Standard covers cold drawn and annealed seamless low-carbon steel pressure tubing intended for use as hydraulic lines and in other applications requiring tubing of a quality suitable for flaring and bending.

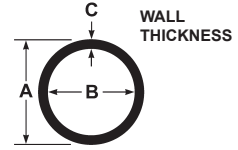
● = Alro Stock Size

Outside Diameter (OD) and Gauge - inches		Inside Dia. (ID)	Weight (lbs./ft.)	Seamless
1/8	OD x	.028 Wall	0.069	-
		.035 Wall	0.055	●
3/16	OD x	.035 Wall	0.117	●
1/4	OD x	.028 Wall	0.194	-
		.035 Wall	0.180	●
		.049 Wall	0.152	●
		.065 Wall	0.120	-
5/16	OD x	.035 Wall	0.242	●
3/8	OD x	.035 Wall	0.305	●
		.049 Wall	0.277	●
		.065 Wall	0.245	●
1/2	OD x	.035 Wall	0.430	●
		.049 Wall	0.402	●
		.065 Wall	0.370	●
		.083 Wall	0.334	-
5/8	OD x	.035 Wall	0.555	●
		.049 Wall	0.527	●
		.065 Wall	0.495	●
		.083 Wall	0.459	●
3/4	OD x	.035 Wall	0.680	-
		.049 Wall	0.652	●
		.065 Wall	0.620	●
		.083 Wall	0.584	●
		.095 Wall	0.560	-
		.120 Wall	0.510	●
1	OD x	.049 Wall	0.930	-
		.065 Wall	0.870	●
		.083 Wall	0.834	-
		.120 Wall	0.760	●

Carbon Steel Pipe

ASTM A-53 (Tested) and
ASTM A-500 Grade B (Structural)

Standard Lengths: 21 ft. and 42 ft.



A Schedule	C Wall	B Theor. I.D.	Weight (lbs./ft.)	ASTM Type
1/8 IPS (.405 OD)				
Sched. 40	.068	.269	.245	A-53
Sched. 80	.095	.215	.315	A-53
1/4 IPS (.540 OD)				
Sched. 40	.088	.364	.425	A-53
Sched. 80	.119	.302	.535	A-53
3/8 IPS (.675 OD)				
Sched. 40	.091	.493	.568	A-53
Sched. 80	.126	.423	.739	A-53
1/2 IPS (.840 OD)				
Sched. 10	.083	.674	.670	A-500B
Sched. 40	.109	.622	.851	A-53
Sched. 40	.109	.622	.851	A-500B
Sched. 80	.147	.546	1.088	A-53
3/4 IPS (1.050 OD)				
Sched. 10	.083	.884	.857	A-500B
Sched. 40	.113	.824	1.131	A-53
Sched. 40	.113	.824	1.131	A-500B
Sched. 80	.154	.742	1.474	A-53
1 IPS (1.315 OD)				
Sched. 10	.109	1.097	1.410	A-500B
Sched. 40	.133	1.049	1.679	A-53
Sched. 40	.133	1.049	1.679	A-500B
Sched. 80	.179	.957	2.172	A-53
1-1/4 IPS (1.660 OD)				
Sched. 10	.109	1.442	1.810	A-500B
Sched. 40	.140	1.380	2.273	A-53
Sched. 40	.140	1.380	2.273	A-500B
Sched. 80	.191	1.278	2.997	A-53
Sched. 80	.191	1.278	2.997	A-500B
1-1/2 IPS (1.900 OD)				
Sched. 10	.109	1.682	2.090	A-500B
Sched. 40	.145	1.610	2.718	A-53
Sched. 40	.145	1.610	2.718	A-500B
Sched. 80	.200	1.500	3.631	A-53
Sched. 80	.200	1.500	3.631	A-500B

A-53 is available in Galvanized

Carbon Steel Pipe

ASTM A-53 (Tested) and ASTM A-500 Grade B (Structural)

Standard Lengths: 21 ft. and 42 ft.

A Schedule	B		Weight (lbs./ft.)	ASTM TYPE
	C Wall	Theor. I.D.		
2 IPS (2.375 OD)				
Sched. 10	.109	2.157	2.640	A500B
Sched. 40	.154	2.067	3.653	A-53
Sched. 40	.154	2.067	3.653	A-500B
Sched. 80	.218	1.939	5.022	A-53
Sched. 80	.218	1.939	5.022	A-500B
2-1/2 IPS (2.875 OD)				
Sched. 40	.203	2.469	5.793	A-53
Sched. 40	.203	2.469	5.793	A-500B
Sched. 80	.276	2.323	7.661	A-53
Sched. 80	.276	2.323	7.661	A-500B
3 IPS (3.500 OD)				
Sched. 40	.216	3.068	7.576	A-53
Sched. 40	.216	3.068	7.576	A-500B
Sched. 80	.300	2.900	10.250	A-53
Sched. 80	.300	2.900	10.250	A-500B
3-1/2 IPS (4.000 OD)				
Sched. 40	.226	3.548	9.109	A-53
Sched. 40	.226	3.548	9.109	A-500B
Sched. 80	.318	3.364	12.510	A-53
Sched. 80	.318	3.364	12.510	A-500B
4 IPS (4.500 OD)				
Sched. 40	.237	4.026	10.790	A-53
Sched. 40	.237	4.026	10.790	A-500B
Sched. 80	.337	3.826	14.997	A-53
Sched. 80	.337	3.826	14.997	A-500B
5 IPS (5.563 OD)				
Sched. 40	.258	5.047	14.620	A-53
Sched. 40	.258	5.047	14.620	A-500B
Sched. 80	.375	4.813	20.780	A-53
Sched. 80	.375	4.813	20.780	A-500B
6 IPS (6.625 OD)				
Sched. 10	.134	9.289		
Sched. 40	.280	6.065	18.970	A-53
Sched. 40	.280	6.065	18.970	A-500B
Sched. 80	.432	5.761	28.570	A-53
Sched. 80	.432	5.761	28.570	A-500B

A-53 is available in Galvanized

Carbon Steel Pipe

ASTM A-53 (Tested) and ASTM A-500 Grade B (Structural)

Standard Lengths: 21 ft. and 42 ft.

A Schedule	B		Weight (lbs./ft.)	ASTM Type
	C Wall	Theor. I.D.		
8 IPS (8.625 OD)				
Sched. 40	.322	7.981	28.550	A-53
Sched. 40	.322	7.981	28.550	A-500B
Sched. 80	.500	7.625	43.428	A-53
Sched. 80	.500	7.625	43.428	A-500B
10 IPS (10.75 OD)				
Sched. 20	.250	10.250	28.040	A-500B
Sched. 40	.365	10.020	40.480	A-53
Sched. 80	.594	9.562	64.430	A-500B
12 IPS (12.75 OD)				
	.375	12.000	49.608	A-500B
	.500	11.750	65.476	A-500B
14 IPS				
	.375	13.250	54.619	
16 IPS (16.00 OD)				
Sched. 10	.250	15.500	42.090	A-500B
Sched. 30	.375	15.250	62.640	A-500B
Sched. 40	.500	15.000	82.848	A-500B
20 IPS				
Sched. 20	.375	19.250	78.600	

Mechanical Tubing Tolerances

Tolerances, Outside Dimensions for Square and Rectangular Tubing*

Widest Side (inches)	Tolerance (inches)
3/8 thru 5/8	Plus or Minus .004
Over 5/8 up to 1-1/8	Plus or Minus .005
1-1/8 up to 1-1/2	Plus or Minus .006
1-1/2 to 2	Plus or Minus .008

*Measured at corners at least 2" from cut end of tubing.

Convexity and Concavity Tolerances**

Widest Side (inches)	Tolerance (inches)
Up thru 2-1/2	Plus or Minus .010
Over 2-1/2 to 4	Plus or Minus .015

**Measured in center of the flat sides, applies to size determined at the corners.

Straightness Tolerances	Wall Tolerances
Max. = 1/16" in 3'	± 10% of nominal wall specified

Structural Tubing Tolerances

Outside dimension tolerances for Square & Rectangular Structural Tubing

Largest Outside Dimension, Across Flats - inches (mm)	Tolerance*, Plus and Minus inches (mm)
Up thru 2-1/2 (63.5)	0.020 (0.51)
Over 2-1/2 thru 3-1/2 (63.5 to 88.9)	0.025 (0.64)
Over 3-1/2 thru 5-1/2 (88.9 to 139.7)	0.030 (0.76)
Over 5-1/2 (139.7)	±1%

*Tolerances include allowance for convexity and concavity. For rectangular sections, the tolerance calculated for the larger flat dimension shall also apply to the smaller flat dimension. This tolerance may be increased 50% when applied to the smaller dimension, if the ratio of cross-sectional dimensions is between 1.5 and 3, and 100% when the ratio exceeds 3.

Wall Thickness Tolerances for Square and Rectangular Structural Tubing
10% of the specified wall thickness.

Specified Mill Length Tolerances for Square & Rectangular Structural Tubing

Widest Side (inches)	Up thru 22 ft. (6.7m)		Over 22 ft. thru 44 ft. (6.7m thru 13.4m)	
	Over	Under	Over	Under
Length Tolerance for Specified Mill Length, Inches (mm)	1/2 (12.7)	1/4 (6.4)	3/4 (19.0)	1/4 (6.4)

*Measured at corners at least 2" from cut end of tubing.

Straightness Tolerances

Max. = .025" per ft.

Cold Drawn Seamless Tubing Tolerances ASTM A519

OD (inches)	Wall as % of OD	OD (inches)		ID (inches)	
		+	-	+	-
Up to 0.499	all	0.004	0.000	-	-
0.500-1.699	all	0.005	0.000	0.000	0.005
2.100-2.499	all	0.007	0.000	0.000	0.007
2.500-2.899	all	0.008	0.000	0.000	0.008
2.900-3.299	all	0.009	0.000	0.000	0.009
3.300-3.699	all	0.010	0.000	0.000	0.010
3.700-4.099	all	0.011	0.000	0.000	0.011
4.100-4.499	all	0.012	0.000	0.000	0.012
4.500-4.899	all	0.013	0.000	0.000	0.013
4.900-5.299	all	0.014	0.000	0.000	0.014
5.300-5.549	all	0.015	0.000	0.000	0.015
5.550-5.999	under 6	0.010	0.010	0.010	0.010
	6 to 7-1/2	0.009	0.009	0.009	0.009
	over 7-1/2	0.018	0.000	0.009	0.009
6.000-6.499	under 6	0.013	0.013	0.013	0.013
	6 to 7-1/2	0.010	0.010	0.010	0.010
	over 7-1/2	0.020	0.000	0.010	0.010
6.500-6.999	under 6	0.015	0.015	0.015	0.015
	6 to 7-1/2	0.012	0.012	0.012	0.012
	over 7-1/2	0.023	0.000	0.012	0.012
7.000-7.499	under 6	0.018	0.018	0.018	0.018
	6 to 7-1/2	0.013	0.013	0.013	0.013
	over 7-1/2	0.026	0.000	0.013	0.013
7.500-7.999	under 6	0.020	0.020	0.020	0.020
	6 to 7-1/2	0.015	0.015	0.015	0.015
	over 7-1/2	0.029	0.000	0.015	0.015
8.000-8.499	under 6	0.023	0.023	0.023	0.023
	6 to 7-1/2	0.016	0.016	0.016	0.016
	over 7-1/2	0.031	0.000	0.015	0.016
8.500-8.999	under 6	0.025	0.025	0.025	0.025
	6 to 7-1/2	0.017	0.017	0.017	0.017
	over 7-1/2	0.034	0.000	0.015	0.019
9.000-9.499	under 6	0.028	0.028	0.028	0.028
	6 to 7-1/2	0.019	0.019	0.019	0.019
	over 7-1/2	0.037	0.000	0.015	0.022
9.500-9.999	under 6	0.030	0.030	0.030	0.030
	6 to 7-1/2	0.020	0.020	0.020	0.020
	over 7-1/2	0.040	0.000	0.015	0.025
10.000-10.999	under 6	0.034	0.034	0.034	0.034
	6 to 7-1/2	0.022	0.022	0.022	0.022
	over 7-1/2	0.044	0.000	0.015	0.029
11.000-12.000	under 6	0.035	0.035	0.035	0.035
	6 to 7-1/2	0.025	0.025	0.025	0.025
	over 7-1/2	0.045	0.000	0.015	0.035

- Many tubes with ID less than 50% of OD or with wall more than 25% of OD, or with wall over 1-1/4", or weighing more than 90 lb./ft. are difficult to draw over a mandrel. Therefore, the ID can vary over or under by an amount equal to 10% of the wall thickness.
- For tubes with ID less than 1/2". (or less than 5/8" when the wall thickness is more than 20% of the OD), which are not commonly drawn over a mandrel the above footnote not applicable.
- Tubing having a wall less than 3% of the OD cannot be straightened properly without a certain amount of distortion. Consequently such tubes, while having an average OD and ID within the tolerances shown in this table, require an ovality of tolerance of 1/2% over and under nominal outside diameter, in addition to the tolerances indicated in this table.

Cold Drawn Seamless Wall Thickness Tolerances

Wall Thickness as % of OD ASTM A519	% Over and Under Nominal	
	thru 1.4999" ID	1.500" ID & up
25 and under	10.0	7.5
Over 25	12.5	10.0

Straightness Tolerances for Seamless Round Mechanical Tubing

NOTE 1—The straightness variation for any 3 ft (0.9 m) of length is determined by measuring the concavity between the tube and a 3-ft straightedge with a feeler gage. The total variation, that is, the maximum curvature at any point in the total length of tube, is determined by rolling the tube on a surface plate and measuring the concavity with a feeler gage.

NOTE 2—The tolerances apply generally to unannealed, finish-annealed, and medium-annealed cold-finished or hot-finished tubes. When straightening stress would interfere with the use of the end product, the straightness tolerances shown do not apply when tubing is specified "not to be straightened after furnace treatment." These straightness tolerances do not apply to soft-annealed or quenched and tempered tubes.

Size Limits	Maximum Curvature in any 3 ft/in. (mm/m)	Maximum Curvature in Total Lengths, in. (mm)	Maximum Curvature for Lengths under 3 ft or 1 m
OD 5 in. (127.0 mm) and smaller. Wall thickness, over 3 % of OD	0.030 (0.83)	$0.030 \times (\text{no. of ft of length}/3)$ ($0.83 \times \text{no. of m of length}$)	ratio of 0.010 in./ft or 0.83 mm/m
OD over 5 to 8 in. (127.0 to 203.2 mm), incl. Wall thickness, over 4 % of OD	0.045 (1.25)	$0.045 \times (\text{no. of ft of length}/3)$ ($1.25 \times \text{no. of m of length}$)	ratio of 0.015 in./ft or 1.25 mm/m
OD over 8 to 12-3/4 in. (203.2 to 323.8 mm), incl. Wall thickness, over 4 % of OD	0.060 (1.67)	$0.060 \times (\text{no. of ft of length}/3)$ ($1.67 \times \text{no. of m of length}$)	ratio of 0.020 in./ft or 16.7 mm/m

Sizes over 12-3/4" do not have an ASTM published straightness tolerance. These sizes vary by producer. Check with your Alro Representative for more details.

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

*See p. 4-45 for all applicable footnotes.

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

Note 1 - Measurements for diameter are to be taken at least 2 in. from the ends of the tubes.

Outside Diameter Range in. [mm]	Wall Thickness inches	Bwg ^F	Flash-in-Tubing ^{A,B}		Flash Controlled to 0.010 in. max Tubing ^C		Flash Controlled to 0.005 in. [0.13 mm] max Tubing ^{C,D}	
			Outside Diameter, ±	Outside Diameter, ±	Outside Diameter, ±	Outside Diameter, ±	Outside Diameter, ±	Inside Diameter, ±
1/2 to 1-1/8	0.065 to 0.134	16 to 10	0.0035	0.0035	0.0035	0.0035	0.0035	0.020
Over 1-1/8 to 2	0.065 to 0.083	16 to 14	0.005	0.005	0.005	0.005	0.005	0.021
Over 1-1/8 to 2	0.095 to 0.180	13 to 7	0.005	0.005	0.005	0.005	0.005	0.025
Over 1-1/8 to 2	0.203 to 0.220	6 to 5	0.005	0.005	0.005	0.005	0.005	0.029
Over 1-1/8 to 2	0.238 to 0.259	4 to 3	0.005	0.005	0.005	0.005	0.005	0.039
Over 2 to 2-1/2	0.065 to 0.083	16 to 14	0.006	0.006	0.006	0.006	0.006	0.022
Over 2 to 2-1/2	0.095 to 0.220	13 to 5	0.006	0.006	0.006	0.006	0.006	0.024
Over 2 to 2-1/2	0.238 to 0.259	4 to 3	0.006	0.006	0.006	0.006	0.006	0.040
Over 2-1/2 to 3	0.065 to 0.083	16 to 14	0.008	0.008	0.008	0.008	0.008	0.024
Over 2-1/2 to 3	0.095 to 0.220	13 to 5	0.008	0.008	0.008	0.008	0.008	0.026
Over 2-1/2 to 3	0.238 to 0.259	4 to 3	0.008	0.008	0.008	0.008	0.008	0.040
Over 2-1/2 to 3	0.284 to 0.320	2 to 0.320	0.010	0.010	0.010	0.010	0.010	0.048
Over 3 to 3-1/2	0.065 to 0.083	16 to 14	0.009	0.009	0.009	0.009	0.009	0.025
Over 3 to 3-1/2	0.095 to 0.220	13 to 5	0.009	0.009	0.009	0.009	0.009	0.027
Over 3 to 3-1/2	0.238 to 0.259	4 to 3	0.009	0.009	0.009	0.009	0.009	0.043
Over 3 to 3-1/2	0.284 to 0.360	2 to 0.360	0.012	0.012	0.012	0.012	0.012	0.050
Over 3 1/2 to 4	0.065 to 0.083	16 to 14	0.010	0.010	0.010	0.010	0.010	0.026
Over 3 1/2 to 4	0.095 to 0.220	13 to 5	0.010	0.010	0.010	0.010	0.010	0.028
Over 3 1/2 to 4	0.238 to 0.259	4 to 3	0.010	0.010	0.010	0.010	0.010	0.044
Over 3 1/2 to 4	0.284 to 0.500	2 to 0.500	0.015	0.015	0.015	0.015	0.015	0.053

Continued on next page ►

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

*See p. 4-45 for all applicable footnotes.

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

Note 1- Measurements for diameter are to be taken at least 2 in. from the ends of the tubes.

Outside Diameter Range in. [mm]	Wall Thickness inches	Bwg ^F	Flash in- Tubing ^{A,B}		Flash Controlled to 0.010 in. max Tubing ^{B,C}		Flash Controlled to 0.005 in. [0.13 mm] max Tubing ^{C,D}	
			Outside Diameter, ±	Outside Diameter, ±	Outside Diameter, ±	Inside Diameter, ±	Outside Diameter, ±	Inside Diameter, ±
Over 4 to 5	0.065 to 0.083	16 to 14	0.020	0.020	0.020	0.036	0.020	0.045
Over 4 to 5	0.095 to 0.220	13 to 5	0.020	0.020	0.020	0.045	0.020	0.054
Over 4 to 5	0.238 to 0.259	4 to 3	0.020	0.020	0.020	0.054	0.020	0.058
Over 4 to 5	0.284 to 0.500	2 to 0.500	0.020	0.020	0.020	0.058	0.020	0.036
Over 5 to 6	0.065 to 0.134	16 to 10	0.020	0.020	0.020	0.040	0.020	0.054
Over 5 to 6	0.148 to 0.220	9 to 5	0.020	0.020	0.020	0.054	0.020	0.058
Over 5 to 6	0.238 to 0.259	4 to 3	0.020	0.020	0.020	0.058	0.020	0.043
Over 5 to 6	0.284 to 0.500	2 to 0.500	0.020	0.020	0.020	0.043	0.020	0.045
Over 6 to 8	0.120 to 0.134	11 to 10	0.025	0.025	0.025	0.045	0.025	0.059
Over 6 to 8	0.148 to 0.220	9 to 5	0.025	0.025	0.025	0.059	0.025	0.063
Over 6 to 8	0.238 to 0.259	4 to 3	0.025	0.025	0.025	0.063	0.025	0.041
Over 6 to 8	0.284 to 0.500	2 to 0.500	0.025	0.025	0.025	0.041	0.025	0.045
Over 8 to 10	0.083 to 0.109	14 to 12	0.030	0.030	0.030	0.045	0.030	0.059
Over 8 to 10	0.120 to 0.134	11 to 10	0.030	0.030	0.030	0.059	0.030	0.063
Over 8 to 10	0.148 to 0.220	9 to 5	0.030	0.030	0.030	0.063	0.030	0.041
Over 8 to 10	0.238 to 0.259	4 to 3	0.030	0.030	0.030	0.041	0.030	0.045
Over 8 to 10	0.248 to 0.500	2 to 0.500	0.030	0.030	0.030	0.045	0.030	0.059
Over 10 to 12	0.083 to 0.109	14 to 12	0.035	0.035	0.035	0.059	0.035	0.063
Over 10 to 12	0.120 to 0.134	11 to 10	0.035	0.035	0.035	0.063	0.035	0.041
Over 10 to 12	0.148 to 0.220	9 to 5	0.035	0.035	0.035	0.041	0.035	0.045
Over 10 to 12	0.238 to 0.259	4 to 3	0.035	0.035	0.035	0.045	0.035	0.059
Over 10 to 12	0.284 to 0.500	2 to 0.500	0.035	0.035	0.035	0.059	0.035	0.063

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

Diameter Tolerances for Type 1 (A.W.H.R.) Round Tubing

Note 1 - Measurements for diameter are to be taken at least 2 in. from the ends of the tubes.

Outside Diameter Range in. [mm]	Wall Thickness inches	Bwg ^F	Flash-in-Tubing ^{A,B}		Flash Controlled to 0.010 in. max Tubing ^{B,C}		Flash Controlled to 0.005 in. [0.13 mm] max Tubing ^{C,D}	
			Outside Diameter, ±	Outside Diameter, ±	Outside Diameter, ±	Inside Diameter, ±	Outside Diameter, ±	Inside Diameter, ±
Over 12 to 15	0.083 to 0.109	14 to 12	0.040	0.040	0.040	0.058	0.040	0.058
Over 12 to 15	0.120 to 0.134	11 to 10	0.040	0.040	0.040	0.058	0.040	0.058
Over 12 to 15	0.148 to 0.220	9 to 5	0.040	0.040	0.040	0.060	0.040	0.060
Over 12 to 15	0.238 to 0.259	4 to 3	0.040	0.040	0.040	0.074	0.040	0.074
Over 12 to 15	0.284 to 0.500	2 to 0.500	0.040	0.040	0.040	0.086	0.040	0.086

^A Flash-In-Tubing is produced only to outside diameter tolerances and wall thickness tolerances and the inside diameter welding flash does not exceed the wall thickness or 3/32 in., whichever is less.

^B Flash Controlled to 0.010 in. maximum tubing consists of tubing which is commonly produced only to outside diameter tolerances and wall thickness tolerances, in which the height of the remaining welding flash is controlled not to exceed 0.010 in.

^C Flash Controlled to 0.005 in. maximum tubing is produced to outside diameters and wall thickness tolerance, inside diameter and wall thickness tolerances, or outside diameters and inside diameter tolerances, in which the height of the remaining flash is controlled not to exceed 0.005 in. Any remaining flash is considered to be part of the applicable inside diameter tolerances



Wall Thickness Tolerances for Type 1 (A.W.H.R.) Round Tubing

Wall Thickness Tolerances for Type 1 (A.W.H.R.) Round Tubing

Wall Thickness in. ^A Bwg ^A	Outside Diameter, ^A																							
	3/4 to 1, incl	Over 1 to 1-15/16, incl	Over 1-15/16 to 3-3/4, incl	Over 3-3/4 to 4-1/2, incl	Over 4-1/2 to 6, incl	Over 6 to, 8 incl	Over 8 to, 10 incl	Over 10 to, 12 incl	Over 12 to, 15 incl															
	+	-	+	-	+	-	+	-	+	-	+	-												
	Wall Thickness Tolerances, in., ± ^B																							
0.065	0.005	0.009	0.004	0.010	0.003	0.011	0.002	0.012	0.002	0.012	0.002	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.072	0.005	0.009	0.004	0.010	0.003	0.011	0.002	0.012	0.002	0.012	0.002	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.083	0.006	0.010	0.005	0.011	0.004	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.095	0.006	0.010	0.005	0.011	0.004	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.109	0.006	0.010	0.005	0.011	0.004	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.120	0.006	0.010	0.005	0.011	0.004	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.134	0.006	0.010	0.005	0.011	0.004	0.012	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013	0.003	0.013
0.148	...	...	0.006	0.012	0.005	0.013	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014
0.165	...	...	0.006	0.012	0.005	0.013	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014
0.180	...	...	0.006	0.012	0.005	0.013	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014	0.004	0.014
0.203	...	...	...	...	0.007	0.015	0.006	0.016	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017
0.220	...	...	...	...	0.007	0.015	0.006	0.016	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017	0.005	0.017
0.238	...	...	...	...	0.012	0.020	0.011	0.021	0.010	0.022	0.010	0.022	0.010	0.022	0.010	0.022	0.010	0.022	0.010	0.022	0.010	0.022	0.010	0.022
0.259	...	...	...	...	0.013	0.021	0.012	0.022	0.011	0.023	0.011	0.023	0.011	0.023	0.011	0.023	0.011	0.023	0.011	0.023	0.011	0.023	0.011	0.023
0.284	...	...	...	...	0.014	0.022	0.013	0.023	0.012	0.024	0.012	0.024	0.012	0.024	0.012	0.024	0.012	0.024	0.012	0.024	0.012	0.024	0.012	0.024
0.300	...	...	...	...	0.015	0.023	0.014	0.024	0.013	0.025	0.013	0.025	0.013	0.025	0.013	0.025	0.013	0.025	0.013	0.025	0.013	0.025	0.013	0.025
0.320	...	...	...	...	0.016	0.024	0.015	0.025	0.014	0.026	0.014	0.026	0.014	0.026	0.014	0.026	0.014	0.026	0.014	0.026	0.014	0.026	0.014	0.026
0.344	...	...	...	...	0.017	0.025	0.016	0.026	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027
0.360	...	...	...	...	0.017	0.025	0.016	0.026	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027
0.375	...	...	...	...	0.016	0.026	0.016	0.026	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027	0.015	0.027
0.406	...	...	...	...	0.017	0.027	0.017	0.027	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028
0.438	...	...	...	...	0.017	0.027	0.017	0.027	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028
0.469	...	...	...	...	...	...	...	...	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028
0.500	...	...	...	...	...	...	...	...	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028	0.016	0.028

**Steel Tube
and Pipe**

Diameter Tolerances for D.O.M Tubing

ASTM A513-T5

Outside diameter tolerances for cold rolled steel tubing, sink drawn and mandrel drawn

OD Size Range ^A	Wall % of OD	Types 3,4, (Sink Drawn) ^{A,B} Types 5,6 (Mandrel Drawn) ^{B,C} OD in Inches		Types 5 and 6 (Mandrel Drawn) ^{B,C,D} ID in Inches	
		Over	Under	Over	Under
Up to 0.499	all	.004	.000	-	-
0.500 - 1.699	all	.005	.000	.000	.005
1.700 - 2.099	all	.006	.000	.000	.006
2.100 - 2.499	all	.007	.000	.000	.007
2.500 - 2.899	all	.008	.000	.000	.008
2.900 - 3.299	all	.009	.000	.000	.009
3.300 - 3.699	all	.010	.000	.000	.010
3.700 - 4.099	all	.011	.000	.000	.011
4.100 - 4.499	all	.012	.000	.000	.012
4.500 - 4.899	all	.013	.000	.000	.013
4.900 - 5.299	all	.014	.000	.000	.014
5.300 - 5.549	all	.015	.000	.000	.015
5.550 - 5.999	under 6	.010	.010	.010	.010
	6 and over	.009	.009	.009	.009
6.000 - 6.499	under 6	.013	.013	.013	.013
	6 and over	.010	.010	.010	.010
6.500 - 6.999	under 6	.015	.015	.015	.015
	6 and over	.012	.012	.012	.012
7.000 - 7.499	under 6	.018	.018	.018	.018
	6 and over	.013	.013	.013	.013
7.500 - 7.999	under 6	.020	.020	.020	.020
	6 and over	.015	.015	.015	.015
8.000 - 8.499	under 6	.023	.023	.023	.023
	6 and over	.016	.016	.016	.016
8.500 - 8.999	under 6	.025	.025	.025	.025
	6 and over	.017	.017	.017	.017
9.000 - 9.499	under 6	.028	.028	.028	.028
	6 and over	.019	.019	.019	.019
9.500 - 9.999	under 6	.030	.030	.030	.030
	6 and over	.020	.020	.020	.020
10.000 - 10.999	all	.034	.034	.034	.034
11.000 - 11.999	all	.035	.035	.035	.035
12.000 - 12.999	all	.036	.036	.036	.036
13.000 - 13.999	all	.037	.037	.037	.037
14.000 - 14.999	all	.038	.038	.038	.038

NOTE: Alro Steel lists

^A Tubing, flash in or flash controlled which is further processed without mandrel to obtain tolerances closer than those .

^B Birmingham Wire Gauge.

^C Where the ellipsis (...) appears in this table, the tolerance is not addressed.

Straightness-- The straightness tolerance is 1/16 in./3 ft (1.7mm/1m). The test method for straightness measurement is at the manufacturer's option, unless a specific test method is specified in the purchase order.

Outside Diameter Tolerances for Hot Finished Seamless Tubing^{A,B,C}

Outside Diameter in Inches	Over	Under
Up to 2.999	.020	.020
3.000 to 4.499	.025	.025
4.500 to 5.999	.031	.031
6.000 to 7.499	.037	.037
7.500 to 8.999	.045	.045
9.000 to 10.750	.050	.050

^ADiameter tolerances are not applicable to normalized and tempered or quenched and tempered conditions.

^BThe common range of sizes of hot finished tubes is 1½" to 10¾" outside diameter with wall thickness at least 3% more of outside diameter, but not less than 0.095".

^CLarger sizes are available; consult manufacturer for sizes and tolerances.

Hot Finished Seamless Round Tubing Wall Thickness Tolerances

Wall Thickness in Inches as % of OD ASTM A519	Wall Thickness Tolerance in Inches, ^A % Over and Under Nominal		
	Outside Diameter 2.999" and Smaller	Outside Diameter 3.000" to 5.999"	Outside Diameter 6.000 in. to 10.750"
Under 15	12.5	10.0	10.0
15 and over	10.0	7.5	10.0

^AWall thickness tolerances may not be applicable to walls 0.199" and less; consult manufacturer for wall tolerances on such tube sizes.

Ovality Tolerances ASTM A513-T5

Ovality shall be within the below tolerance except when wall thickness is less than 3% of the OD. In such cases, the additional ovality shall be as follows, but the mean diameter shall be within the specified tolerance:

Outside Diameter (inches)	Additional Ovality Tolerance (inches)
Up to 2.000	.010
Over 2.000 to 3.000	.015
Over 3.000 to 4.000	.020
Over 4.000 to 5.000	.025
Over 5.000 to 6.000	.030
Over 6.000 to 7.000	.035
Over 7.000 to 8.000	.040
Over 8.000 to 9.000	.045
Over 9.000 to 10.000	.050
Over 10.000 to 11.000	.055
Over 11.000 to 12.000	.060
Over 12.000 to 12.500	.065

Structural Pipe Tolerances

Straightness

1/8 times the number of feet of total length divided by 5

Length Tolerance Mill Cut

Up to 22 ft. -1/4/+ 1/2
Over 22 ft. to 44 ft. -1/4/+ 3/4

Outside Diameter (inches)

0.840 thru 1.900 ± 0.5%
2.000 and larger ± 0.75%

The outside diameter measurements shall be made at positions at least 1" from either end of the pipe.

Wall Tolerance

± 10% of nominal wall specified

Tested Pipe (A-53) Tolerances

Outside diameter at any point shall not vary more than:		
Nominal	Over	Under
1-1/2" and smaller	1/64"	1/64"
2" and larger	1%	1%

Wall Tolerance + 0 / - 12.5% of the nominal wall

Hydraulic Tubing - (Seamless) Tolerances SAE J-524

The diameter of the tubing shall not vary from that specified more than the following amounts:

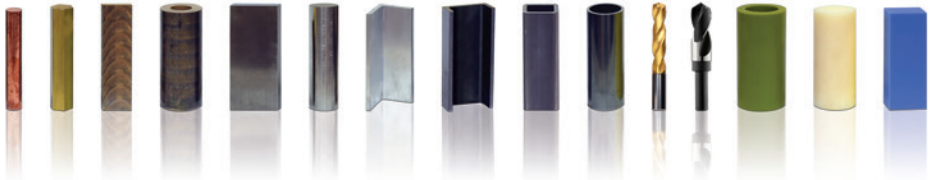
OD Sizes inches	Outside Dia. (inches)		Inside Dia. (inches)	
	Plus	Minus	Plus	Minus
Below 3-1/2 to 1-1/2 incl.	0.010	0.010	0.010	0.010
Below 1-1/2 to 1/2 ID incl.	0.005	0.005	0.005	0.005
Below 1/2 ID	0.003	0.003	0.005	0.005

When the outside diameter and wall thickness of 1/2 inch to 3-1/2 inch OD tubes are specified, the outside diameter shall conform to the tolerances given in the above table, and the wall thicknesses shall not vary from that specified more than plus or minus 10 percent. When less than 1/2 inch ID, the outside diameter shall conform to the tolerances given in the above table. The wall thickness shall not vary from that specified more than plus or minus 15 percent.



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and Pipe**

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