

Aluminum Plate

5086
H-116, H-32
H-321

Thickness	Fraction Equivalent	Width	Length	Approx. Wt. Per Sheet
.125	1/8	48	96	57.60
.125	1/8	48	144	86.40
.125	1/8	48	240	144.00
.125	1/8	60	240	180.00
.125	1/8	72	240	216.00
.125	1/8	96	240	288.00
.190	3/16	48	120	109.44
.190	3/16	48	240	218.88
.190	3/16	60	240	273.60
.190	3/16	72	240	328.32
.190	3/16	96	240	437.76
.250	1/4	48	120	144.00
.250	1/4	48	240	288.00
.250	1/4	60	240	360.00
.250	1/4	72	240	432.00
.250	1/4	84	240	504.00
.250	1/4	96	240	576.00
.313	5/16	48	240	360.58
.313	5/16	60	240	450.72
.313	5/16	72	240	540.86
.313	5/16	96	240	721.15
.375	3/8	48	240	432.00
.375	3/8	60	240	540.00
.375	3/8	72	240	648.00
.375	3/8	96	240	864.00
.500	1/2	48	240	576.00
.500	1/2	60	240	720.00
.500	1/2	72	240	864.00
.500	1/2	96	240	1152.00
.630	5/8	48	240	725.76
.630	5/8	60	240	907.20
.630	5/8	72	240	1088.64
.750	3/4	60	240	1080.00
1.00	1	60	240	1440.00
1.50	1-1/2	48	144	1036.80
2.00	2	48	144	1382.40

Aluminum Sheet

**5052
H-32**

Thickness	Fraction Equivalent	Width	Length	Approx. Wt. Per Sheet
.050	1/20	48	144	34.56
.063	1/16	48	144	43.55
.080	5/64	48	144	55.30
.090	3/32	48	144	62.21
.125	1/8	48	96	57.60
.125	1/8	48	144	86.40
.125	1/8	60	144	108.00
.190	3/16	48	144	131.33
.190	3/16	60	144	164.16
.250	1/4	48	144	172.80
.250	1/4	60	144	216.00

Aluminum Plate

**6061
T-6, T-651**

Thickness	Fraction Equivalent	Width	Length	Approx. Wt. Per Sheet
.040	1/25	48	144	27.65
.063	1/16	48	144	43.55
.080	5/64	48	144	55.30
.125	1/8	48	144	86.40
.190	3/16	48	144	131.33
.250	1/4	48	144	172.80
.250	1/4	60	144	216.00
.313	5/16	48	144	216.35
.375	3/8	48	144	259.20
.375	3/8	60	144	324.00
.500	1/2	48	144	345.60
.500	1/2	60	144	432.00
.750	3/4	48	144	518.40
.750	3/4	60	144	648.00
1.00	1	48	144	691.20
1.25	1-1/4	48	144	864.00
1.50	1-1/2	48	144	1036.80
1.75	1-3/4	48	144	1209.60
2.00	2	48	144	1382.40
2.50	2-1/2	48	144	1728.00
3.00	3	48	144	2073.60
3.50	3-1/2	48	144	2419.20
4.00	4	48	144	2764.80
4.50	4-1/2	48	144	3110.40
5.00	5	48	144	3456.00
5.50	5-1/2	48	144	3801.60
6.00	6	48	144	4147.20

**Aluminum Diamond Tread Plate
Brite**

**3003
H-22**

Thickness	Fraction Equivalent	Width	Length	Approx. Wt. Per Sheet
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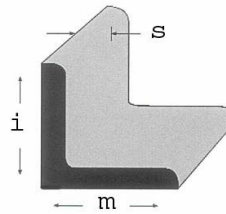
.080	5/64	48	120	46.00
.100	7/64	48	120	57.00
.125	1/8	48	120	76.00
.190	3/16	48	120	112.00
.190	3/16	48	192	179.20
.250	1/4	48	120	148.00
.250	1/4	48	192	236.80
.250	1/4	60	192	296.00

**Aluminum Diamond Tread Plate
Mill Finish**

**5052, 6061 & 5086
H-32, H-34**

Thickness	Fraction Equivalent	Width	Length	Approx. Wt. Per Sheet
.125	1/8	48	96	60.80
.125	1/8	48	192	121.60
.125	1/8	60	192	152.00
.190	3/16	48	96	89.60
.190	3/16	48	192	179.20
.250	1/4	48	96	118.40
.250	1/4	48	192	236.80
.250	1/4	60	192	296.00
.375	3/8	48	96	173.76
.375	3/8	48	192	347.52
.375	3/8	60	192	434.40
.437	7/16	60	240	630.00
.500	1/2	48	192	460.80
.500	1/2	60	192	576.00

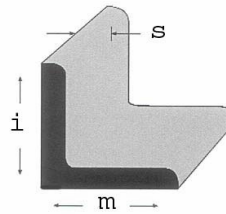
Structural Aluminum Angle



**5086 & 6061
X 25'
Equal Leg**

I	M	S	Approx. Wt. Per Lin. Ft.
3/4	3/4	1/8	.201
1	1	1/8	.280
1	1	3/16	.406
1	1	1/4	.514
1-1/4	1-1/4	1/8	.343
1-1/4	1-1/4	3/16	.522
1-1/4	1-1/4	1/4	.656
1-1/2	1-1/2	1/8	.440
1-1/2	1-1/2	3/16	.640
1-1/2	1-1/2	1/4	.830
1-1/2	1-1/2	3/8	1.176
1-3/4	1-3/4	1/8	.497
1-3/4	1-3/4	3/16	.744
1-3/4	1-3/4	1/4	.980
1-3/4	1-3/4	3/8	1.378
2	2	1/8	.588
2	2	3/16	.870
2	2	1/4	1.110
2	2	3/8	1.606
2-1/2	2-1/2	1/8	.724
2-1/2	2-1/2	3/16	1.070
2-1/2	2-1/2	1/4	1.404
2-1/2	2-1/2	3/8	2.047
3	3	3/16	1.275
3	3	1/4	1.730
3	3	3/8	2.474
3	3	1/2	3.227
3-1/2	3-1/2	1/4	1.989
3-1/2	3-1/2	3/8	2.926
3-1/2	3-1/2	1/2	3.826
4	4	1/4	2.350
4	4	3/8	3.366
4	4	1/2	4.414
5	5	3/8	4.237
5	5	1/2	5.578
6	6	3/8	5.119
6	6	1/2	6.754
8	8	1/2	9.141
8	8	3/4	13.478

Structural Aluminum Angle

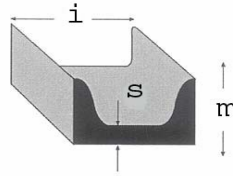


**5086 & 6061
X 25'
Unequal Leg**

I	M	S	Approx. Wt. Per Lin. Ft.
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1	1-1/2	1/8	.356
1	1-1/2	1/4	.662
1-1/2	2	1/8	.496
1-1/2	2	3/16	.731
1-1/2	2	1/4	.956
1-1/2	2	3/8	1.378
2	2-1/2	3/8	1.828
2	3	3/16	1.090
2	3	1/4	1.405
2	3	3/8	2.046
2-1/2	3	1/4	1.537
2-1/2	3	3/8	2.253
3	3-1/2	1/4	1.842
3	3-1/2	3/8	2.705
3	3-1/2	1/2	3.532
3	4	1/4	1.988
3	4	3/8	2.926
3	4	1/2	3.826
3	5	3/8	3.349
3	5	1/2	4.396
4	6	3/8	4.237
4	6	1/2	5.578
6	8	1/2	7.952
6	8	3/4	11.679

**Structural
Aluminum
Channel**

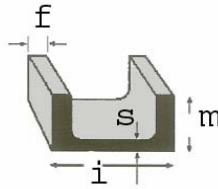


**5086 & 6061
X 25'
American
Standard**

I	M	S	Approx. Wt. Per Lin. Ft.
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3.00	1.410	.170	1.417
3.00	1.498	.258	1.729
3.00	1.596	.356	2.074
4.00	1.580	.180	1.846
4.00	1.647	.247	2.161
4.00	1.720	.320	2.504
5.00	1.750	.190	2.316
5.00	1.885	.325	3.108
5.00	2.032	.472	3.975
6.00	1.920	.200	2.826
6.00	1.945	.225	3.002
6.00	2.034	.314	3.631
6.00	2.157	.437	4.498
7.00	2.110	.230	3.541
7.00	2.194	.314	4.232
8.00	2.290	.250	4.252
8.00	2.343	.303	4.751
8.00	2.435	.395	5.617
8.00	2.527	.487	6.484
9.00	2.430	.230	4.604
9.00	2.648	.448	6.911
10.00	2.600	.240	5.278
10.00	2.739	.379	6.915
10.00	2.886	.526	8.641
12.00	2.960	.300	7.411
12.00	3.047	.387	8.374
12.00	3.170	.510	10.374
15.00	3.400	.400	11.708

Structural Aluminum Channel

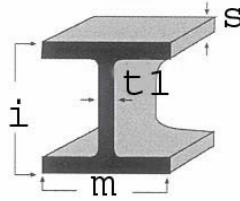


**5086 & 6061
X 25'
Aluminum
Association**

I	M	F	S	Approx. Wt. Per Lin. Ft.
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2.00	1.00	.13	.10	.577
2.00	1.25	.26	.17	1.071
3.00	1.50	.20	.13	1.135
3.00	1.75	.26	.17	1.597
4.00	2.00	.23	.15	1.738
4.00	2.25	.29	.19	2.331
5.00	2.25	.26	.15	2.212
5.00	2.75	.32	.19	3.089
6.00	2.50	.29	.17	2.834
6.00	3.25	.35	.21	4.030
7.00	2.75	.29	.17	3.205
7.00	3.50	.38	.21	4.715
8.00	3.00	.35	.19	4.147
8.00	3.75	.41	.25	5.789
9.00	3.25	.35	.23	4.983
9.00	4.00	.44	.29	6.970
10.00	3.50	.41	.25	6.136
10.00	4.25	.50	.31	8.360
12.00	4.00	.47	.29	8.274
12.00	5.00	.62	.35	11.822

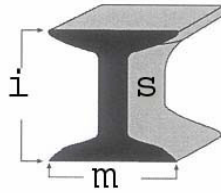
Structural Aluminum I-Beam



**6061
X 25'
Aluminum
Association**

I	M	S	T1	R	Approx. Wt. Per Lin. Ft.
3.00	2.50	.20	.13	.25	1.637
3.00	2.50	.26	.15	.25	2.030
4.00	3.00	.23	.15	.25	2.331
4.00	3.00	.29	.17	.25	2.793
5.00	3.50	.32	.19	.30	3.700
6.00	4.00	.29	.19	.30	4.030
6.00	4.00	.35	.21	.30	4.700
7.00	4.50	.38	.23	.30	5.800
8.00	5.00	.35	.23	.30	6.181
8.00	5.00	.41	.25	.30	7.023
9.00	5.50	.44	.27	.30	8.360
10.00	6.00	.41	.25	.40	8.650
10.00	6.00	.50	.29	.40	10.286
12.00	7.00	.47	.29	.40	11.672
12.00	7.00	.62	.31	.40	14.292

**Structural
Aluminum
I-Beam**



**6061
X 25'
American
Standard**

I	M	S	Approx. Wt. Per Lin. Ft.
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3	2.330	.170	1.944
3	2.509	.349	2.670
4	2.660	.190	2.642
4	2.796	.326	3.373
5	3.000	.210	3.508
5	3.284	.494	5.250
6	3.330	.230	4.421
6	3.443	.343	5.220
6	3.565	.465	6.072
7	3.755	.345	6.230
8	4.000	.270	6.510
8	4.171	.441	8.124
10	4.660	.310	8.981
10	4.944	.594	12.450
12	5.000	.350	11.220
12	5.355	.565	15.874

**SCH 40
Aluminum
Pipe**

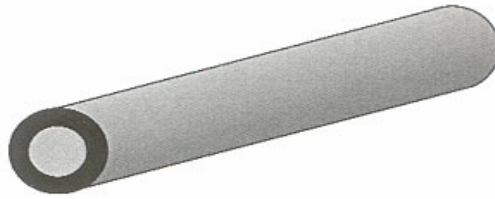


**6061, 6063 & 5086
X 20'**

Size	OD	ID	Wall	Approx. Wt. Per Lin Ft.
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3/8	.675	.493	.091	.196
1/2	.840	.622	.109	.294
3/4	1.050	.824	.113	.391
1	1.315	1.049	.133	.581
1-1/4	1.660	1.380	.140	.786
1-1/2	1.900	1.610	.145	.940
2	2.375	2.067	.154	1.264
2-1/2	2.875	2.469	.203	2.004
3	3.500	3.068	.216	2.621
3-1/2	4.000	3.548	.226	3.151
4	4.500	4.026	.237	3.733
5	5.563	5.047	.258	5.057
6	6.625	6.065	.280	6.564
8	8.625	7.981	.322	9.870
10	10.75	10.02	.365	14.000
12	12.75	11.938	.375	17.100

**SCH 80
Aluminum
Pipe**

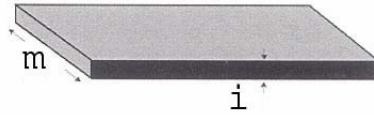


**6061, 6063 & 5086
X 20'**

Size	OD	ID	Wall	Approx. Wt. Per Lin Ft.
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3/4	1.050	.742	.154	.510
1	1.315	.957	.179	.751
1-1/4	1.660	1.278	.191	1.037
1-1/2	1.900	1.500	.200	1.256
2	2.375	1.939	.218	1.737
2-1/2	2.875	2.323	.276	2.650
3	3.500	2.900	.300	3.547
3-1/2	4.000	3.364	.318	4.326
4	4.500	3.826	.337	5.183
5	5.563	4.813	.375	7.188
6	6.625	5.761	.432	9.884
8	8.625	7.625	.500	15.010

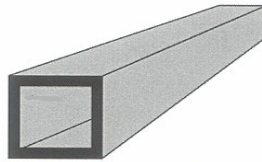
Aluminum Flat Bar



**6061 & 5086
X 12'**

Thickness	Width	Wt. Per Ft.	Thickness	Width	Wt. Per Ft.
1/8	1/2	.078	1/2	3/4	.450
1/8	5/8	.092	1/2	1	.600
1/8	3/4	.113	1/2	1-1/4	.734
1/8	1	.150	1/2	1-1/2	.900
1/8	1-1/4	.188	1/2	1-3/4	1.028
1/8	1-1/2	.225	1/2	2	1.200
1/8	2	.300	1/2	2-1/2	1.500
3/16	3/4	.169	1/2	3	1.800
3/16	1	.226	1/2	4	2.400
3/16	1-1/4	.275	1/2	5	2.940
3/16	1-1/2	.338	1/2	6	3.600
3/16	2	.451	1/2	8	4.704
3/16	2-1/2	.561	1/2	10	5.880
1/4	1/2	.150	3/4	1	.881
1/4	3/4	.226	3/4	1-1/4	1.101
1/4	1	.300	3/4	1-1/2	1.350
1/4	1-1/4	.376	3/4	2	1.800
1/4	1-1/2	.450	3/4	3	2.640
1/4	1-3/4	.524	3/4	4	3.528
1/4	2	.600	3/4	6	5.292
1/4	2-1/2	.735	1	1-1/4	1.469
1/4	3	.900	1	1-1/2	1.800
1/4	4	1.200	1	2	2.350
1/4	5	1.500	1	2-1/2	2.937
1/4	6	1.800	1	3	3.528
1/4	8	2.352	1	3-1/2	4.200
1/4	10	2.940	1	4	4.800
3/8	1/2	.220	1	6	7.200
3/8	3/4	.330	1-1/4	1-1/2	2.203
3/8	1	.450	1-1/4	2	2.937
3/8	1-1/4	.563	1-1/2	2	3.524
3/8	1-1/2	.675	1-1/2	3	5.287
3/8	2	.900	1-1/2	6	10.573
3/8	2-1/2	1.126	2	3	7.049
3/8	3	1.350	2	4	9.398
3/8	4	1.800			
3/8	6	2.645			
3/8	8	3.528			

**Aluminum Square Tubing
Radius Corners**



**6061
X 24'**

2" Square X 3/16" wall X 24' 39#

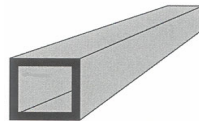
2" Square X 1/4" wall X 24' 49#

2-1/2" Square X 1/4" wall X 24' 65#

3" Square X 1/4" wall X 24' 78#

4" Square X 1/4" wall X 24' 108#

Aluminum Square Tubing



**6063
X 24'**

3/4" Square X .125 wall

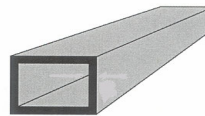
1" Square X .125 wall

1-1/4" Square X .125 wall

1-1/2" Square X .125 wall

2" Square X .125 wall

**Aluminum Extruded Rectangular
Tube**



**6063
X 24'**

1" X 2" X .125 Wall

1" X 3" X .125 Wall

1" X 4" X .125 Wall

1-1/2" X 2" X .125 Wall

1-1/2" X 3" X .125 Wall

1-3/4" X 3" X .125 Wall

1-3/4" X 4" X .125 Wall

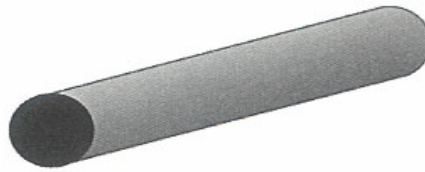
2" X 3" X .125 Wall

2" X 4" X .125 Wall

2" X 5" X .125 Wall

2" X 6" X .125 Wall

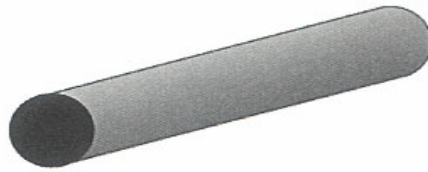
Round Aluminum Rod



**5086
6061
X 12'**

Size	Approx. Wt. Per Lin Ft	Size	Approx. Wt. Per Lin Ft
1/8	0.015	1-7/8	3.247
3/16	0.032	2	3.691
7/32	0.044	2-1/8	4.166
1/4	0.059	2-1/4	4.771
5/16	0.090	2-3/8	5.210
3/8	0.133	2-1/2	5.733
7/16	0.178	2-5/8	6.358
1/2	0.235	2-3/4	6.978
9/16	0.292	3	8.304
5/8	0.368	3-1/4	9.746
3/4	0.530	3-1/2	11.303
7/8	0.716	3-5/8	12.140
1	0.943	3-3/4	12.975
1-1/8	1.169	4	14.763
1-1/4	1.472	4-1/4	16.765
1-5/16	1.590	4-1/2	18.694
1-3/8	1.745	5	23.067
1-7/16	1.925	5-1/2	27.998
1-1/2	2.110	6	33.219
1-5/8	2.439	6-1/2	38.988
1-3/4	2.826	7	45.214
1-13/16	3.042	7-1/2	51.961
		8	59.091

**Stainless Steel
Round Rod**



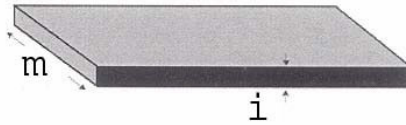
**316L
X 12'**

Size

Approx. Wt. Per Lin Ft.

3/16	.0938
1/4	.1669
5/16	.2608
3/8	.3756
7/16	.5111
1/2	.6676
5/8	1.043
3/4	1.502
7/8	2.044
1	2.670
1-1/8	3.379
1-3/16	3.766
1-1/4	4.173
1-5/16	4.600
1-3/8	5.019
1-1/2	6.008
1-5/8	7.051
1-3/4	8.178
2	10.68
2-3/16	12.78
2-1/4	13.52
2-3/8	15.07
2-1/2	16.69
2-5/8	18.40
2-3/4	20.20
2-7/8	22.07
3	24.03
4	42.73
5	66.76

Stainless Steel Flat Bar



**316L
X 12'**

Thickness	Width	App. Wt. Per Ft.	Thickness	Width	App. Wt. Per Ft.
1/8	1/2	.212	1/2	3/4	1.27
1/8	3/4	.318	1/2	1	1.70
1/8	1	.425	1/2	1-1/4	2.12
1/8	1-1/4	.531	1/2	1-1/2	2.55
1/8	1-1/2	.638	1/2	1-3/4	2.98
1/8	1-3/4	.744	1/2	2	3.40
1/8	2	.850	1/2	2-1/2	4.25
1/8	2-1/2	1.06	1/2	3	5.10
1/8	3	1.275	1/2	4	6.80
3/16	3/4	.478	5/8	3/4	1.59
3/16	1	.638	5/8	1	2.12
3/16	1-1/4	.797	3/4	1	2.55
3/16	1-1/2	.957	3/4	1-1/2	3.83
3/16	1-3/4	1.15	3/4	1-3/4	4.47
3/16	2	1.28	3/4	2	5.10
3/16	2-1/2	1.59	3/4	3-1/2	8.93
1/4	1/2	.425	3/4	4	10.20
1/4	3/4	.636	1	1-1/2	5.10
1/4	1	.850	1	2	6.80
1/4	1-1/4	1.06	1-1/8	1-1/2	5.74
1/4	1-1/2	1.28	1-1/4	2-1/8	9.03
1/4	1-3/4	1.49	2	2-1/2	17.00
1/4	2	1.70			
1/4	2-1/2	2.12			
1/4	3	2.55			
1/4	4	3.40			
5/16	2	2.12			
3/8	3/4	.957			
3/8	1	1.28			
3/8	1-1/4	1.59			
3/8	1-1/2	1.92			
3/8	1-3/4	2.23			
3/8	2	2.55			
3/8	2-1/2	3.19			
3/8	3	3.83			
3/8	4	5.10			

**SCH 40
Stainless Steel
Pipe**

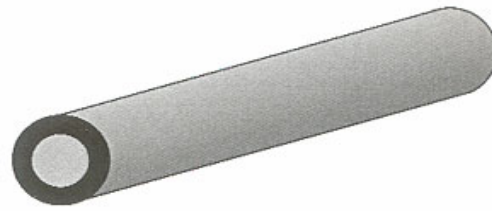


**316L
X 20'**

Size	OD	Wall	Approx. Wt. Per Lin Ft.
------	----	------	-------------------------

1/8	.405	.068	.245
1/4	.540	.088	.425
3/8	.675	.091	.568
1/2	.840	.109	.851
3/4	1.050	.113	1.13
1	1.315	.133	1.68
1-1/4	1.660	.140	2.27
1-1/2	1.900	.145	2.72
2	2.375	.154	3.65
2-1/2	2.875	.203	5.79
3	3.500	.216	7.58
3-1/2	4.000	.226	9.11
4	4.500	.237	10.79
5	5.563	.258	14.62
6	6.625	.280	18.97
8	8.625	.322	28.55
10	10.75	.365	40.48
12	12.75	.375	49.56

**SCH 80
Stainless Steel
Pipe**



**316L
X 20'**

Size	OD	Wall	Approx. Wt. Per Lin Ft.
------	----	------	-------------------------

1/8	.405	.095	.31
1/4	.540	.119	.54
3/8	.675	.126	.74
1/2	.840	.147	1.09
3/4	1.050	.154	1.47
1	1.315	.179	2.17
1-1/4	1.660	.191	3.00
1-1/2	1.900	.200	3.63
2	2.375	.218	5.02
2-1/2	2.875	.276	7.66
3	3.500	.300	10.25
3-1/2	4.000	.318	12.51
4	4.500	.337	14.98
6	6.625	.432	28.57
8	8.625	.500	43.39

**Stainless Steel
Sheet/Plate**

**316L
4' x 10'**

Gauge	Decimal Equiv.	Approx. Wt. Per Sheet
26	.018	29.70
25	.0199	33.60
24	.024	39.50
22	.030	48.70
20	.036	59.60
18	.048	80.60
16	.060	100.00
14	.075	126.00
12	.105	176.40
11	.120	201.60
10	.135	226.80
3/16	.190	343.16
1/4	.250	446.48
3/8	.375	659.84
1/2	.500	866.52

**Polished
Stainless Steel
Sheet/Plate**

**316L
4' x 10'**

Gauge

Decimal Equiv.

Approx. Wt. Per Sheet

11

.120

201.60

16

.060

100.00

**Polished
Stainless Steel
Tubing #8**

**316L
X 20'**

3/4 X 16 GA

7/8 X 16 GA

1 X 16 GA

1 X 14 GA

1-1/8 X 16 GA

1-1/4 X 16 GA

1-1/4 X 14 GA

1-1/2 X 16 GA

1-1/2 X 14 GA

1-1/2 X 11 GA

2 X 16 GA

2 X 14 GA

2 X 11 GA

Aquatech Boat Shafting

AQUATECH 19

AQUATECH 19 is an 18-8 stainless alloy and is an austenitic stainless with nitrogen added for greater strength. Under certain conditions it may exhibit crevice attack, which can be protected by proper use of anodic cathodic protection.

AQUATECH 19 is used in commercial fishing boats as well as pleasure boats in the smaller diameters. In some instances this alloy has been used in work boats.

AQUATECH 19 is ground, polished and precision straightened and like austenitic stainless steels, it is non-magnetic. This alloy has good strength and its chemical properties give it excellent corrosion resistance.

AQUATECH 22

AQUATECH 22 is a highly corrosive-resistant alloy, non-magnetic with high yield strength characteristics.

AQUATECH 22 is used in yachts and those vessels that may require more corrosive-resistant shafting due to certain conditions, such as running time versus docking time, and also extreme water conditions.

AQUATECH 22 has shown superior resistance to pitting and crevice corrosion in all marine environments.

AQUATECH 22 has high strength and a toughness which is constant in low and high temperatures. In the production of AQUATECH 22, constant control of chemical and mechanical properties, with precision grinding, polishing and straightening, and careful packaging, assures you a delivered product worthy of your fine craft.

Comparison of Gauges

Gauge	American or Browne Sharpe	Birmingham or Stubs Iron Wire	United States Standard	Manufacturers Stan- dard	Steel Wire or Washburn & Moen
7/0	.....	.....	.500	.....	.4900
6/0	.5800	.....	.46875	.....	.4615
5/0	.5165	.....	.4375	.....	.4305
4/0	.4600	.454	.40625	.....	.3938
3/0	.4096	.425	.375	.....	.3625
2/0	.3648	.380	.34375	.....	.3310
0	.3249	.340	.3125	.....	.3065
1	.2893	.300	.28125	.....	.2830
2	.2576	.284	.265625	.....	.2625
3	.2294	.259	.25	.2391	.2437
4	.2043	.238	.234375	.2242	.2253
5	.1819	.220	.21875	.2092	.2070
6	.1620	.203	.203125	.1943	.1920
7	.1443	.180	.1875	.1793	.1770
8	.1285	.165	.171875	.1644	.1620
9	.1144	.148	.15625	.1495	.1483
10	.1019	.134	.140625	.1345	.1350
11	.09074	.120	.125	.1196	.1205
12	.08081	.109	.109375	.1046	.1055
13	.07196	.096	.09375	.0897	.0915
14	.06408	.083	.078125	.0747	.0800
15	.05707	.072	.0703125	.0673	.0720
16	.05082	.065	.0625	.0598	.0625
17	.04526	.058	.05625	.0538	.0540
18	.04030	.049	.05	.0478	.0475
19	.03589	.042	.04375	.0418	.0410
20	.03196	.035	.0375	.0359	.0348
21	.02846	.032	.034375	.0329	.03175
22	.02535	.028	.03125	.0299	.0286
23	.02257	.025	.028125	.0269	.0258
24	.02010	.022	.025	.0239	.0230
25	.01790	.020	.021875	.0209	.0204
26	.01594	.018	.01875	.0179	.0181
27	.01420	.016	.0171875	.0164	.0173
28	.01264	.014	.015625	.0149	.0162
29	.01126	.013	.0140625	.0135	.0150
30	.01003	.012	.0125	.0120	.0140

Decimal & Millimeter Equivalents Of Inch Fractions

Fraction	Decimal	Millimeter	Fraction	Decimal	Millimeter
1/64	.0156	0.397	33/64	.5156	13.097
1/32	.0312	0.794	17/32	.5312	13.494
3/64	.0468	1.191	35/64	.5468	13.891
1/16	.0625	1.588	9/16	.5625	14.288
5/64	.0781	1.984	37/64	.5781	14.684
3/32	.0937	2.381	19/32	.5937	15.081
7/64	.1093	2.778	39/64	.6093	15.478
1/8	.1250	3.175	5/8	.6250	15.875
9/64	.1406	3.572	41/64	.6406	16.272
5/32	.1562	3.969	21/32	.6562	16.669
11/64	.1718	4.366	43/64	.6718	17.066
3/16	.1875	4.763	11/16	.6875	17.463
13/64	.2031	5.159	45/64	.7031	17.859
7/32	.2187	5.556	23/32	.7187	18.256
15/64	.2343	5.953	47/64	.7343	18.653
1/4	.2500	6.350	3/4	.7500	19.050
17/64	.2656	6.747	49/64	.7656	19.447
9/32	.2812	7.144	25/32	.7812	19.844
19/64	.2968	7.541	51/64	.7968	20.241
5/16	.3125	7.938	13/16	.8125	20.638
21/64	.3281	8.334	53/64	.8281	21.034
11/32	.3437	8.731	27/32	.8437	21.431
23/64	.3593	9.128	55/64	.8593	21.828
3/8	.3750	9.525	7/8	.8750	22.225
25/64	.3906	9.922	57/64	.8906	22.622
13/32	.4062	10.319	29/32	.9062	23.019
27/64	.4218	10.716	59/64	.9218	23.416
7/16	.4375	11.113	15/16	.9375	23.813
29/64	.4531	11.509	61/64	.9531	24.209
15/32	.4687	11.906	31/32	.9687	24.606
31/64	.4843	12.303	63/64	.9843	25.003
1/2	.5000	12.700	1	1.0000	25.400

Weights and Measures Metric and English

		Length
1 Mil.....	= .001	Inch
	= .025400	Millimeter
	= .0025400	Centimeter
1 Inch.....	= 1000	Mils
	= 25.400	Millimeters
	= 2.5400	Centimeters
1 Foot	= 30.480	Centimeters
	= .30480	Meter
1 Yard.....	= 91.440	Centimeters
	= .9144	Meters
1 Mile	= 1609.4	Meters
	= 1.6094	Kilometers
1 Millimeter	= 39.370	Mils
	= .039370	Inch
1 Centimeter.....	= .39370	Inch
	= .32808	Foot
1 Meter	= 39.370	Inches
	= 3.2808	Feet
1 Kilometer	= 3280.8	Feet
	= .62137	Mile
		Surface
1 Circ. Mil.....	= .78540	Sq. Mil
	= .000001	Circ. Inch
	= .00064516	Circ. Millimeter
1 Sq. Mil	= 1.2732	Circ. Mils
	= .000001	Sq. Inch
	= .00064516	Sq. Millimeter
1 Circ. Inch	= 1000000	Circ Mils
	= 645.16	Sq. Millimeters
	= 6.4516	Sq. Centimeters
1 Sq. Inch.....	= 1000000	Sq. Mils
	= 1273240	Circ. Mils
	= 645.16	Sq. Millimeters
	= 6.4516	Sq. Centimeters
1 Sq. Foot.....	= 929.03	Sq. Centimeters
1 Circ. Mil.....	= 1550.0	Circ. Mils

Weights and Measures

Metric and English

1 Cubic Inch.....=	16.387
1 Cubic Foot.....=	28317.
1 Cubic Centimeters.....=	.061023
1 Cubic Inch of Water.....=	.0361
1 Cubic Foot of Water.....=	62.5

1 Pound.....=	453.59
1 Gram.....=	.0022046
1 Kilogram.....=	2.2046

Volume

Cubic Centimeters
Cubic Centimeters
Cubic Inch
Pounds
Pounds

Weight

Grams
Pounds
Pounds

Miscellaneous Conversion Factors Metric and English

To Change From	To	Multiply By
Feet.....	Meters	0.3048
Miles.....	Kilometers.....	1.60935
Meters.....	Inches.....	39.37
Meters.....	Feet	3.28083
Kilometers	Miles	0.62137
Square Feet	Square Meters.....	0.0929
Square Yards.....	Square Meters.....	0.8361
Square Meters	Square Yards	1.196
Cubic Yards.....	Cubic Meters	0.7646
Cubic Meters.....	Cubic Yards.....	1.308
Fluid Ounces.....	Cubic Centimeters.....	29.574
Quarts.....	Liters.....	0.9464
Cubic Centimeters.....	Fluid Ounces.....	0.0344
Liters	Quarts.....	1.0567
Grains.....	Milligrams.....	64.7989
Pounds	Kilograms.....	0.4536
Ounces.....	Grams.....	31.1035
Grams.....	Grains.....	15.4324
Kilograms	Pounds.....	2.2046
Kilowatts.....	Horse Power	1.34
Horse Power.....	Kilowatts	0.746
B.T.U.....	Calories	252.00
Calories.....	B.T.U. ....	.008968
Pounds.....	Grams.....	453.6
Ounces.....	Grams.....	28.35
Inches	Centimeters.....	2.54
Inches	Decimeters.....	0.254
Feet.....	Centimeters.....	30.48
Feet.....	Decimeters.....	3.048

Miscellaneous Conversion Factors Metric and English

To Change From	To	Multiply By
Square Inches	Square Centimeters.....	6.452
Square Inches	Square Decimeters.....	0.0645
Square Feet	Square Centimeters.....	929.0
Square Feet	Square Decimeters.....	9.29
Cubic Inches	Cubic Centimeters.....	16.387
Ounces per Sq. Ft.....	Millig. Per Sq. Decimeter	3050.
Grams per Sq. In. per Hr.....	Millig per Sq. Decimeter per Day	360000.0
Pounds per Sq. Ft. per Yr.....	Millig. Per Sq. Decimeter per Day	133.8
Grams	Pounds	0.002205
Grams	Ounces	0.03527
Centimeters.....	Inches	0.3937
Decimeters.....	Inches	3.937
Centimeters.....	Feet.....	0.03281
Decimeters.....	Feet.....	0.3281
Square Centimeters.....	Square Inches.....	0.1550
Square Decimeters.....	Square Inches.....	15.50
Square Centimeters.....	Square Feet	0.001076
Square Decimeters.....	Square Feet	0.1076
Cubic Centimeters.....	Cubic Inches	0.06102



IMS METALS

International Marine Supply

3291 SW 11TH AVE * Ft. Lauderdale, FL 33315

Phone 954-760-4550 / 888-560-5086 FAX-954-760-4549

CREDIT REFERENCES

BUSINESS NAME: _____

MAILING ADDRESS: _____

DELIVERY ADDRESS: _____

PHONE: _____ FAX: _____

NATURE OF BUSINESS: _____ YEARS ESTABLISHED: _____

RESALE PERMIT NUMBER (IF APPLICABLE): _____

LIST OFFICERS: _____

AUTHORIZED BUYERS: _____

DO YOU REQUIRE PURCHASE ORDERS: _____

BANK NAME: _____ BANK OFFICER: _____

BANK ADDRESS: _____ PHONE: _____

TYPE OF ACCOUNT: _____ ACCOUNT NUMBER: _____

TRADE REFERENCES

1. COMPANY: _____ PHONE: _____

ADDRESS: _____ FAX: _____

2. COMPANY: _____ PHONE: _____

ADDRESS: _____ FAX: _____

3. COMPANY: _____ PHONE: _____

ADDRESS: _____ FAX: _____

OUR TERMS ARE NET 30 DAYS. INVOICES ARE PAYABLE IN U.S. FUNDS TO IMS METALS, INC. I/WE UNDERSTAND AND AGREE THAT ALL MATERIAL RETURNED FOR CREDIT MUST BE WITH PRIOR APPROVAL, AND SHALL BE SUBJECT TO A NORMAL RESTOCKING CHARGE. CUT MATERIAL WHEN FURNISHED CORRECTLY, CANNOT BE RETURNED. BY SIGNING THIS APPLICATION, I/WE DO SO WITH THE UNDERSTANDING THAT I/WE AGREE TO PAY ALL PURCHASES, AND/OR SERVICE ACCORDING TO THE ABOVE TERMS, UNLESS OTHERWISE ARRANGED IN WRITING IN ADVANCE OF SALE. I/WE AGREE TO PAY INTEREST ON ALL DELINQUENT AMOUNTS AT THE APPLICABLE FLORIDA RATES FROM RESPECTIVE DATES OF DELINQUENCY, ALSO, IF IT BECOMES NECESSARY TO EFFECT COLLECTION, I/WE AGREE TO PAY REASONABLE COLLECTION FEES, COURT COSTS AND ATTORNEY FEES.

I/WE HAVE READ THE ABOVE TERMS AND CONDITIONS, AND HEREIN, MAKE APPLICATION TO IMS METALS, INC. FOR CREDIT.

BUSINESS NAME: _____ SIGNATURE: _____

DATE: _____ PRINT NAME AND TITLE: _____

TERMS AND CONDITIONS OF SALE

This transaction shall be governed by the laws of the State of Florida, including but not limited to the applicable provisions of the Uniform Commercial Code as adopted by the State of Florida. The invalidity of any term or provision hereof shall not invalidate the remaining terms and provisions hereof.

This Order of Sale constitutes the entire contract and contains all of the agreements of the parties, written or oral. All prior written or oral representations, promises, conditions or statements merged herein. No modification hereof or waiver of any conditions herein contained shall be binding unless in writing, signed by the parties.

Prevention of performance by Seller or delay in delivery caused by acts of God, work stoppage, slow-downs, interruption, fire, flood, the elements, casualty, default by and common carrier, or which are due to Government regulations or restrictions affecting the Seller, or inability or refusal of the Buyer to accept or receive shipment when due, or other cause beyond the Seller's control, shall entitle the Seller to extend the time for the performance and delivery for a period, or periods, of which time, in the Seller's discretion appears to be reasonable or, the Seller may at its option, cancel the sale, without further liability on the part of the Seller.

If, within the fair judgment of the Buyer, the goods shall, after its reasonable and prompt inspection, be damaged not substantially to comply with the agreed specifications the Buyer shall promptly notify the Seller, in writing of the details of any such failure, and the Seller shall be give the opportunity to confirm, by its inspection, the complaint of the Buyer. If, in Seller's opinion, after such inspection, the complaint of Buyer is valid, or if it elects not to inspect, it shall thereupon have the right either to replace such goods within a reasonable amount of time with other goods meeting the agreed specifications or to cancel the sale, and it shall, in either event, thereupon have the right to require return of the original shipment at its cost. If Buyer has not so notified Seller, via certified mail, of a failure to comply with specifications within five (5) days of delivery, the goods shall be conclusively deemed to be in compliance with specifications.

When more than one class or grade of goods is contained in a single delivery, and one or more of said classes or grades shall not substantially comply with the agreed specifications, the parties shall have the same rights with respect to such class or grade, or classes or grades, as the preceding paragraph, but any class or grade, or classes or grades, contained in such single delivery that conforms or conform to the agreed specifications shall not be affected, but the parties shall be fully bound with respect thereto. If this Agreement provides for delivery of the goods in installments, failure of the Buyer to make any payment promptly when due shall entitle the Seller to treat the entire balance as immediately due and owing and to withhold further deliveries until such default shall be cured, or to cancel the unexpected part of the contract. Waiver of any default of the Buyer shall not constitute a waiver of any subsequent default whether or not the Agreement provides for delivery of the goods in installments.

The rights and remedies granted Seller hereunder shall be additions to all right and remedies granted Seller under the Uniform Commercial Code, as adopted by the State of Florida, and under all other applicable laws of the State of Florida.

Buyers exclusive remedy hereunder is to require Seller to replace materials not in compliance with specification, unless Seller shall elect to cancel the sale as above provided, and under no circumstances shall the Seller be liable for incidental or consequential damages.

Except as otherwise provided in Seller's price data publications, the total Order and each delivery shall be subject to a shipping quantity tolerance of = or - ten (10) percent.

Customer is responsible for all state and local sales, use, excise or privilege taxes.

Extrusion dies, tools, printing plates or cylinders and other equipment acquired by Seller to fill this Order shall remain Seller's property and in its sole possession and control. Any die service or other equipment charges assessed by the Seller are for the use of such equipment and convey no proprietary rights to Buyer. When Seller has not made shipments to Buyer for products made with such equipment for a period of one year and after thirty (30) days prior written notice to Buyer, Seller may dispose of such equipment. Until then, Seller shall keep such equipment available to fill the Buyer's orders.

Seller's standard terms are net (30) days. In addition to its rights or rights with respect to defaults hereunder, Seller shall have the right to interest on all balances not paid within said period at rate of interest, computed by applying a periodic monthly rate of 1-1/2% to the past due balance. This is an annual percentage rate of 18%. Seller has right to all costs of collection, reasonable attorney's fees, whether suit brought or not including attorneys' fees on appeal.