

# Crucible Tool Steel and Specialty Alloy Selector

## Weights per linear inch of Round Tool Steel Bars

Conversion factors approximate:  
 Tungsten High Speed Steel 1.11,  
 Molybdenum High Speed Steels 1.03,  
 Aluminum 0.346, Brass 1.07, Cast Iron 1.03,  
 Copper and Bronze 1.128

Diameter	Pounds	Diameter	Pounds
0	—	1/4	1.13
1/16	—	5/16	1.19
1/8	—	3/8	1.26
3/16	—	7/16	1.33
1/4	.01	2 1/2	1.39
5/16	.02	9/16	1.46
3/8	.03	5/8	1.54
7/16	.04	11/16	1.61
1/2	.06	3/4	1.69
9/16	.07	13/16	1.76
5/8	.09	7/8	1.84
11/16	.11	15/16	1.92
3/4	.13	3	2.01
13/16	.15	1/16	2.09
7/8	.17	1/8	2.18
15/16	.20	3/16	2.27
1	.22	1/4	2.36
1/16	.25	5/16	2.45
1/8	.28	3/8	2.54
3/16	.31	7/16	2.64
1/4	.35	3 1/2	2.73
5/16	.38	9/16	2.83
3/8	.42	5/8	2.93
7/16	.46	11/16	3.03
1 1/2	.50	3/4	3.14
9/16	.54	13/16	3.24
5/8	.59	7/8	3.35
11/16	.64	15/16	3.46
3/4	.68	4	3.57
13/16	.73	1/16	3.68
7/8	.78	1/8	3.80
15/16	.84	3/16	3.91
2	.89	1/4	4.03
1/16	.95	5/16	4.14
1/8	1.01	3/8	4.27
3/16	1.07	7/16	4.39

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## Weights *per linear inch* of Round Tool Steel Bars, (*continued*)

Diameter	Pounds	Diameter	Pounds
4 1/2	4.52	5/16	11.93
9/16	4.64	3/8	12.13
5/8	4.77	7/16	12.34
11/16	4.90	7 1/2	12.55
3/4	5.03	9/16	12.76
13/16	5.17	5/8	12.97
7/8	5.30	11/16	13.18
15/16	5.44	3/4	13.40
5	5.58	13/16	13.61
1/16	5.72	7/8	13.84
1/8	5.86	15/16	14.05
3/16	6.00	8	14.28
1/4	6.15	1/16	14.50
5/16	6.30	1/8	14.73
3/8	6.45	3/16	14.95
7/16	6.60	1/4	15.18
5 1/2	6.75	5/16	15.41
9/16	6.90	3/8	15.65
5/8	7.06	7/16	15.88
11/16	7.22	8 1/2	16.12
3/4	7.38	9/16	16.36
13/16	7.54	5/8	16.60
7/8	7.70	11/16	16.83
15/16	7.86	3/4	17.08
6	8.03	13/16	17.32
1/16	8.20	7/8	17.57
1/8	8.37	15/16	17.82
3/16	8.54	9	18.07
1/4	8.71	1/16	18.32
5/16	8.89	1/8	18.58
3/8	9.07	3/16	18.83
7/16	9.25	1/4	19.09
6 1/2	9.43	5/16	19.34
9/16	9.61	3/8	19.61
5/8	9.79	7/16	19.87
11/16	9.98	9 1/2	20.13
3/4	10.16	9/16	20.40
13/16	10.35	5/8	20.67
7/8	10.54	11/16	20.93
15/16	10.74	3/4	21.21
7	10.93	13/16	21.48
1/16	11.13	7/8	21.76
1/8	11.33	15/16	22.03
3/16	11.52		
1/4	11.73		

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<b>Diameter</b>	<b>Pounds</b>	<b>Diameter</b>	<b>Pounds</b>
10	22.31	13	37.70
1/16	22.59	1/16	38.06
1/8	22.87	1/8	38.42
3/16	23.15	3/16	38.79
1/4	23.44	1/4	39.16
5/16	23.72	5/16	39.53
3/8	24.01	3/8	39.90
7/16	24.30	7/16	40.28
10 1/2	24.60	13 1/2	40.65
9/16	24.89	9/16	41.03
5/8	25.19	5/8	41.41
11/16	25.48	11/16	41.79
3/4	25.78	3/4	42.17
13/16	26.08	13/16	42.56
7/8	26.39	7/8	42.94
15/16	26.68	15/16	43.33
11	27.00	14	43.72
1/16	27.30	1/16	44.11
1/8	27.61	1/8	44.50
3/16	27.92	3/16	44.90
1/4	28.24	1/4	45.29
5/16	28.54	5/16	45.69
3/8	28.87	3/8	46.09
7/16	29.19	7/16	46.49
11 1/2	29.50	14 1/2	46.90
9/16	29.83	9/16	47.30
5/8	30.15	5/8	47.71
11/16	30.47	11/16	48.12
3/4	30.80	3/4	48.53
13/16	31.12	13/16	48.94
7/8	31.46	7/8	49.35
15/16	31.79	15/16	49.77
12	32.13	15	50.19
1/16	32.46	1/16	50.61
1/8	32.80	1/8	51.03
3/16	33.13	3/16	51.45
1/4	33.48	1/4	51.87
5/16	33.81	5/16	52.30
3/8	34.17	3/8	52.73
7/16	34.51	7/16	53.16
12 1/2	34.86	15 1/2	53.59
9/16	35.21	9/16	54.02
5/8	35.56	5/8	54.46
11/16	35.91	11/16	54.89
3/4	36.27	3/4	55.33
13/16	36.62	13/16	55.77
7/8	36.98	7/8	56.21
15/16	37.33	15/16	56.66

# Crucible Tool Steel and Specialty Alloy Selector

## Weights per linear foot of Tool Steel Bars

Conversion factors (approximate):  
 Tungsten High Speed Steel 1.11,  
 Molybdenum High Speed Steels 1.03,  
 Aluminum 0.346, Brass 1.07, Cast Iron 1.03,  
 Copper and Bronze 1.128

Size (Inches)	Round	Square	Octagon	Hexagon
1/16	.010	.013	.011	.012
5/64	.017	.022	.018	.019
3/32	.023	.029	.024	.025
7/64	.031	.039	.033	.034
1/8	.042	.053	.044	.046
9/64	.053	.067	.056	.058
5/32	.065	.083	.069	.072
11/64	.079	.100	.083	.087
3/16	.094	.120	.099	.104
13/64	.110	.140	.116	.121
7/32	.128	.163	.135	.141
15/64	.147	.187	.155	.162
1/4	.167	.213	.176	.184
17/64	.188	.240	.199	.207
9/32	.211	.269	.223	.233
19/64	.235	.300	.248	.259
5/16	.261	.332	.275	.288
21/64	.288	.360	.304	.318
11/32	.316	.402	.334	.348
23/64	.345	.439	.364	.381
3/8	.376	.478	.397	.414
25/64	.408	.519	.431	.450
13/32	.441	.561	.466	.486
27/64	.475	.605	.502	.524
7/16	.511	.651	.540	.564
29/64	.548	.698	.579	.604
15/32	.587	.747	.620	.647
31/64	.627	.798	.662	.692
1/2	.668	.850	.705	.736
33/64	.710	.904	.750	.783
17/32	.754	.960	.796	.831
35/64	.799	1.017	.844	.881
9/16	.845	1.076	.892	.932
37/64	.893	1.136	.943	.985
19/32	.941	1.199	.994	1.038

## *Crucible Tool Steel and Specialty Alloy Selector*

<b>Size (Inches)</b>	<b>Round</b>	<b>Square</b>	<b>Octagon</b>	<b>Hexagon</b>
39/64	.992	1.263	1.048	1.094
5/8	1.043	1.328	1.102	1.150
41/64	1.096	1.395	1.517	1.209
21/32	1.150	1.464	1.214	1.268
43/64	1.205	1.535	1.272	1.329
11/16	1.262	1.607	1.333	1.392
45/64	1.320	1.681	1.394	1.456
23/32	1.380	1.756	1.487	1.521
47/64	1.440	1.834	1.521	1.588
3/4	1.502	1.913	1.586	1.656
25/32	1.630	2.075	1.721	1.797
13/16	1.763	2.245	1.862	1.944
27/32	1.901	2.421	2.008	2.096
7/8	2.045	2.603	2.159	2.254
29/32	2.193	2.792	2.316	2.418
15/16	2.347	2.988	2.479	2.588
31/32	2.506	3.191	2.646	2.763
1	2.670	3.400	2.820	2.945
1 1/16	3.015	3.838	3.183	3.324
1 1/8	3.380	4.303	3.569	3.727
1 3/16	3.766	4.795	3.977	4.152
1 1/4	4.172	5.313	4.407	4.601
1 5/16	4.600	5.857	4.858	5.072
1 3/8	5.049	6.428	5.332	5.567
1 7/16	5.518	7.026	5.827	6.085
1 1/2	6.008	7.650	6.345	6.625
1 9/16	6.519	8.301	6.885	7.189
1 5/8	7.051	8.978	7.446	7.775
1 11/16	7.604	9.682	8.030	8.385
1 3/4	8.178	10.41	8.634	9.018
1 13/16	8.773	11.17	9.265	9.673
1 7/8	9.388	11.95	9.911	10.35
1 15/16	10.02	12.76	10.58	11.05
2	10.68	13.60	11.28	11.78
2 1/16	11.36	14.46	11.99	12.53
2 1/8	12.06	15.35	12.73	13.30
2 3/16	12.78	16.27	13.49	14.09
2 1/4	13.52	17.21	14.27	14.91
2 5/16	14.28	18.18	15.08	15.75
2 3/8	15.06	19.18	15.91	16.61
2 7/16	15.87	20.20	16.75	17.49
2 1/2	16.69	21.25	17.62	18.40
2 9/16	17.53	22.33	18.52	19.34
2 5/8	18.40	23.43	19.43	20.29
2 11/16	19.29	24.56	20.37	21.27
2 3/4	20.19	25.71	21.33	22.27

# Crucible Tool Steel and Specialty Alloy Selector

## Weights *per linear foot* of Tool Steel Bars, (*continued*)

Size (Inches)	Round	Square	Octagon	Hexagon
2 13/16	21.12	26.90	22.31	23.29
2 7/8	22.07	28.10	23.31	24.34
2 15/16	23.04	29.34	24.33	25.41
3	24.03	30.60	25.38	26.50
3 1/16	25.05	31.89	26.45	27.62
3 1/8	26.08	33.20	27.54	28.76
3 3/16	27.13	34.55	28.65	29.92
3 1/4	28.21	35.91	29.79	.....
3 5/16	29.30	37.21	30.94	.....
3 3/8	30.42	38.73	32.12	.....
3 7/16	31.55	40.18	33.32	.....
3 1/2	32.71	41.65	34.54	.....
3 9/16	33.90	43.15	35.78	.....
3 5/8	35.09	44.68	37.07	.....
3 11/16	36.31	46.23	38.34	.....
3 3/4	37.55	47.81	39.65	.....
3 13/16	38.81	49.42	40.99	.....
3 7/8	40.10	51.05	42.34	.....
3 15/16	41.40	52.71	43.72	.....
4	42.73	54.40	45.12	.....
4 1/16	44.07	56.11	46.54	.....
4 1/8	45.44	57.85	47.98	.....
4 3/16	46.83	59.62	49.45	.....
4 1/4	48.23	61.41	50.93	.....
4 5/16	49.66	63.23	52.44	.....
4 3/8	51.11	65.08	53.98	.....
4 7/16	52.58	66.95	55.53	.....
4 1/2	54.08	68.85	57.10	.....
4 9/16	55.59	70.78	58.70	.....
4 5/8	57.12	72.73	60.32	.....
4 11/16	58.68	74.71	61.96	.....
4 3/4	60.25	76.71	63.63	.....
4 13/16	61.85	78.75	65.32	.....
4 7/8	63.46	80.80	67.02	.....
4 15/16	65.10	82.89	68.75	.....
5	66.76	85.00	70.50	.....
5 1/16	68.44	87.14	72.27	.....
5 1/8	70.14	89.30	74.07	.....
5 3/16	71.86	91.50	75.89	.....
5 1/4	73.60	93.71	77.72	.....
5 5/16	75.36	95.96	79.59	.....
5 3/8	77.15	98.23	81.47	.....
5 7/16	78.95	100.5	83.38	.....

## *Crucible Tool Steel and Specialty Alloy Selector*

(Inches)	Size			
	Round	Square	Octagon	Hexagon
5 1/2	80.78	102.9	85.30	.....
5 9/16	82.62	105.2	87.25	.....
5 5/8	84.49	107.6	89.23	.....
5 11/16	86.38	110.0	91.22	.....
5 3/4	88.29	112.4	93.23	.....
5 13/16	90.22	114.9	95.27	.....
5 7/8	92.17	117.4	97.33	.....
5 15/16	94.14	119.9	99.41	.....
6	96.13	112.4	101.5	.....
6 1/16	98.15	125.0	103.6	.....
6 1/8	100.2	127.6	105.8	.....
6 3/16	102.2	130.2	108.0	.....
6 1/4	104.3	132.8	110.2	.....
6 5/16	106.4	135.5	112.4	.....
6 3/8	108.5	138.2	114.6	.....
6 7/16	110.7	140.9	116.9	.....
6 1/2	112.8	143.7	119.1	.....
6 9/16	115.0	146.4	121.4	.....
6 5/8	117.2	149.2	123.8	.....
6 11/16	119.4	152.1	126.1	.....
6 3/4	121.7	154.9	128.5	.....
6 13/16	123.9	157.8	130.9	.....
6 7/8	126.2	160.7	133.3	.....
6 15/16	128.5	163.6	135.7	.....
7	130.9	166.6	138.2	.....
7 1/16	133.2	169.6	140.7	.....
7 1/8	135.6	172.6	143.2	.....
7 3/16	138.0	175.6	145.7	.....
7 1/4	140.4	178.7	148.2	.....
7 5/16	142.8	181.8	150.8	.....
7 3/8	145.2	184.9	153.4	.....
7 7/16	147.7	188.1	156.0	.....
7 1/2	150.2	191.3	158.6	.....
7 5/8	155.3	197.7	164.0	.....
7 3/4	160.4	204.2	169.4	.....
7 7/8	165.6	210.9	174.9	.....
8	170.9	217.6	180.5	.....
8 1/4	181.8	230.9	192.0	.....
8 1/2	192.9	245.7	203.8	.....
8 3/4	204.4	259.6	215.8	.....
9	216.3	275.4	228.4	.....
10	267.0	340.0	282.0	.....
11	323.1	411.4	341.2	.....
12	384.4	489.6	406.1	.....