

Rounds

Cold Rolled Rounds 1045 Turned Ground and Polished

Size	Length	WT / FT	WT / Length
3/4"	22' rl	1.502	33.04
1"	21' rl	2.670	56.07
1-1/4"	20' rl	4.173	83.46
1-1/2"	20' rl	6.008	120.16
1-3/4"	22' rl	8.178	179.92
2"	24' rl	10.680	256.32
2-1/2"	21' rl	16.690	350.49

Cold Rolled Rounds 1144

Size	Length	WT / FT	WT / Length
1"	12'	2.670	32.04
1-1/2"	12'	6.008	72.10

Cold Rolled Rounds 1215

Size	Length	WT / FT	WT / Length
1"	12'	2.670	32.04

Cold Rolled 1144 Rounds Stress Relieved

Size	Length	WT / FT	WT / Length
5/16"	12' rl	0.261	3.13
3/8"	12' rl	0.376	4.51
1/2"	12' rl	0.668	8.02
5/8"	12' rl	1.043	12.52
3/4"	12' rl	1.502	18.02
7/8"	12' rl	2.045	24.54
1"	12' rl	2.670	32.04
1-1/8"	12' rl	3.380	40.56
1-1/4"	12' rl	4.173	50.08
1-3/8"	12' rl	5.049	60.59
1-7/16"	12' rl	5.518	66.22
1-1/2"	12' rl	6.008	72.10

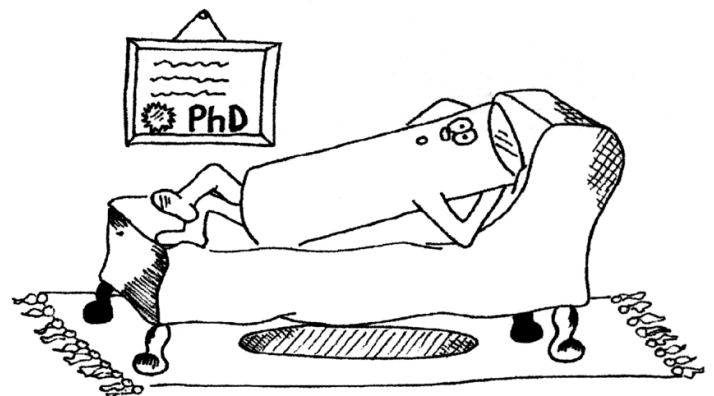
Cold Rolled 1144 Rounds Stress Relieved

Size	Length	WT / FT	WT / Length
1-5/8"	12' rl	7.052	84.62
1-11/16"	12' rl	7.604	91.25
1-3/4"	12' rl	8.178	98.14
1-7/8"	12' rl	9.388	112.66
1-15/16"	12' rl	10.020	120.24
2"	12' rl	10.680	128.16
2-3/16"	12' rl	12.780	153.36
2-1/4"	12' rl	13.520	162.24
2-7/16"	12' rl	15.870	190.44
2-1/2"	12' rl	16.690	200.28
2-15/16"	12' rl	23.040	276.48
3"	12' rl	24.030	288.36
3"	20' rl	24.030	480.60
3-1/4"	12' rl	28.210	338.52
3-1/2"	12' rl	32.710	392.52

Cold Rolled 1144 Rounds Stress Relieved Turned Ground & Polished

Size	Length	WT / FT	WT / Length
1"	12' rl	2.670	32.04
1-1/4"	12' rl	4.173	50.08

1045 – This higher carbon range steel is produced with a smoother finish and has more strength than the 1018. The 1045 does not machine freely, can be forced satisfactorily, is fair for brazing, and welding requires a specific technique. Commonly used for shafts, connecting rods, bolts, wheel flanges, and gears. Response to heat treatment is excellent. Estimated Minimum Mechanical Properties (EMMP): Yield – 77,000 psi. Tensile – 91,000 psi.



Cold Drawn 1144 Bars – Higher carbon and sulphur levels resulting in superior machinability but restricts weldability. Estimated Minimum Mechanical Properties (EMMP): Yield – 90,000 psi. Tensile – 108,000 psi.

Cold Rolled Squares & Hexagons



Cold Rolled Squares 1018

Size	Length	WT / FT	WT / Bar
3/16"	12'	0.120	1.44
1/4"	12'	0.213	2.56
5/16"	12'	0.332	3.98
3/8"	12'	0.478	5.74
7/16"	12'	0.651	7.81
1/2"	12'	0.850	10.20
5/8"	12'	1.328	15.94
3/4"	12'	1.913	22.96
7/8"	12'	2.603	31.24
1"	12'	3.400	40.80
1-1/8"	12'	4.303	51.64
1-1/4"	12'	5.313	63.76
1-1/2"	12'	7.650	91.80
2"	12'	13.600	163.20
3"	12'	30.600	367.20



Cold Rolled Squares 1045

Size	Length	WT / FT	WT / Bar
1-1/4"	12'	5.313	63.76

1215 – Low carbon, resulphurized, and rephosphorized screw machine steel. This is very fast machining material with a smooth and bright finish used for studs, nuts, fasteners, etc. Can be case hardened. Average Mechanical Properties:

Yield – 60,000-75,000 psi.

Tensile – 70,000-85,000 psi.



Cold Rolled Hexagons 1018

Size	Length	WT / FT	WT / Bar
3/8"	12' rl	0.414	4.97
7/16"	12' rl	0.564	6.77
1/2"	12' rl	0.736	8.83
9/16"	12' rl	0.932	11.18
5/8"	12' rl	1.150	13.80
11/16"	12' rl	1.392	16.70
3/4"	12' rl	1.656	19.87
7/8"	12' rl	2.254	27.05
1"	12' rl	2.944	35.33
1-1/8"	12' rl	3.727	44.72
1-1/4"	12' rl	4.601	55.21
1-3/8"	12' rl	5.567	66.80
1-1/2"	12' rl	6.625	79.50



Cold Rolled Hexagons 12L14

Size	Length	WT / FT	WT / Bar
1/2"	12' rl	0.736	8.83
5/8"	12' rl	1.150	13.80
3/4"	12' rl	1.656	19.87
7/8"	12' rl	2.254	27.05
1"	12' rl	2.945	35.34
1-1/8"	12' rl	3.727	44.72
1-1/4"	12' rl	4.601	55.21
1-1/2"	12' rl	6.625	79.50



Cold Rolled 1144 Hexagons

Stress Relieved

Size	Length	WT / FT	WT / Length
9/16"	12' rl	0.932	11.18
3/4"	12' rl	1.656	19.87
1"	12' rl	2.944	35.33
1-1/8"	12' rl	3.727	44.72