



Properties of Steel

800-871-5022

More information can be found at www.Drill-HQ.com.

(Tabulated in accordance with the Unified Numbering System for Metals and Alloys (UNS), Society of Automotive Engineers, Warrendale, PA., 1975. This reference contains the cross reference numbers for AISI, ASTM, FED, MIL SPEC, and SAE specifications. The values shown for hot-rolled (HR) and cold drawn (CD) steels are estimated minimum values which can usually be expected in the size range of 3/4 to 1-1/4 in. A minimum value is roughly several standard deviations below the arithmetic mean. The values shown for heat-treated steels are so-called typical values. A typical value is neither the mean nor the minimum. It can be obtained by careful control of the purchase specifications and the heat-treatment, together with continuous inspection and testing. The properties shown in this table are from a variety of sources and are believed to be representative. There are so many variables which affect these properties, however, that their approximate nature must be clearly recognized. Multiply strength in kpsi by 6.89 to get strength in MPa.)

Properties of Steel								
UNS Number	Processing Method	Yield Strength kpsi	Tensile Strength kpsi	Yield Strength MPa	Tensile Strength MPa	Elongation in 2 in. %	Reduction in Area %	Brinell Hardness H_b
G10100	Hot Rolled	26	47	179	324	28	50	95
G10100	Cold Drawn	44	53	303	365	20	40	105
G10150	Hot Rolled	27	50	186	345	28	50	101
G10150	Cold Drawn	47	56	324	386	18	40	111
G10180	Hot Rolled	32	58	220	400	25	50	116
G10180	Cold Drawn	54	64	372	441	15	40	126
G10350	Hot Rolled	39	72	269	496	18	40	143
G10350	Cold Drawn	67	80	462	551	12	35	163
G10350	Drawn 800 F	81	110	558	768	18	51	220
G10350	Drawn 1000 F	72	103	496	710	23	59	201
G10350	Drawn 1200 F	62	91	427	627	27	66	180
G10400	Hot Rolled	42	76	289	524	18	40	149
G10400	Cold Drawn	71	85	489	586	12	35	170
G10400	Drawn 1000 F	86	113	593	779	23	62	235
G10500	Hot Rolled	49	90	338	620	15	35	179
G10500	Cold Drawn	84	100	579	689	10	30	197
G10500	Drawn 600 F	180	220	1240	1516	10	30	450



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G10500	Drawn 900 F	130	155	896	1068	18	55	310
G10500	Drawn 1200 F	80	105	551	723	28	65	210
G15216	Hot Rolled, Annealed	81	100	558	689	25	57	192
G41300	Hot Rolled, Annealed	60	90	413	620	30	45	183
G41300	Cold Drawn, Annealed	87	98	599	675	21	52	201
G41300	Drawn 1000 F	133	146	916	1006	17	60	293
G41400	Hot Rolled, Annealed	63	90	434	620	27	58	187
G41400	Cold Drawn, Annealed	90	102	620	703	18	50	223
G41400	Drawn 1000 F	131	153	903	1054	16	45	302
G43400	Hot Rolled, Annealed	69	101	475	696	21	45	207
G43400	Cold Drawn, Annealed	99	111	682	765	16	42	223
G43400	Drawn 600 F	234	260	1612	1791	12	43	498
G43400	Drawn 1000 F	162	182	1116	1254	15	40	363
G46200	Case Hardened	89	120	613	827	22	55	248
G46200	Drawn 800 F	94	130	648	896	23	66	256
G61500	Hot Rolled, Annealed	58	91	400	627	22	53	183
G61500	Drawn 1000 F	132	155	909	1058	15	44	302
G87400	Hot Rolled, Annealed	64	95	441	665	25	55	190
G87400	Cold Drawn, Annealed	96	107	661	737	17	48	223
G87400	Drawn 1000 F	129	152	889	1047	15	44	302
G92550	Hot Rolled, Annealed	78	115	537	792	22	45	223
G92660	Drawn 1000 F	160	180	1102	1240	15	32	352