

HARDNESS-UTS CONVERSIONS FOR STEEL

Hardness Conversion Tables Based on Brinell
(Approximate)

Brinell Hardness	Rockwell Hardness		Approximate Tensile Strength (1000 psi)
	B-Scale 100 kg 1/16" ball	C-Scale 150 kg brale	
...	...	70.0	...
...	...	69.0	...
...	...	68.0	...
...	...	67.0	...
...	...	65.9	...
...	...	65.3	...
...	...	64.0	...
...	...	63.3	...
...	...	61.7	...
614	...	60.0	...
600	...	58.7	323
573	...	57.3	309
560	...	56.0	297
547	...	54.7	285
528	...	53.5	274
509	...	52.1	263
496	...	51.0	253
484	...	49.6	243
466	...	48.5	235
448	...	47.1	225
429	...	45.7	217
415	...	44.5	210
401	...	43.1	202
388	...	41.8	195
375	...	40.4	188
363	...	39.1	182
352	(110.0)	37.9	176
341	(109.0)	36.6	170
331	(108.5)	35.5	166
321	(108.0)	34.3	160
311	(107.5)	33.1	155
302	(107.0)	32.1	150
293	(106.0)	30.9	145

Brinell Hardness	Rockwell Hardness		Approximate Tensile Strength (1000 psi)
	B-Scale 100 kg 1/16" ball	C-Scale 150 kg brale	
285	(105.5)	29.9	141
277	(104.5)	28.8	137
269	(104.0)	27.6	133
262	(103.0)	26.6	129
255	(102.0)	25.4	126
248	(101.0)	24.3	122
241	100.0	22.8	118
235	99.0	21.7	115
229	98.2	20.5	111
223	97.3	(18.8)	...
217	96.4	(17.5)	105
212	95.5	(16.0)	102
207	94.6	(15.2)	100
201	93.8	(13.8)	98
197	92.8	(12.7)	95
192	91.9	(11.5)	93
187	90.7	(10.0)	90
183	90.0	(9.0)	89
179	89.0	(8.0)	87
174	87.8	(6.4)	85
170	86.8	(5.4)	83
167	86.0	(4.4)	81
163	85.0	(3.3)	79
156	82.9	(0.9)	76
149	80.8	...	73
143	78.7	...	71
137	76.4	...	67
131	74.0	...	65
126	72.0	...	63
121	69.8	...	61
116	67.6	...	58
111	65.7	...	56