

Hardness Conversion Table

Brinell Hardness	Rockwell Hardness Number						Rockwell Superficial Hardness Number						Tensile Strength
	A Scale	B Scale	C Scale	D Scale	E Scale	F Scale	15-N Scale	30-N Scale	45-N Scale	15-T Scale	30-T Scale	45-T Scale	
10-mm Std. Ball 3000-kgf load	Diamond Penetrator 60-kgf load	1.588-mm 1/16" Ball 100-kgf load	Diamond Penetrator 150-kgf load	Diamond Penetrator 100-kgf load	3.175-mm 1/8" Ball 100-kgf load	1.588-mm 1/16" Ball 60-kgf load	Superficial Diamond Penetrator 30-kgf load	Superficial Diamond Penetrator 30-kgf load	Superficial Diamond Penetrator 45-kgf load	1.588-mm 1/16" Ball 15-kgf load	1.588-mm 1/16" Ball 30-kgf load	1.588-mm 1/16" Ball 45-kgf load	KSI
750	85.0	—	66.0	76.0	—	—	93.0	83.0	73.0	—	—	—	—
710	84.0	—	64.0	74.0	—	—	92.0	81.0	71.0	—	—	—	—
682	83.0	—	62.0	73.0	—	—	91.0	79.0	69.0	—	—	—	—
653	81.0	—	60.0	71.0	—	—	90.0	78.0	67.0	—	—	—	314
578	80.0	—	58.0	69.0	—	—	89.0	76.0	64.0	—	—	—	299
555	79.0	—	56.0	68.0	—	—	88.0	74.0	62.0	—	—	—	284
534	78.0	—	54.0	66.0	—	—	87.0	72.0	60.0	—	—	—	270
495	77.0	—	52.0	65.0	—	—	86.0	70.0	57.0	—	—	—	256
479	75.5	—	50.0	63.0	—	—	85.5	68.0	54.5	—	—	—	244
450	74.5	—	48.0	61.5	—	—	84.5	66.5	52.5	—	—	—	228
425	73.5	—	46.0	60.0	—	—	83.5	64.5	50.0	—	—	—	212
403	72.5	—	44.0	58.5	—	—	82.5	63.0	47.5	—	—	—	201
382	71.5	—	42.0	57.0	—	—	81.5	61.0	45.5	—	—	—	189
363	70.5	—	40.0	55.5	—	—	80.5	59.5	43.0	—	—	—	178
346	69.5	—	38.0	54.0	—	—	79.5	58.0	41.0	—	—	—	167
329	68.5	—	36.0	52.5	—	—	78.5	56.0	38.5	—	—	—	160
313	67.5	—	34.0	50.5	—	—	77.5	54.5	36.0	—	—	—	153
298	66.5	106	32.0	49.5	—	116.5	76.5	52.5	34.0	94.5	85.5	77.0	144
275	64.5	104	28.5	46.5	—	115.5	75.0	49.5	30.0	94.0	84.5	75.0	130
258	63.0	102	25.5	44.5	—	114.5	73.5	47.0	26.5	93.0	83.0	73.0	121
241	61.5	100	22.5	42.0	—	113.0	72.0	44.5	23.0	92.5	81.5	71.0	114
228	60.5	98	20.0	40.0	—	112.0	70.5	42.0	20.0	92.0	80.5	69.0	107
215	59.0	96	17.0	38.0	—	111.0	69.0	39.5	17.0	91.0	79.0	67.0	101
204	57.5	94	14.5	36.0	—	110.0	68.0	37.5	14.0	90.5	77.5	65.0	98
194	56.5	92	12.0	34.0	—	108.5	66.5	35.5	11.0	89.5	76.0	63.0	93
184	55.0	90	9.0	32.0	108.5	107.5	65.0	32.5	7.5	89.0	75.0	61.0	89
176	53.5	88	6.5	30.0	107.0	106.5	64.0	30.5	5.0	88.0	73.5	59.5	85
168	52.5	86	4.0	28.0	106.0	105.0	62.5	28.5	2.0	87.5	72.0	57.5	87
161	51.5	84	2.0	26.5	104.5	104.0	61.5	26.5	-.5	87.0	70.5	55.5	78
155	50.0	82	—	24.5	103.0	103.0	—	—	—	86.0	69.5	53.5	75
149	49.0	80	—	22.5	102.0	101.5	—	—	—	85.5	68.0	51.5	72
144	47.5	78	—	21.0	100.5	100.5	—	—	—	84.5	66.5	49.5	69
139	46.5	76	—	19.0	99.5	99.5	—	—	—	84.0	65.5	47.5	67
134	45.5	74	—	17.5	98.0	98.5	—	—	—	83.0	64.0	45.5	65
129	44.0	72	—	16.0	97.0	97.0	—	—	—	82.5	62.5	43.5	63
125	43.0	70	—	14.5	95.5	96.0	—	—	—	82.0	61.0	41.5	61
121	42.0	68	—	13.0	94.5	95.0	—	—	—	81.0	60.0	39.5	59
118	41.0	66	—	11.5	93.0	93.5	—	—	—	80.5	58.5	37.5	57
114	40.0	64	—	10.0	91.5	92.5	—	—	—	79.5	57.0	35.5	55
111	39.0	62	—	8.0	90.5	91.5	—	—	—	79.0	56.0	33.5	53
108	—	60	—	—	89.0	90.0	—	—	—	78.5	54.5	31.5	51
108	—	58	—	—	88.0	89.0	—	—	—	77.5	53.0	29.5	—
103	—	56	—	—	86.5	88.0	—	—	—	77.0	51.5	27.5	—
100	—	54	—	—	85.5	87.0	—	—	—	76.0	50.5	25.5	—
98	—	52	—	—	84.0	85.5	—	—	—	75.5	49.0	23.5	—
95	—	50	—	—	83.0	84.5	—	—	—	74.5	47.5	21.5	—
93	—	48	—	—	81.5	83.5	—	—	—	74.0	46.5	19.5	—
91	—	46	—	—	80.5	82.0	—	—	—	73.5	45.0	17.0	—