

## Hardness Conversion Table

RELATIONSHIP BETWEEN BRINELL, ROCKWELL, AND TENSILE STRENGTH FOR TOOL AND ALLOY STEELS									
Brinell		Rockwell		Tensile	Brinell		Rockwell		Tensile
3000 KG. LOAD 10 MM BALL		C SCALE	B SCALE	1000 POUNDS PER SQ. IN.	3000 KG. LOAD 10 MM BALL		C SCALE	B SCALE	1000 POUNDS PER SQ. IN.
IMP. DIA. M M.	HARDNESS NO.	150 KG. SCALE	100 KG. BALL		IMP. DIA. MM.	HARDNESS NO.	150 KG. SCALE	100 KG. BALL	
2.20	780	68		382	4.15	212	17	95	104
2.25	745	66		365	4.20	207	16	95	101
2.30	712	65		349	4.25	201	15	94	99
2.35	682	63		334	4.30	197	14	93	97
2.40	653	62		320	4.35	192	13	92	95
2.45	627	60		307	4.40	187	11	91	93
2.50	601	58		294	4.45	183	10	90	91
2.55	578	57		283	4.50	179	9	89	89
2.60	555	55		272	4.55	174	7	88	87
2.65	534	53		261	4.60	170	6	87	85
2.70	514	52		252	4.65	167	5	86	84
2.75	495	50		242	4.70	163	3	85	82
2.80	477	49		234	4.75	159	2	84	80
2.85	461	48		226	4.80	156	1	83	79
2.90	444	46		217	4.85	152	0	82	77
2.95	429	45		210	4.90	149		81	75.
3.00	415	44		203	4.95	146		80	74
3.05	401	42		196	5.00	143		79	72
3.10	388	41	112	190	5.05	140		78	71
3.15	375	40	111	184	5.10	137		77	70
3.20	363	39	110	178	5.15	134		75	69
3.25	352	38	109	172	5.20	131		74	67
3.30	341	37	108	167	5.25	128		73	66
3.35	331	36	108	162	5.30	126		72	65

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3000 KG. LOAD 10 MM BALL		C SCALE	B SCALE	1000 POUNDS PER SQ. IN.	3000 KG. LOAD 10 MM BALL		C SCALE	B SCALE	1000 POUNDS PER SQ. IN.
IMP. DIA. M M.	HARDNESS NO.	150 KG. SCALE	100 KG. BALL		IMP. DIA. MM.	HARDNESS NO.	150 KG. SCALE	100 KG. BALL	
3.35	331	36	108	162	5.30	126		72	65
3.40	321	35	107	157	5.35	123		71	63
3.45	311	34	106	152	5.40	121		70	62
3.50	302	33	106	148	5.45	118		68	61
3.55	293	32	105	144	5.50	116		67	60
3.60	285	30	104	140	5.55	114		66	58
3.65	277	29	104	136	5.60	111		65	57
3.70	269	28	103	132	5.65	109		63	56
3.75	262	27	102	128	5.70	107		62	55
3.80	255	26	101	125	5.75	105		60	54
3.85	248	25	100	122	5.80	103		58	53
3.90	241	23	100	118	5.85	101		58	52
3.95	235	22	99	115	5.90	99		56	51
4.00	229	21	98	112	5.95	97		55	50
4.05	223	20	97	109	6.00	95		54	49
4.10	217	18	96	106					

Data is typical and should not be construed as actual values for any category. Applications and technical information require engineers and tool designers to exercise independent judgement.