

ROCKWELL HARDNESS CONVERSION CHART

Rockwell C-Scale Hardness No. †	Diamond Pyramid Hardness No., Vickers	Brinell Hardness No. 10-mm Ball, 3000-kg Load			Rockwell Hardness No. †			Rockwell, Superficial Hardness No., Superficial Brale Penetrator			Shore Scleroscope Hardness No.
		Standard Ball	Hultgren Ball	Tungsten Carbide Ball	A-Scale 60-kg Load, Brale Penetrator	B-Scale 100-kg Load, 1/16 in. Dia. Ball	D-Scale 100-kg Load, Brale Penetrator	15-N Scale, 15-kg Load	30-N Scale, 30-kg Load	45-N Scale, 45-kg Load	
68	940	—	—	—	85.6	—	76.9	93.2	84.4	75.4	97
67	900	—	—	—	85.0	—	76.1	92.9	83.6	74.2	95
66	865	—	—	—	84.5	—	75.4	92.5	82.8	73.3	92
65	832	—	—	739	83.9	—	74.5	92.2	81.9	72.0	91
64	800	—	—	722	83.4	—	73.8	91.8	81.1	71.0	88
63	772	—	—	705	82.8	—	73.0	91.4	80.1	69.9	87
62	746	—	—	688	82.3	—	72.2	91.1	79.3	68.8	85
61	720	—	—	670	81.8	—	71.5	90.7	78.4	67.7	83
60	697	—	613	654	81.2	—	70.7	90.2	77.5	66.6	81
59	674	—	559	634	80.7	—	69.9	89.8	76.6	65.5	80
58	653	—	587	615	80.1	—	69.2	89.3	75.7	64.3	78
57	633	—	575	595	79.6	—	68.5	88.9	74.8	63.2	76
56	613	—	561	577	79.0	—	67.7	88.3	73.9	62.0	75
55	595	—	546	560	78.5	—	66.9	87.9	73.0	60.9	74
54	577	—	534	543	78.0	—	66.1	87.4	72.0	59.8	72
53	560	—	519	525	77.4	—	65.4	86.9	71.2	58.6	71
52	544	500	508	512	76.8	—	64.6	86.4	70.2	57.4	69
51	528	487	494	496	76.3	—	63.8	85.9	69.4	56.1	68
50	513	475	481	481	75.9	—	63.1	85.5	68.5	55.0	67
49	498	464	469	469	75.2	—	62.1	85.0	67.6	53.8	66
48	484	451	455	455	74.7	—	61.4	84.5	66.7	52.5	64
47	471	442	443	443	74.1	—	60.8	83.9	65.8	51.4	63
46	458	432	432	432	73.6	—	60.0	83.5	64.8	50.3	62
45	446	421	421	421	73.1	—	59.2	83.0	64.0	49.0	60
44	434	409	409	409	72.5	—	58.5	82.5	63.1	47.8	58
43	423	400	400	400	72.0	—	57.7	82.0	62.2	46.7	57
42	412	390	390	390	71.5	—	56.9	81.5	61.3	45.5	56
41	402	381	381	381	70.9	—	56.2	80.9	60.4	44.3	55
40	392	371	371	371	70.4	—	55.4	80.4	59.5	43.1	54
39	382	362	362	362	69.9	—	54.6	79.9	58.6	41.9	52
38	372	353	353	353	69.4	—	53.8	79.4	57.7	40.8	51
37	363	344	344	344	68.9	—	53.1	78.8	56.8	39.6	50
36	354	336	336	336	68.4	(109.0)	52.3	78.3	55.9	38.4	49
35	345	327	327	327	67.9	(108.5)	51.5	77.7	55.0	37.2	48
34	336	319	319	319	67.4	(108.0)	50.8	77.2	54.2	36.1	47
33	327	311	311	311	66.8	(107.5)	50.0	76.6	53.3	34.9	46
32	318	301	301	301	66.3	(107.0)	49.2	76.1	52.1	33.7	44
31	310	294	294	294	65.8	(106.0)	48.4	75.6	51.3	32.5	43
30	302	286	286	286	65.3	(105.5)	47.7	75.0	50.4	31.3	42
29	294	279	279	279	64.7	(104.5)	47.0	74.5	49.5	30.1	41
28	286	271	271	271	64.3	(104.0)	46.1	73.9	48.6	28.9	41
27	279	264	264	264	63.8	(103.0)	45.2	73.3	47.7	27.8	40
26	272	258	258	258	63.3	(102.5)	44.6	72.8	46.8	26.7	38
25	266	253	253	253	62.8	(101.5)	43.8	72.2	45.9	25.5	38
24	260	247	247	247	62.4	(101.0)	43.1	71.6	45.0	24.3	37
23	254	243	243	243	62.0	100.0	42.1	71.0	44.0	23.1	36
22	248	237	237	237	61.5	99.0	41.6	70.5	43.2	22.0	35
21	243	231	231	231	61.0	98.5	40.9	69.9	42.3	20.7	35
20	238	226	226	226	60.5	97.8	40.1	69.4	41.5	19.6	34
(18)	230	219	219	219	—	96.7	—	—	—	—	33
(16)	222	212	212	212	—	95.5	—	—	—	—	32
(14)	213	203	203	203	—	93.9	—	—	—	—	31
(12)	204	194	194	194	—	92.3	—	—	—	—	29
(10)	196	187	187	187	—	90.7	—	—	—	—	28
(8)	188	179	179	179	—	89.5	—	—	—	—	27
(6)	180	171	171	171	—	87.1	—	—	—	—	26
(4)	173	165	165	165	—	85.5	—	—	—	—	25
(2)	166	158	158	158	—	83.5	—	—	—	—	24
(0)	160	152	152	152	—	81.7	—	—	—	—	24

† Values in parentheses are beyond normal range and are given for information only.