

Hardness Conversion Chart

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Vickers Hardness No	Brinell Hardness 10mm		Rockwell Hardness				Shore Hardness No	Approximate Tensile Strength Mpa
	Standard Ball	Tungsten Carbide Ball	A Scale Diamond Penetrator 60kgf Load	B Scale 1.588mm 1/16 in Ball 100kgf Load	C Scale Diamond Penetrator 150 kgf Load	D Scale 1.588mm 1/16 in Ball 100kgf Load		
940	-	-	85.6	-	68.0	76.9	97	
920	-	-	85.3	-	67.5	76.5	96	
900	-	-	85.0	-	67.0	76.1	95	
880	-	(767)	84.7	-	66.4	75.7	93	
860	-	(757)	84.4	-	65.9	75.3	92	
840	-	(745)	84.1	-	65.3	74.8	91	
820	-	-733	83.8	-	64.7	74.3	90	
800	-	-722	83.4	-	64.0	73.8	88	
780	-	-710	83.0	-	63.3	73.3	87	
760	-	(698)	82.6	-	62.5	72.6	86	
740	-	(684)	82.2	-	61.8	71.5	84	
720	-	(670)	81.8	-	61.0	71.5	83	
700	-	-656	81.3	-	60.1	70.8	81	
690	-	-647	81.1	-	59.7	70.5	-	
680	-	-638	80.8	-	59.2	70.1	80	
670	-	630	80.6	-	58.8	69.8	-	
660	-	620	80.3	-	58.3	69.4	79	
650	-	611	80.0	-	57.8	69.0	-	
640	-	601	79.8	-	57.3	68.7	77	
630	-	591	79.5	-	56.8	68.3	-	
620	-	582	79.2	-	56.3	67.9	75	
610	-	573	78.9	-	55.7	67.5	-	
600	-	564	78.6	-	55.2	67.0	74	
590	-	554	78.4	-	54.7	66.7	-	2055
580	-	545	78.0	-	54.1	66.2	72	2020
570	-	535	77.8	-	53.6	65.8	-	1985
560	-	525	77.4	-	53.0	65.4	71	1950
550	(505)	517	77.0	-	52.3	64.8	-	1905
540	(496)	507	76.7	-	51.7	64.4	69	1860
530	(488)	497	76.4	-	51.1	63.9	-	1825
520	(480)	488	76.1	-	50.5	63.5	67	1795
510	(473)	479	75.7	-	48.8	62.9	-	1750
500	(465)	471	75.3	-	49.1	62.2	66	1705
490	(456)	460	74.9	-	48.4	61.6	-	1660
480	448	452	74.5	-	47.7	61.3	64	1620
470	441	442	74.1	-	46.9	60.7	-	1570
460	433	433	73.6	-	46.1	60.1	62	1530
450	425	425	73.3	-	45.3	59.4	-	1495
440	415	415	72.8	-	44.5	58.8	59	1460
430	405	405	72.3	-	43.6	58.2	-	1410
420	397	397	71.8	-	42.7	57.5	57	1370
410	388	388	71.4	-	41.8	56.8	-	1330
400	379	379	70.8	-	40.8	56.0	55	1290
390	369	369	70.3	-	39.8	55.2	-	1240
380	360	360	69.8	-110	38.8	54.4	52	1205
370	350	350	69.2	-	37.7	53.6	-	1170
360	341	341	68.7	-109	36.6	52.8	50	1130
350	331	331	68.1	-	35.5	51.9	-	1095
340	322	322	67.6	-108	34.4	51.1	47	1070
330	313	313	67.0	-	33.3	50.2	-	1035
320	303	303	66.4	-107	32.2	49.4	45	1005
310	294	294	65.8	-	31.0	48.4	-	980
300	284	284	65.2	-105.5	29.8	47.5	42	950
295	280	280	64.8	-	29.2	47.1	-	935
290	275	275	64.5	-104.5	28.5	46.5	41	915
285	270	270	64.2	-	27.8	46.0	-	905
280	265	265	63.8	-103.5	27.1	45.3	40	890
275	261	261	63.5	-	26.4	44.9	-	875
270	256	256	63.1	-102	25.6	44.3	38	855
265	252	252	62.7	-	24.8	43.7	-	840
260	247	247	62.4	-101	24.0	43.1	37	825
255	243	243	62.0	-	23.1	42.2	-	805
250	238	238	61.6	-99.5	22.2	41.7	36	795
245	233	233	61.2	-	21.3	41.1	-	780
240	228	228	60.7	-98.1	20.3	0.3	34	765
230	219	219	-	-96.7	(18.0)	-	33	730
220	209	209	-	-95	(15.7)	-	32	695
210	200	200	-	-93.4	(13.4)	-	30	670
200	190	190	-	-91.5	(11.0)	-	29	635
190	181	181	-	-89.5	(8.5)	-	28	605
180	171	171	-	-87.5	(6.0)	-	26	580
170	162	162	-	-85	(3.0)	-	25	545
160	152	152	-	-81.7	0.0	-	24	515
150	143	143	-	-78.7	-	-	22	490
140	133	133	-	-75	-	-	21	455
130	124	124	-	-71.2	-	-	20	425
120	114	114	-	-66.7	-	-	-	390
110	105	105	-	-62.3	-	-	-	-
100	95	95	-	-56.2	-	-	-	-
95	90	90	-	-52	-	-	-	-
90	86	86	-	-48	-	-	-	-
85	81	81	-	-41	-	-	-	-

(Source: JIS, Japanese Industrial Standards)