<<Hardness conversion table>>

株式会社特殊金属エクセル
TOKUSHU KINZOKU EXCEL CO., LTD.
http://www.tokkin.com/

Vickers	Brinell	Rockwell C	Rockwell B	Rockwell Superficial [HR]						Shore	Tensile strength approximate value
[HV]	[HB]	[HRC]	[HRB]	15N	30N	45N	15T	30T	45T	[HS]	[N/mm^2] [MPa]
940		68.0		93.2	84.4	75.4				97	
920		67.5		93.0	84.0	74.8				96	
900		67.0		92.9	83.6	74.2				95	
880		66.4		92.7	83.1	73.6				93	
860		65.9		92.5	82.7	73.1				92	
840		65.3		92.3	82.2	72.2				91	
820		64.7		92.1	81.7	71.8				90	
800		64.0		91.8	81.1	71.0				88	
780		63.3		91.5	80.4	70.2				87	
760		62.5		91.2	79.7	69.4				86	
740		61.8		91.0	79.1	68.6				84	
720		61.0		90.7	78.4	67.7				83	
700		60.1		90.3	77.6	66.7				81	
690		59.7		90.1	77.2	66.2					
680		59.2		89.8	76.8	65.7				80	
670		58.8		89.7	76.4	65.3					
660		58.3		89.5	75.9	64.7				79	
650		57.8		89.2	75.5	64.1					
640		57.3		89.0	75.1	63.5				77	
630		56.8		88.8	74.6	63.0					
620		56.3		88.5	74.2	62.4				75	
610		55.7		88.2	73.6	61.7					
600		55.2		88.0	73.2	61.2				74	
590		54.7		87.8	72.7	60.5					2,060
580		54.1		87.5	72.1	59.9				72	2,020
570		53.6		87.2	71.7	59.3					1,980
560		53.0		86.9	71.2	58.6				71	1,950
550	505	52.3		86.6	70.5	57.8					1,910
540	496	51.7		86.3	70.0	57.0				69	1,860
530	488	51.1		86.0	69.5	56.2					1,820
520	480	50.5		85.7	69.0	55.6				67	1,790
510	473	49.8		85.4	68.3	54.7					1,760
500	465	49.1		85.0	67.7	53.9				66	1,710
490	456	48.4		84.7	67.1	53.1					1,660
480	448	47.7		84.3	66.4	52.2				64	1,620
470	441	46.9		83.9	65.7	51.3					1,570
460	433	46.1		83.6	64.9	50.4				62	1,530
450	425	45.3		83.2	64.3	59.4					1,500
440	415	44.5		82.8	63.5	58.4				59	1,460
430	405	43.6		82.3	62.7	57.4					1,410
420	397	42.7		81.8	61.9	46.4				57	1,370

[Notes] ・These values are taken from the SAE and ASTM conversion tables.

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Vickers	Brinell	Rockwell C	Rockwell B	Rockwell Superficial [HR]						Shore	Tensile strength approximate value
[HV]	[HB]	[HRC]	[HRB]	15N	30N	45N	15T	30T	45T	[HS]	[N/mm^2] [MPa]
410	388	41.8		81.4	61.1	45.3					1,330
400	379	40.8		81.0	60.2	44.1				55	1,290
390	369	39.8		80.3	59.3	42.9					1,250
380	360	38.8	(110.0)	79.8	58.4	41.7				52	1,210
370	350	37.7		79.2	57.4	40.4					1,170
360	341	36.6	(109.0)	78.5	56.4	39.1				50	1,130
350	331	35.5		78.0	55.4	37.8					1,100
340	322	34.4	(108.0)	77.4	54.4	36.5				47	1,070
330	313	33.3		76.8	53.6	35.2					1,030
320	303	32.2	(107.0)	76.2	52.3	33.9				45	1,010
310	294	31.0		75.6	51.3	32.5					980
300	284	29.8	(105.5)	74.9	50.2	31.1				42	950
295	280	29.2		74.6	49.7	30.4					940
290	275	28.5	(104.5)	74.2	49.0	29.5				41	920
285	270	27.8		73.8	48.4	28.7					900
280	265	27.1	(103.5)	73.4	47.6	27.9				40	890
275	261	26.4		73.0	47.2	27.1					870
270	256	25.6	(102.0)	72.6	46.4	26.2				38	850
265	252	24.8		72.1	45.7	25.2					840
260	247	24.0	(101.0)	71.6	45.0	24.3				37	820
255	243	23.1		71.1	44.2	23.2					800
250	238	22.2	99.5	70.6	43.4	22.2				36	790
245	233	21.3		70.1	42.5	21.1					780
240	228	20.3	98.1	69.6	41.7	19.9	93.1	83.1	72.9	34	770
230	219	(18.0)	96.7				92.6	82.0	74.2	33	740
220	209	(15.7)	95.0				92.0	80.9	69.6	32	700
210	200	(13.4)	93.4				91.5	79.8	67.9	30	670
200	190	(11.0)	91.5				90.8	78.4	65.9	29	640
190	181	(8.5)	89.5				90.2	77.1	63.8	28	610
180	171	(6.0)	87.1				89.5	75.8	61.8	26	580
170	162	(3.0)	85.0				88.7	74.0	59.1	25	550
160	152	(0.0)	81.7				87.7	72.0	56.1	24	520
150	143		78.7				86.6	69.7	52.8	22	490
140	133		75.0				85.5	67.4	49.3	21	450
130	124		71.2				84.0	64.4	44.8	20	430
120	114		66.7				82.6	61.4	40.3		390
110	105		62.3				80.8	57.7	34.7		
100	95		56.2				78.5	53.0	27.7		
95	90		52.0								
90	86		48.0								
85	81		41.0								

[Notes] ・These values are taken from the SAE and ASTM conversion tables.