

硬度換算表

Steel (鋼・鐵)										Soft Metal (軟鐵・銅)						
Vickers		Rockwell				Rockwell Superficial			Brinell	Shore	Vickers		Rockwell		Rockwell Superficial	
HV	HRA	HRB	HRC	HRD	15N	30N	45N	HB	HS	HV	HRB	HRF	15T	30T	45T	
50kgf	60kgf	100kgf	150kgf	100kgf	15kgf	30kgf	45kgf	3000kgf	JIS	50kgf	100kgf	60kgf	15kgf	30kgf	45kgf	
940	85.6		68.0	76.9	93.2	84.4	75.4		98.0	198	93.5	110.0	90.0	77.5	66.0	
920	85.3		67.5	76.5	93.0	84.0	74.8		96.8	194		109.5			65.5	
900	85.0		67.0	76.1	92.9	83.6	74.2		95.6	192	93.0			77.0	65.0	
880	84.7		66.4	75.7	92.7	83.1	73.6	767	94.3	190	92.5	109.0		76.5	64.5	
860	84.4		65.9	75.3	92.5	82.7	73.1	757	93.1	188	92.0		89.5		64.0	
840	84.1		65.3	74.8	92.3	82.2	72.2	745	91.7	186	91.5	108.5		76.0	63.5	
820	83.8		64.7	74.3	92.1	81.7	71.8	733	90.4	184	91.0			75.5	63.0	
800	83.4		64.0	73.8	91.8	81.1	71.0	722	89.0	182	90.5	108.0	89.0		62.5	
780	83.0		63.3	73.3	91.5	80.4	70.2	710	87.6	180	90.0	107.5		75.0	62.0	
760	82.6		62.5	72.6	91.2	79.7	69.4	698	86.2	178	89.0			74.5	61.5	
740	82.2		61.8	72.1	91.0	79.1	68.6	684	84.8	176	88.5	107.0			61.0	
720	81.8		61.0	71.5	90.7	78.4	67.7	670	83.3	174	88.0		88.5	74.0	60.5	
700	81.3		60.1	70.8	90.3	77.6	66.7	656	81.8	172	87.5	106.5		73.5	60.0	
690	81.1		59.7	70.5	90.1	77.2	66.2	647	81.0	170	87.0				59.5	
680	80.8		59.2	70.1	89.8	76.8	65.7	638	80.2	168	86.0	106.0	88.0	73.0	59.0	
670	80.6		58.8	69.8	89.7	76.4	65.3	630	79.4	166	85.5			72.5	58.5	
660	80.3		58.3	69.4	89.5	75.9	64.7	620	78.6	164	85.0	105.5		72.0	58.0	
650	80.0		57.8	69.0	89.2	75.5	64.1	611	77.8	162	84.0	105.0	87.5		57.5	
640	79.8		57.3	68.7	89.0	75.1	63.5	601	77.0	160	83.5			71.5	56.5	
630	79.5		56.8	68.3	88.8	74.6	63.0	591	76.2	158	93.0	104.5		71.0	56.0	
620	79.2		56.3	67.9	88.5	74.2	62.4	582	75.4	156	82.0	104.0	87.0	70.5	55.5	
610	78.9		55.7	67.5	88.2	73.6	61.7	573	74.5	154	81.5	103.5		70.0	54.5	
600	78.6		55.2	67.0	88.0	73.2	61.2	564	73.7	152	80.5	103.0			54.0	
590	78.4		54.7	66.7	87.8	72.7	60.5	554	72.8	150	80.0		86.5	69.5	53.5	
580	78.0		54.1	66.2	87.5	72.1	59.9	545	72.0	148	79.0	102.5		69.0	53.0	
570	77.8		53.6	65.8	87.2	71.7	59.3	535	71.1	146	78.0	102.0		68.5	52.5	
560	77.4		53.0	65.4	86.9	71.2	58.6	525	70.2	144	77.5	101.5	86.0	68.0	51.5	
550	77.0		52.3	64.8	86.6	70.5	57.8	517	69.3	142	77.0	101.0		67.5	51.0	
540	76.7		51.7	64.4	86.3	70.0	57.0	507	68.4	140	76.0	100.5	85.5	67.0	50.0	
530	76.4		51.1	63.9	86.0	69.5	56.2	497	675.0	138	75.0	100.0		66.5	49.0	
520	76.1		50.5	64.5	85.7	69.0	55.6	488	66.6	136	74.5	99.5	85.0	66.0	48.0	
510	75.7		49.8	62.9	85.4	68.3	54.7	479	65.6	134	73.5	99.0		65.5	47.5	
500	75.3		49.1	62.2	85.0	67.7	53.9	471	64.7	132	73.0	98.5	84.5	65.0	46.5	
490	74.9		48.4	61.6	84.7	67.1	53.1	460	63.7	130	72.0	98.0	84.0	64.5	45.5	
480	74.5		47.7	61.3	84.3	66.4	52.2	452	62.8	128	71.0	97.5		63.5	45.0	
470	74.1		46.9	60.7	83.9	65.7	51.3	442	61.8	126	70.0	97.0	83.5	63.0	44.0	
460	73.6		46.1	60.1	83.6	64.9	50.4	433	60.8	124	69.0	96.5		62.5	43.0	
450	73.3		45.3	59.4	83.2	64.3	49.4	425	59.8	122	68.0	96.0	83.0	62.0	42.0	
440	72.8		44.5	58.8	82.8	63.5	48.4	415	58.8	120	67.0	95.5		61.0	41.0	
430	72.3		43.6	58.2	82.3	62.7	47.4	405	57.8	118	66.0	95.0	82.5	60.5	40.0	
420	71.8		42.7	57.5	81.8	61.9	46.4	397	56.7	116	65.0	94.5	82.0	60.0	39.0	
410	71.4		41.8	56.8	81.4	61.1	45.3	388	55.7	114	64.0	94.0	81.5	59.5	38.0	
400	70.8		40.8	56.0	81.0	60.2	44.1	379	54.6	112	63.0	93.0	81.0	58.5	37.0	
390	70.3		39.8	55.2	80.3	59.3	42.9	369	53.6	110	62.0	92.6	80.5	58.0	35.5	
380	69.8	110.0	38.8	54.4	79.8	58.4	41.7	360	52.5	108	61.0	92.0		57.0	34.5	
370	69.2		37.7	53.6	79.2	57.4	40.4	350	51.4	106	59.5	91.2	80.0	56.0	33.0	
360	68.7	109.0	36.6	52.8	78.6	56.4	39.1	341	50.3	104	58.0	0.5	79.5	55.0	32.0	
350	68.1		35.5	51.9	78.0	55.4	37.8	331	49.2	102	57.0	89.8	79.0	54.5	30.5	
340	67.6	108.0	34.4	51.1	77.4	54.4	36.5	322	48.1	100	56.0	89.0	78.5	53.5	29.5	
330	67.0		33.3	50.2	76.8	53.6	35.2	313	46.9	98	54.0	88.0	78.0	52.5	28.0	
320	66.4	107.0	32.2	49.4	76.2	52.3	33.9	303	45.7	96	53.0	87.2	77.5	51.5	26.5	
310	65.8		31.0	48.4	75.6	51.3	32.5	294	44.6	94	51.0	86.3	77.0	50.5	24.5	
300	65.2	105.5	29.8	47.5	74.9	50.2	31.1	284	43.4	92	49.5	85.4	76.5	49.0	23.0	
295	64.8		29.2	47.1	74.6	49.7	30.4	280	42.8	90	47.5	84.4	75.5	48.0	21.0	
290	64.5	104.5	28.5	46.5	74.2	49.0	29.5	275	42.2	88	46.0	83.5	75.0	47.0	19.0	
285	64.2		27.8	46.0	73.8	48.4	28.7	270	41.6	86	44.0	82.3	74.5	45.5	17.0	
280	63.8	103.5	27.1	45.3	73.4	47.8	27.9	265	41.0	84	42.0	81.2	73.5	44.0	14.5	
275	63.5		26.4	44.9	73.0	47.2	27.0	261	40.4	82	40.0	80.0	73.0	43.0	12.5	
270	63.1	102.0	25.6	44.3	72.6	46.4	26.2	256	39.7	80	37.5	78.6	72.0	41.0	10.0	
265	62.7		24.8	43.7	72.1	45.7	25.2	252	39.1	78	35.0	77.4	71.5	39.5	7.5	
260	62.4	101.0	24.0	43.1	71.6	45.0	24.3	247	38.5	76	32.5	76.0	70.5	38.0	4.5	
255	62.0		23.1	42.2	71.1	44.2	23.2	243	37.9	74	32.0	74.8	70.0	36.0	1.0	
250	61.6	99.5	22.2	41.7	70.6	43.4	22.2	238	37.2	72	30.0	73.2	69.0	34.0		
245	61.2		21.3	41.1	70.1	42.5	21.1	233	36.6	70	27.5	71.6	68.0	32.0		
240	60.7	98.1	20.3	40.3	69.6	41.7	19.9	228	36.0	68	24.5	70.0	67.0	30.0		
230		96.7	18.0					219	34.7	66	21.5	68.5	66.0	28.0		
220		95.0	15.7					209	33.4	64	18.5	66.8	65.0	25.5		
210		93.4	13.4					200	32.0	62	15.5	65.0	63.5	23.0		
200		91.5	11.0					190	30.7	60	12.5	63.0	62.5	20.5		
190		89.5	8.5					181	29.4	58	10.0	61.0	61.0	18.0		
180		87.1	6.0					171	28.0	56		58.8	60.0	15.0		
170		85.0	3.0					162	26.6	54		46.6	58.5	12.0		
160		81.7	0.0					152	25.2	52		53.5	57.0			
150		78.7						143	23.8	50		50.5	55.5			
140		75.0						133	22.3	49		49.0	54.5			
130		71.2						124	20.8	48		47.0	53.5			
120		66.7						114	19.4	47		45.0				
110		62.3						105	17.9	46		43.0				
100		56.2						95	16.3	45		40.0				

佳億科技企業社
TEL: (02)2309-0120