

Vickers 경도 (DPH)	Brinell 경도 10mm Ball 하중 3000kg			Rockwell 경도				Shore 경도	인장강도 kgf/mm <sup>2</sup> (t)	Vickers 경도 (하중 50kg)
	Standard Ball	Hultgren Ball	Tungsten Carbide Ball	A scale 하중 60kg 다이아몬드 원추	B scale 하중 100kg 1/16 강구	C scale 하중 150kg 다이아몬드 원추	D scale 하중 100kg 다이아몬드 원추			
420	397	397	397	71,8	-	42,7	57,5	57	140	420
410	388	388	388	71,4	-	41,8	56,8	-	136	410
400	379	379	379	70,8	-	40,8	56,0	55	131	400
390	369	369	369	70,3	-	39,8	55,2	-	127	390
380	360	360	360	69,8	(110,0)	38,8	54,4	52	123	380
370	350	350	350	69,2	-	37,7	53,6	-	120	370
360	341	341	341	68,7	(109,0)	36,6	52,8	50	115	360
350	331	331	331	68,1	-	35,5	51,9	-	112	350
340	322	322	322	67,6	(108,0)	34,4	51,1	47	109	340
330	313	313	313	67,0	-	33,3	50,2	-	105	330
320	303	303	303	66,4	(107,0)	32,3	49,4	45	103	320
310	294	294	294	65,8	-	31,0	48,4	-	100	310
300	284	284	284	65,2	(105,5)	29,8	47,5	42	97	300
295	280	280	280	64,8	-	29,2	47,1	-	96	295
290	275	275	275	64,5	(104,5)	28,5	46,5	41	94	290
285	270	270	270	64,2	-	27,8	46,0	-	92	285
280	265	265	265	63,8	(103,5)	27,1	45,3	40	91	280
275	261	261	261	63,5	-	26,4	44,9	-	89	275
270	256	256	256	63,1	(102,0)	25,6	44,3	38	87	270
265	252	252	252	62,7	-	24,8	43,7	-	86	265
260	247	247	247	62,4	(101,0)	24,0	43,1	37	84	260
255	243	243	243	62,0	-	23,1	42,2	-	82	255
250	238	238	238	61,6	99,5	22,2	41,7	36	81	250
245	233	233	233	61,2	-	21,3	41,1	-	79	245
240	228	228	228	60,7	98,1	20,3	0,3	34	78	240
230	219	219	219	-	96,7	(18,0)	-	33	75	230
220	209	209	209	-	95,0	(15,7)	-	32	71	220
210	200	200	200	-	93,4	(13,4)	-	30	68	210
200	190	190	190	-	91,5	(11,0)	-	29	65	200
190	181	181	181	-	89,5	( 8,5)	-	28	62	190
180	171	171	171	-	87,1	( 6,0)	-	26	59	180
170	162	162	162	-	85,0	( 3,0)	-	25	56	170
160	152	152	152	-	81,7	( 0,0)	-	24	53	160
150	148	143	143	-	78,7	-	-	22	50	150
140	133	133	133	-	75,0	-	-	21	46	140
130	124	124	124	-	71,2	-	-	20	44	130
120	114	114	114	-	66,7	-	-	-	40	120
110	105	105	105	-	62,3	-	-	-	-	110
100	95	95	95	-	56,2	-	-	-	-	100
95	90	90	90	-	52,0	-	-	-	-	95
90	86	86	86	-	48,0	-	-	-	-	90
85	81	81	81	-	41,0	-	-	-	-	85

응력환산표(STRESS CONVERSION TABLE) (lbs/in<sup>2</sup>→kgf/mm<sup>2</sup>)

lbs/in <sup>2</sup>	0,000	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
	kgf/mm <sup>2</sup>									
0,000	0,000	0,703	1,406	2,109	2,812	3,515	4,218	4,922	5,625	6,328
10,000	7,031	7,734	8,437	9,140	9,343	10,546	11,249	11,952	12,655	13,359
20,000	14,063	14,765	15,468	16,171	16,874	17,577	18,280	18,983	19,686	20,389
30,000	21,092	21,796	22,499	23,202	23,905	24,608	25,311	26,014	26,717	27,420
40,000	28,231	28,826	29,529	30,233	30,936	31,639	32,342	33,045	33,748	34,451
50,000	35,154	35,857	36,560	37,263	37,966	38,669	39,373	40,076	40,779	41,482
60,000	42,185	42,888	43,591	44,294	44,997	45,700	46,403	47,106	47,810	48,513
70,000	49,216	49,919	50,622	51,325	52,028	52,731	53,434	54,137	54,840	55,543
80,000	56,247	56,950	57,653	58,356	59,059	59,762	60,465	61,168	61,871	62,574
90,000	63,277	63,980	64,683	65,387	66,090	66,793	67,496	68,199	68,902	69,605
100,000	70,308	71,011	71,714	72,417	73,120	73,824	74,527	75,230	75,933	76,636
110,000	77,339	78,042	78,745	79,448	80,151	80,854	81,557	82,261	82,964	83,667
120,000	84,370	85,073	85,776	86,479	87,182	87,885	88,588	89,291	89,994	90,698
130,000	91,401	92,104	92,807	93,510	94,213	94,916	95,619	96,322	97,025	97,728
140,000	98,431	99,134	99,838	100,541	101,244	101,947	102,650	103,353	104,056	104,759
150,000	105,462	106,165	106,868	107,571	108,275	108,978	109,681	110,384	111,087	111,790
160,000	112,493	113,196	113,899	114,602	115,305	116,008	116,712	117,415	118,118	118,821
170,000	119,524	120,227	120,930	121,633	122,336	123,039	123,742	124,445	125,148	125,852
180,000	126,555	127,258	127,961	128,664	129,367	130,070	130,773	131,476	132,179	132,882
190,000	133,585	134,289	134,992	135,695	136,398	137,101	137,804	138,507	139,210	139,913
200,000	140,616	141,319	142,022	142,726	143,429	144,132	144,835	145,538	146,241	146,944
210,000	147,647	148,350	149,058	149,756	150,459	151,163	151,866	152,569	153,272	153,975
220,000	154,678	155,381	156,084	156,787	157,490	158,193	158,896	159,599	160,303	161,006
230,000	161,709	162,412	163,115	163,818	164,521	165,224	165,927	166,630	167,333	168,036
240,000	168,740	169,443	170,146	170,849	171,552	172,255	172,958	173,661	174,364	175,067
250,000	175,770	176,473	177,177	177,880	178,583	179,286	179,989	180,692	181,395	182,098

lbs/in <sup>2</sup>	100	200	300	400	500	600	700	800	900
kgf/mm <sup>2</sup>	0,0703	0,1406	0,2109	0,2812	0,3515	0,4218	0,4922	0,5625	0,6328