

**(Rockwell C Scale )**

Rockwell C Scale 150 kg Brale	Vickers 50Kg	Brinell , 10mm , 3000Kg			Rockwell			Rockwell Superficial (Superficial Brale )			Shore	(ksi)	Rockwell C Scale 150 kg Brale
			Hultgren	Tungsten Carbide	A Scale 60Kg Brale	B Scale 100Kg	D Scale 100Kg brale	15 -N Scale 15Kg	30 -N Scale 15Kg	45 -N Scale 15Kg			
68	940	-	-	-	85.6	-	76.9	93.2	84.4	75.4	97	-	68
67	900	-	-	-	85.0	-	76.1	92.9	83.6	74.2	95	-	67
66	865	-	-	-	84.5	-	75.4	92.5	82.8	73.3	92	-	66
65	832	-	-	739	83.9	-	74.5	92.2	81.9	72.0	91	-	65
64	800	-	-	722	83.4	-	73.8	91.8	81.1	71.0	88	-	64
63	772	-	-	705	82.8	-	73.0	91.4	80.1	69.9	87	-	63
62	746	-	-	688	82.3	-	72.2	91.1	79.3	68.8	85	-	62
61	720	-	-	670	81.8	-	71.5	90.7	78.4	67.7	83	-	61
60	697	-	613	654	81.2	-	70.7	90.2	77.5	66.6	81	-	60
59	674	-	599	634	80.7	-	69.9	89.8	76.6	65.5	80	-	59
58	653	-	587	615	80.1	-	69.2	89.3	75.7	64.3	78	-	58
57	633	-	575	595	79.6	-	68.5	88.9	74.8	63.2	76	-	57
56	613	-	561	577	79.0	-	67.7	88.3	73.9	62.0	75	-	56
55	595	-	546	560	78.5	-	66.9	87.9	73.0	60.9	74	301	55
54	577	-	534	543	78.0	-	66.1	87.4	72.0	59.8	72	292	54
53	560	-	519	525	77.4	-	65.4	86.9	71.2	58.6	71	283	53
52	544	500	508	512	76.8	-	64.6	86.4	70.2	57.4	69	273	52
51	528	487	494	496	76.3	-	63.8	85.9	69.4	56.1	68	264	51
50	513	475	481	481	75.9	-	63.1	85.5	68.5	55.0	67	255	50

Rockwell C Scale 150 kg Brale	Vickers 50Kg	Brinell , 10mm , 3000Kg			Rockwell			Rockwell Superficial (Superficial Brale )			Shore	(ksi)	Rockwell C Scale 150 kg Brale
			Hultgren	Tungsten Carbide	A Scale 60Kg Brale	B Scale 100Kg	D Scale 100Kg brale	15 - N Scale 15Kg	30 - N Scale 15Kg	45 - N Scale 15Kg			
49	498	464	469	469	75.2	-	62.1	85.0	67.6	53.8	66	246	49
48	484	451	455	455	74.7	-	61.4	84.5	66.7	52.5	64	237	48
47	471	442	443	443	74.1	-	60.8	83.9	65.8	51.4	63	229	47
46	458	432	432	432	73.6	-	60.0	83.5	64.8	50.3	62	222	46
45	446	421	421	421	73.1	-	59.2	83.0	64.0	49.0	60	215	45
44	434	409	409	409	72.5	-	58.5	82.5	63.1	47.8	58	208	44
43	423	400	400	400	72.0	-	57.7	82.0	62.2	46.7	57	201	43
42	412	390	390	390	71.5	-	56.9	81.5	61.3	45.5	56	194	42
41	402	381	381	381	70.9	-	56.2	80.9	60.4	44.3	55	188	41
40	392	371	371	371	70.4	-	55.4	80.4	59.5	43.1	54	181	40
39	382	362	362	362	69.9	-	54.6	79.9	58.6	41.9	52	176	39
38	372	353	353	353	69.4	-	53.8	79.4	57.7	40.8	51	171	38
37	363	344	344	344	68.9	-	53.1	78.8	56.8	39.6	50	168	37
36	354	336	336	336	68.4	(109.0)	52.3	78.3	55.9	38.4	49	162	36
35	345	327	327	327	67.9	(108.5)	51.5	77.7	55.0	37.2	48	157	35
34	336	319	319	319	67.4	(108.0)	50.8	77.2	54.2	36.1	47	153	34
33	327	311	311	311	66.8	(107.5)	50.0	76.6	53.3	34.9	46	149	33
32	318	301	301	301	66.3	(107.0)	49.2	76.1	52.1	33.7	44	145	32
31	310	294	294	294	65.8	(106.0)	48.4	75.6	51.3	32.5	43	142	31
30	302	286	286	286	65.3	(105.5)	47.7	75.0	50.4	31.3	42	138	30
29	294	279	279	279	64.7	(104.5)	47.0	74.5	49.5	30.1	41	135	29

Rockwell C Scale 150 kg Brale	Vickers 50Kg	Brinell , 10mm , 3000Kg			Rockwell			Rockwell Superficial (Superficial Brale )			Shore	(ksi)	Rockwell C Scale 150 kg Brale
			Hultgren	Tungsten Carbide	A Scale 60Kg Brale	B Scale 100Kg	D Scale 100Kg brale	15 - N Scale 15Kg	30 - N Scale 15Kg	45 - N Scale 15Kg			
28	286	271	271	271	64.3	(104.0)	46.1	73.9	48.6	28.9	41	132	28
27	279	264	264	264	63.8	(103.0)	45.2	73.3	47.7	27.8	40	128	27
26	272	258	258	258	63.3	(102.5)	44.6	72.8	46.8	26.7	38	125	26
25	266	253	253	253	62.8	(101.5)	43.8	72.2	45.9	25.5	38	122	25
24	260	247	247	247	62.4	(101.0)	43.1	71.6	45.0	24.3	37	120	24
23	254	243	243	243	62.0	100.0	42.1	71.0	44.0	23.1	36	117	23
22	248	237	237	237	61.5	99.0	41.6	70.5	43.2	22.0	35	114	22
21	243	231	231	231	61.0	98.5	40.9	69.9	42.3	20.7	35	112	21
20	238	226	226	226	60.5	97.8	40.1	69.4	41.5	19.6	34	110	20
(18)	230	219	219	219	-	96.7	-	-	-	-	33	106	(18)
(16)	222	212	212	212	-	95.5	-	-	-	-	32	102	(16)
(14)	213	203	203	203	-	93.9	-	-	-	-	31	98	(14)
(12)	204	194	194	194	-	92.3	-	-	-	-	29	94	(12)
(10)	196	187	187	187	-	90.7	-	-	-	-	28	90	(10)
(8)	188	179	179	179	-	89.5	-	-	-	-	27	87	(8)
(6)	180	171	171	171	-	87.1	-	-	-	-	26	84	(6)
(4)	173	165	165	165	-	85.5	-	-	-	-	25	80	(4)
(2)	166	158	158	158	-	83.5	-	-	-	-	24	77	(2)
(0)	160	152	152	152	-	81.7	-	-	-	-	24	75	(0)

[            ]

1. 1 ksi = 1,000 lb<sub>f</sub>/in<sup>2</sup> (psi) = 6.8948 MPa = 0.70307 Kg/mm<sup>2</sup>

3. 1 Kg/mm<sup>2</sup> = 1.4224 ksi = 9.8067 Mpa

5. Brinell : 3000 Kg 가 10mm ball .

7. Rockwell B Scale : 100 Kg , 1.59mm (1/16") .

9. Rockwell D Scale : 100 Kg , 120° Diamond Cone (Brale ) .

2. 1 MPa = 0.10197 kgf/mm<sup>2</sup> = 0.14504 ksi

4. Vickers : 50 kg 136° Diamond Pyramid .

6. Rockwell A Scale : 60 Kg , 120° Diamond Cone (Brale ) .

8. Rockwell C Scale : 150 Kg , 120° Diamond Cone (Brale ) .