

HARDNESS – TENSILE CONVERSION

INCH ROCKWELL – BRINELL – TENSILE CONVERSION

Rockwell "C" scale	Brinell hardness number	tensile strength approx. 1000 psi
60	654	336
59	634	328
58	615	319
57	595	310
56	577	301
55	560	292
54	543	283
53	524	274
52	512	265
51	500	257
50	488	249
49	476	241
48	464	233
47	453	225
46	442	219
45	430	212
44	419	206

Rockwell "C" scale	Brinell hardness number	tensile strength approx. 1000 psi
43	408	200
42	398	194
41	387	188
40	377	181
39	367	176
38	357	170
37	347	165
36	337	160
35	327	155
34	318	150
33	309	147
32	301	142
31	294	139
30	285	136
29	279	132
28	272	129
27	265	126

Rockwell		Brinell hardness number	tensile strength approx. 1000 psi
"C" scale	"B" scale		
26		259	123
25		253	120
24		247	118
23		241	115
22	100	235	112
21	99	230	110
20	98	225	107
(19)		220	104
(18)	97	215	103
(17)		210	102
(16)	96	206	100
(15)		201	99
(14)	95	197	97
(13)	94	193	96
(12)	93	190	93
(11)		186	91
(10)	92	183	90

METRIC ROCKWELL – BRINELL – TENSILE CONVERSION

Rockwell "C" scale	Brinell hardness number	tensile strength approx. MPa
60	654	2,317
59	634	2,261
58	615	2,199
57	595	2,137
56	577	2,075
55	560	2,013
54	543	1,951
53	524	1,889
52	512	1,827
51	500	1,772
50	488	1,717
49	476	1,662
48	464	1,606
47	453	1,551
46	442	1,510
45	430	1,462
44	419	1,420

Rockwell "C" scale	Brinell hardness number	tensile strength approx. MPa
43	408	1,379
42	398	1,338
41	387	1,296
40	377	1,248
39	367	1,213
38	357	1,172
37	347	1,138
36	337	1,103
35	327	1,069
34	318	1,034
33	309	1,014
32	301	979
31	294	958
30	285	938
29	279	910
28	272	889
27	265	869

Rockwell		Brinell hardness number	tensile strength approx. MPa
"C" scale	"B" scale		
26		259	848
25		253	827
24		247	814
23		241	793
22	100	235	772
21	99	230	758
20	98	225	738
(19)		220	717
(18)	97	215	710
(17)		210	703
(16)	96	206	690
(15)		201	683
(14)	95	197	669
(13)	94	193	662
(12)	93	190	641
(11)		186	627
(10)	92	183	621