

Comparison of Metal Hardness Scales

Rockwell C	Rockwell B	Rockwell A	15N	30N	Brinell	Vickers	Knoop	Shore	- Tensile (ksi)
67	NA	85	93	83.5	NA	900	895	95	NA
66	NA	84.5	92.5	83	NA	865	870	92	NA
65	NA	83.9	92	82	739	832	846	91	NA
64	NA	83.4	NA	81	722	800	822	88	NA
63	NA	82.8	91.5	80	705	772	799	87	NA
62	NA	82.3	91	79	688	746	776	85	NA
61	NA	81.8	90.5	78.5	670	720	754	83	NA
60	NA	81.2	90	77.5	654	697	732	81	NA
59	NA	80.7	89.5	76.5	634	674	710	80	326
58	NA	80.1	NA	75.5	615	653	690	78	315
57	NA	79.6	89	75	595	633	670	76	305
56	NA	79	88.5	74	577	613	650	75	295
55	NA	78.5	88	73	560	595	630	74	287
54	NA	78	87.5	72	543	577	612	72	278
53	NA	77.4	87	71	525	560	594	71	269
52	NA	76.8	86.5	70.5	512	544	576	69	262
51	NA	76.3	86	69.5	496	528	558	68	253
50	NA	75.9	85.5	68.5	481	513	542	67	245
49	NA	75.2	85	67.5	469	498	526	66	239
48	NA	74.7	84.5	66.5	455	484	510	64	232
47	NA	74.1	84	66	443	471	495	63	225
46	NA	73.6	83.5	65	432	458	480	62	219
45	NA	73.1	83	64	421	446	466	60	212
44	NA	72.5	82.5	63	409	434	452	58	206
43	NA	72	NA	NA	400	423	NA	57	201

Comparison of Metal Hardness Scales (continued)

Rockwell C	Rockwell B	Rockwell A	15N	30N	Brinell	Vickers	Knoop	Shore	- Tensile (ksi)
42	NA	71.5	81.5	61.5	390	412	426	56	196
41	NA	70.9	NA	NA	381	402	NA	55	191
40	NA	70.6	80.5	59.5	371	392	402	54	186
39	NA	69.9	NA	NA	362	382	NA	52	181
38	NA	69.4	79.5	57.5	353	372	380	51	176
37	NA	68.9	NA	NA	344	363	NA	50	172
36	109	68.4	78.5	56	336	354	360	49	168
35	108.5	67.9	NA	NA	327	345	NA	48	163
34	108	67.4	77	54	319	336	342	47	159
33	107.5	66.8	NA	NA	311	327	NA	46	154
32	107	66.3	76	52	301	318	326	44	150
31	106	65.8	NA	NA	294	310	NA	43	146
30	105.5	65.3	75	50.5	286	302	311	42	142
29	104.5	64.7	NA	NA	279	294	NA	41	138
28	104	64.3	74	48.5	271	286	297	41	134
27	103	63.8	NA	NA	264	279	NA	40	131
26	102.5	63.3	72.5	47	258	272	284	38	127
25	101.5	62.8	NA	NA	253	266	NA	38	124
24	101	62.4	71.5	45	247	260	272	37	121
23	100	62	NA	NA	243	254	NA	36	118
22	99	61.5	70.5	43	237	248	261	35	115
21	98.5	61	NA	NA	231	243	NA	35	113
20	97.8	60.5	69.5	41.5	226	238	251	34	110

For Reference Only

Prepared by J.T.