

Brinell dia of impression mm	Brinell hardness number HB	Vickers hardness number HV	Rockwell hardness Scale 'C' HRC	Tensile Equivalent Rm tonnes/in ²	Tensile Equivalent Rm Kg/mm ²	Tensile Equivalent Rm N/mm ²
2.50	(601)	640	57.0	-	-	-
2.55	(578)	615	56.0	-	-	-
2.60	(555)	591	54.5	-	-	-
2.65	(534)	569	53.5	-	-	-
2.70	(514)	547	52.0	-	-	-
2.75	(495)	528	51.0	-	-	-
2.80	(477)	508	49.5	-	-	-
2.85	(461)	491	48.5	101	160	1569
2.90	444	474	47.0	98	155	1520
2.95	429	455	45.5	95	150	1471
3.00	415	440	44.5	92	145	1422
3.05	401	425	43.0	88	139	1363
3.10	388	410	42.0	85	134	1314
3.15	375	396	40.5	82	129	1265
3.20	363	383	39.0	80	126	1236
3.25	352	372	38.0	77	121	1187
3.30	341	360	36.5	75	118	1157
3.35	331	350	35.5	73	114	1118
3.40	321	339	34.5	71	111	1089
3.45	311	328	33.0	68	107	1049
3.50	302	319	32.0	66	104	1020
3.55	293	309	31.0	64	101	990
3.60	285	301	30.0	63	99	971
3.65	277	292	29.0	61	96	941
3.70	269	284	27.5	59	93	912
3.75	262	276	26.5	58	91	892
3.80	255	269	25.5	56	89	873
3.85	248	261	24.0	55	87	853
3.90	241	253	23.0	53	84	824
3.95	235	247	22.0	51	81	794
4.00	229	241	20.5	50	79	775
4.05	223	235	-	49	77	755
4.10	217	228	-	48	76	745
4.15	212	223	-	46	73	716
4.20	207	218	-	45	71	696
4.30	197	208	-	43	68	667
4.40	187	197	-	41	65	637
4.50	179	189	-	39	62	608
4.60	170	179	-	36	57	559
4.70	163	172	-	35	55	539
4.80	156	165	-	34	54	530
4.90	149	157	-	32	51	500
5.00	143	150	-	31	49	481
5.10	137	144	-	31	49	481
5.20	131	138	-	30	47	461
5.30	126	133	-	29	46	451
5.40	121	127	-	28	44	431
5.50	116	122	-	27	43	422
5.60	111	117	-	26	41	402
5.70	107	113	-	25	39	382
5.80	103	108	-	24	38	373

Reference symbols for tensile strength ranges of hardened and tempered material to BS970 Part 1:1991

Symbol	Tensile Strength N/mm ²
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P	550–700
Q	625–775
R	700–850
S	775–925
T	850–1000
U	925–1075
V	1000–1150
W	1075–1225
X	1150–1300
Y	1225–1375
Z	1550 min.

The figures in parentheses require a 'modified' Brinell test, i.e. a tungsten carbide ball is required where the BH value exceeds 450