3.4 Conversione durezze / resistenza a trazione

Brinell		Rockwell		Vickers	Resistenza a trazione			Brinell		Rockwell		Vickers	Resistenza a trazione		
Impronta ∅ mm	HB	HRC	HRB	HV	N/mm²	Kgf/mm²	ksi	Impronta ∅ mm	HB	HRC	HRB	HV	N/mm²	Kgf/mm²	ksi
—	—	(69)	—	1000	—	—	—	2.91	441	46.8	—	469	1550	158	224.7
—	—	(68.5)	—	966	—	—	—	2.92	438	46.6	—	466	1540	157	223.3
—	—	68	—	940	—	—	—	2.93	435	46.3	—	462	1530	156	221.9
—	—	67.5	—	920	—	—	—	2.94	432	46.1	—	459	1520	155	220.5
—	—	67	—	900	—	—	—	2.95	429	45.8	—	456	1500	153	217.6
—	—	66.5	—	880	—	—	—	2.96	426	45.4	—	453	1490	152	216.2
—	—	66	—	861	—	—	—	2.97	423	45.3	—	449	1480	151	214.8
—	—	65.5	—	845	—	—	—	2.98	420	45	—	446	1470	150	213.3
—	—	65	—	830	—	—	—	2.99	417	44.7	—	443	1450	148	210.5
—	—	64.5	—	815	—	—	—	3.00	415	44.5	—	441	1440	147	209.1
—	—	64	—	802	—	—	—	3.01	412	44.2	—	438	1430	146	207.7
—	—	63.5	—	789	—	—	—	3.02	409	43.9	—	435	1410	144	204.8
—	—	63	—	776	—	—	—	3.03	406	43.6	—	431	1400	143	203.4
—	—	62.5	—	763	—	—	—	3.04	404	43.4	—	429	1390	142	202.0
—	—	62	—	750	—	—	—	3.05	401	43.1	—	426	1385	141	200.5
—	—	61.5	—	738	—	—	—	3.06	398	42.8	—	423	1365	139	197.7
—	—	61	—	726	—	—	—	3.07	395	42.5	—	420	1355	138	196.3
—	—	60.5	—	714	—	—	—	3.08	393	42.3	—	417	1345	137	194.9
—	—	60	—	703	—	—	—	3.09	390	42.1	—	414	1335	136	193.4
—	—	59.5	—	691	—	—	—	3.10	388	41.8	—	412	1325	135	192.0
—	—	59	—	680	—	—	—	3.11	385	41.5	—	409	1315	134	190.6
—	—	58.5	—	670	—	—	—	3.12	383	41.3	—	407	1305	133	189.2
—	—	58	—	660	—	—	—	3.13	380	41	—	404	1295	132	187.7
—	—	57.5	—	649	—	—	—	3.14	378	40.8	—	401	1285	131	186.3
2.50	601	57	—	640	(2235)	(228)	(324.3)	3.15	375	40.5	—	399	1275	130	184.9
2.51	597	56.8	—	636	(2215)	(226)	(321.5)	3.16	373	40.3	—	396	1265	129	183.5
2.52	592	56.5	—	630	(2195)	(224)	(318.6)	3.17	370	40	—	393	1255	128	182.1
2.53	587	56.3	—	625	(2175)	(222)	(315.8)	3.18	368	39.8	—	391	1245	127	180.6
2.54	582	56	—	620	(2160)	(220)	(312.9)	3.19	366	39.6	—	388	1235	126	179.2
2.55	578	55.8	—	616	(2140)	(218)	(310.0)	3.20	363	39.3	—	385	1220	124.5	177.1
2.56	573	55.5	—	610	(2120)	(216)	(307.2)	3.21	361	39.1	—	383	1215	124	176.4
2.57	569	55.3	—	606	(2100)	(214)	(304.3)	3.22	359	38.8	(110)	381	1205	123	174.9
2.58	564	55	—	600	(2080)	(212)	(301.5)	3.23	356	38.5	—	378	1195	122	173.5
2.59	560	54.8	—	596	(2060)	(210)	(298.7)	3.24	354	38.2	—	376	1185	121	172.1
2.60	555	54.5	—	591	(2040)	(208)	(295.9)	3.25	352	38	—	373	1175	120	170.7
2.61	551	54.3	—	587	(2020)	(206)	(293.0)	3.26	350	37.8	—	371	1170	119.5	170.0
2.62	547	54.1	—	582	(2011)	(205)	(291.6)	3.27	347	37.5	—	368	1160	118.5	168.5
2.63	543	53.9	—	578	(1990)	(203)	(288.7)	3.28	345	37.3	—	366	1155	118	167.8
2.64	538	53.6	—	572	(1970)	(201)	(285.9)	3.29	343	37.1	—	364	1150	117.5	167.1
2.65	534	53.3	—	568	(1950)	(199)	(283.0)	3.30	341	36.9	(109)	362	1140	116.5	165.7
2.66	530	53.1	—	564	(1930)	(197)	(280.2)	3.31	339	36.6	—	360	1135	115.5	164.3
2.67	526	52.8	—	560	(1910)	(195)	(277.4)	3.32	337	36.4	—	357	1130	115	163.6
2.68	522	52.6	—	556	(1900)	(194)	(275.9)	3.33	335	36.1	—	355	1120	114	162.1
2.69	518	52.3	—	551	(1880)	(192)	(273.1)	3.34	333	35.9	—	353	1115	113.5	161.4
2.70	514	52.1	—	547	(1865)	(190)	(270.2)	3.35	331	35.7	—	351	1105	112.5	160.0
2.71	510	51.8	—	542	(1855)	(189)	(268.8)	3.36	329	35.3	—	349	1100	112	159.3
2.72	507	51.6	—	539	(1835)	(187)	(266.0)	3.37	326	35.2	—	346	1090	111	157.9
2.73	503	51.5	—	535	(1815)	(185)	(263.1)	3.38	325	35	—	345	1085	110.5	157.2
2.74	499	51.4	—	531	(1805)	(184)	(261.7)	3.39	323	34.8	(108)	343	1075	109.5	155.7
2.75	495	50.9	—	527	1785	182	258.9	3.40	321	34.5	—	341	1070	109	155.0
2.76	492	50.6	—	523	1775	181	257.5	3.41	319	34.3	—	338	1060	108	153.6
2.77	488	50.4	—	519	1755	179	254.6	3.42	317	34.1	—	336	1055	107.5	152.9
2.78	485	50.2	—	516	1735	177	251.7	3.43	315	33.9	—	334	1045	106.5	151.5
2.79	481	49.9	—	511	1725	176	250.3	3.44	313	33.6	—	332	1040	106	150.8
2.80	477	49.6	—	507	1705	174	247.5	3.45	311	33.4	—	329	1035	105.5	150.1
2.81	474	49.4	—	504	1695	173	246.0	3.46	309	33.1	—	327	1025	104.5	148.6
2.82	471	49.2	—	501	1675	171	243.2	3.47	307	32.9	—	325	1020	104	147.9
2.83	467	48.9	—	497	1665	170	241.8	3.48	306	32.8	—	324	1015	103.5	147.2
2.84	464	48.6	—	494	1660	169	240.4	3.49	304	32.5	(107)	322	1010	103	146.5
2.85	461	48.4	—	490	1640	167	237.5	3.50	302	32.3	—	320	1000	102	145.1
2.86	457	48.1	—	486	1630	166	236.1	3.51	300	32	—	318	990	101	143.7
2.87	454	47.9	—	483	1610	164	233.3	3.52	298	31.8	—	316	985	100.5	142.9
2.88	451	47.4	—	479	1600	163	231.8	3.53	297	31.6	—	315	980	100	142.2
2.89	448	47.4	—	476	1590	162	230.4	3.54	295	31.3	—	313	975	99.5	141.5
2.90	444	47.1	—	472	1570	160	227.6	3.55	293	31	—	310	970	99	140.8

Brinell		Rockwell		Vickers	Resistenza a trazione			Brinell		Rockwell		Vickers	Resistenza a trazione		
Impronta ⌀ mm	HB	HRC	HRB	HV	N/mm²	Kgf/mm²	ksi	Impronta ⌀ mm	HB	HRC	HRB	HV	N/mm²	Kgf/mm²	ksi
3.56	292	30.9	—	309	965	98.5	140.1	4.38	189	(10.8)	91	199	630	64.5	91.7
3.57	290	30.6	—	307	960	98	139.4	4.40	187	(10.3)	—	197	625	63.5	90.3
3.58	288	30.3	—	305	950	97	138.0	4.42	185	(9.9)	90	195	620	63	89.6
3.59	286	30	—	303	945	96.5	137.3	4.45	183	—	—	193	615	62.5	88.9
3.60	285	29.8	—	302	940	96	136.6	4.46	182	—	—	191	610	62	88.2
3.61	283	29.5	—	300	935	95.5	135.8	4.48	180	—	89	189	605	61.5	87.5
3.62	282	29.3	—	299	930	95	135.1	4.50	179	—	—	188	600	61	86.8
3.63	280	29.1	—	297	920	94	133.7	4.52	177	—	—	186	595	60.5	86.0
3.64	278	28.9	(105)	295	915	93.5	133.0	4.53	176	—	88	185	590	60	85.3
3.65	277	28.6	—	293	910	93	132.3	4.54	175	—	—	184	585	59.5	84.6
3.66	275	28.3	—	291	905	92.5	131.6	4.57	173	—	—	182	580	59	83.9
3.67	274	28.1	—	290	900	92	130.9	4.59	171	—	87	180	575	58.5	83.2
3.68	272	27.9	—	288	895	91.5	130.1	4.61	170	—	—	179	570	58	82.5
3.69	271	27.7	—	287	890	91	129.4	4.62	169	—	—	178	565	57.5	81.9
3.70	269	27.5	(104)	285	885	90.5	128.7	4.63	167	—	86	175	560	57	81.1
3.71	268	27.3	—	284	880	90	128.0	4.67	165	—	—	173	555	56.5	80.4
3.72	266	27	—	282	875	89.5	127.3	4.68	164	—	85	172	550	56	79.6
3.73	265	26.9	—	281	875	89	126.6	4.70	163	—	—	171	545	55.5	78.9
3.74	263	26.6	—	279	870	88.5	125.9	4.72	161	—	—	169	540	55	78.2
3.75	262	26.5	—	278	865	88	125.2	4.75	159	—	84	167	535	54.5	77.5
3.76	260	26.2	(103)	276	860	87.5	124.5	4.76	158	—	—	166	530	54	76.8
3.77	259	26	—	275	855	87	123.7	4.78	157	—	83	165	525	53.5	76.1
3.78	257	25.7	—	273	850	86.5	123.0	4.81	155	—	—	163	520	53	75.4
3.79	256	25.5	—	272	845	86	122.3	4.84	153	—	82	160	515	52.5	74.7
3.80	255	25.3	—	270	840	85.5	121.6	4.86	152	—	—	159	510	52	74.0
3.81	253	25	—	269	835	85	120.9	4.88	150	—	—	157	505	51.5	73.2
3.82	252	24.7	(102)	267	830	84.5	120.2	4.90	149	—	81	156	500	51	72.5
3.83	250	24.4	—	265	825	84	119.5	4.93	147	—	80	154	495	50.5	71.8
3.85	248	24.1	—	263	820	83.5	118.8	4.95	146	—	—	153	490	50	71.1
3.86	246	23.7	—	261	815	83	118.1	4.96	145	—	79	151	485	49.5	70.4
3.87	245	23.5	(101)	259	810	82.5	117.3	4.99	143	—	—	149	480	49	69.7
3.88	244	23.3	—	258	805	82	116.6	5.02	141	—	78	147	475	48.5	69.0
3.89	242	23	—	256	800	81.5	115.9	5.04	140	—	—	146	470	48	68.3
3.91	240	22.6	—	254	795	81	115.2	5.06	139	—	77	145	465	47.5	67.6
3.92	239	22.4	—	253	790	80.5	114.5	5.09	137	—	—	143	460	47	66.8
3.93	237	22	100	251	785	80	113.8	5.12	135	—	76	141	455	46.5	66.1
3.95	235	21.7	—	249	780	79.5	113.1	5.14	134	—	—	140	450	46	65.4
3.96	234	21.4	—	248	775	79	112.4	5.17	133	—	75	139	445	45.5	64.7
3.97	232	21	—	246	770	78.5	111.7	5.20	131	—	74	137	440	45	64.0
3.98	231	20.8	99	245	765	78	110.9	5.23	129	—	73	135	435	44.5	63.3
4.00	229	20.4	—	243	760	77.5	110.2	5.26	128	—	72.5	134	430	44	62.3
4.01	228	20	—	241	755	77	109.5	5.29	126	—	71.5	131	425	43.5	61.9
4.02	226	(19.7)	—	239	750	76.5	108.8	5.31	125	—	71	130	420	43	61.1
4.03	225	(19.3)	98	237	745	76	108.1	5.35	123	—	70	128	415	42.5	60.4
4.04	224	(19.1)	—	236	740	75.5	107.4	5.37	122	—	69.5	127	410	42	59.7
4.06	222	(18.7)	—	234	735	75	106.7	5.41	120	—	68.5	125	405	41.5	59.0
4.07	221	(18.5)	—	233	730	74.5	106.0	5.45	118	—	68	123	400	41	58.3
4.08	219	(18.1)	97	231	725	74	105.3	5.47	117	—	—	122	395	40.5	57.6
4.10	217	(17.7)	—	229	720	73.5	104.5	5.49	116	—	67	121	390	40	56.9
4.12	215	(17.2)	—	227	715	73	103.8	5.54	114	—	66	119	385	39.5	56.2
4.13	214	(17)	96	226	710	72.5	103.1	5.59	112	—	65	117	380	39	55.5
4.14	213	(16.8)	—	225	705	72	102.4	5.61	111	—	—	116	375	38.5	54.8
4.16	211	(16.3)	—	223	700	71.5	101.7	5.62	110	—	64	115	370	38	54.0
4.18	209	(15.9)	95	221	695	71	101.0	5.63	108	—	63	113	365	37.5	53.3
4.20	207	(15.5)	—	219	690	70.5	100.3	5.67	106	—	62	111	360	37	52.6
4.21	205	(15)	—	217	680	69.5	98.8	5.75	105	—	61	109	355	36.5	51.9
4.22	204	(14.5)	94	215	675	69	98.1	5.80	103	—	60	107	353	36	51.2
4.25	201	(14)	—	212	670	68.5	97.4	5.83	102	—	(59)	106	(350)	(35.5)	(50.5)
4.26	200	(13.5)	—	210	665	68	96.7	5.87	100	—	(58)	104	(345)	(35)	(49.8)
4.27	199	(13.2)	93	209	660	67.5	96.0	5.91	98.8	—	(57)	103	(340)	(34.5)	(49.1)
4.30	197	(12.7)	—	207	655	67	95.3	5.96	96.9	—	(56)	101	(335)	(34)	(48.4)
4.32	195	(12.3)	—	205	650	66.5	94.6	6.02	94.8	—	(55)	99	(330)	(33.5)	(47.6)
4.33	194	(12)	92	204	645	66	93.9	6.05	93.7	—	(54)	98	(325)	(33)	(46.9)
4.34	193	(11.8)	—	203	640	65.5	93.2	6.10	92	—	(52.5)	96	(320)	(32.5)	(46.2)
4.36	193	(11.8)	—	201	635	65	92.4								