

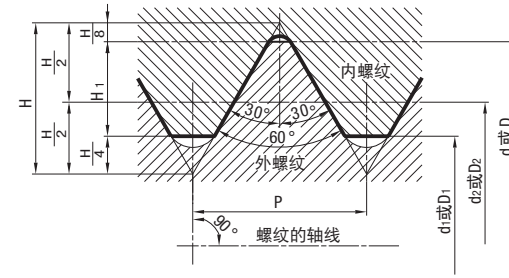
钢的洛氏硬度C的近似换算值⁽¹⁾

(HRC) 洛氏硬度 C	(HV) 维氏硬度	布氏硬度(HB) 10mm球 负载3000kgf		洛氏硬度 ⁽³⁾			洛氏表面硬度 金刚石圆锥压头			(Hs) 肖氏硬度	抗拉强度 (近似值) MPa (kgf/mm ²) ⁽²⁾	洛氏硬度 C ⁽³⁾
		标准球	碳化钨球	(HRA) A标度 负载60kgf 直径1.6mm 圆锥压头	(HRB) B标度 负载100kgf 直径1.6mm (1/16in)球	(HRD) D标度 负载100kgf 金刚石 圆锥压头	15-N 标度 负载15kgf	30-N 标度 负载30kgf	45-N 标度 负载45kgf			
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	—	(654)	81.2	—	70.7	90.2	77.5	66.6	81	—	60
59	674	—	(634)	80.7	—	69.9	89.8	76.6	65.5	80	—	59
58	653	—	615	80.1	—	69.2	89.3	75.7	64.3	78	—	58
57	633	—	595	79.6	—	68.5	88.9	74.8	63.2	76	—	57
56	613	—	577	79.0	—	67.7	88.3	73.9	62.0	75	—	56
55	595	—	560	78.5	—	66.9	87.9	73.0	60.9	74	2075 (212)	55
54	577	—	543	78.0	—	66.1	87.4	72.0	59.8	72	2015 (205)	54
53	560	—	525	77.4	—	65.4	86.9	71.2	58.5	71	1950 (199)	53
52	544	(500)	512	76.8	—	64.6	86.4	70.2	57.4	69	1880 (192)	52
51	528	(487)	496	76.3	—	63.8	85.9	69.4	56.1	68	1820 (186)	51
50	513	(475)	481	75.9	—	63.1	85.5	68.5	55.0	67	1760 (179)	50
49	498	(464)	469	75.2	—	62.1	85.0	67.6	53.8	66	1695 (173)	49
48	484	451	455	74.7	—	61.4	84.5	66.7	52.5	64	1635 (167)	48
47	471	442	443	74.1	—	60.8	83.9	65.8	51.4	63	1580 (161)	47
46	458	432	432	73.6	—	60.0	83.5	64.8	50.3	62	1530 (156)	46
45	446	421	421	73.1	—	59.2	83.0	64.0	49.0	60	1480 (151)	45
44	434	409	409	72.5	—	58.5	82.5	63.1	47.8	58	1435 (146)	44
43	423	400	400	72.0	—	57.7	82.0	62.2	46.7	57	1385 (141)	43
42	412	390	390	71.5	—	56.9	81.5	61.3	45.5	56	1340 (136)	42
41	402	381	381	70.9	—	56.2	80.9	60.4	44.3	55	1295 (132)	41
40	392	371	371	70.4	—	55.4	80.4	59.5	43.1	54	1250 (127)	40
39	382	362	362	69.9	—	54.6	79.9	58.6	41.9	52	1215 (124)	39
38	372	353	353	69.4	—	53.8	79.4	57.7	40.8	51	1180 (120)	38
37	363	344	344	68.9	—	53.1	78.8	56.8	39.6	50	1160 (118)	37
36	354	336	336	68.4	(109.0)	52.3	78.3	55.9	38.4	49	1115 (114)	36
35	345	327	327	67.9	(108.5)	51.5	77.7	55.0	37.2	48	1080 (110)	35
34	336	319	319	67.4	(108.0)	50.8	77.2	54.2	36.1	47	1055 (108)	34
33	327	311	311	66.8	(107.5)	50.0	76.6	53.3	34.9	46	1025 (105)	33
32	318	301	301	66.3	(107.0)	49.2	76.1	52.1	33.7	44	1000 (102)	32
31	310	294	294	65.8	(106.0)	48.4	75.6	51.3	32.7	43	980 (100)	31
30	302	286	286	65.3	(105.5)	47.7	75.0	50.4	31.3	42	950 (97)	30
29	294	279	279	64.7	(104.5)	47.0	74.5	49.5	30.1	41	930 (95)	29
28	286	271	271	64.3	(104.0)	46.1	73.9	48.6	28.9	41	910 (93)	28
27	279	264	264	63.8	(103.0)	45.2	73.3	47.7	27.8	40	880 (90)	27
26	272	258	258	63.3	(102.5)	44.6	72.8	46.8	26.7	38	860 (88)	26
25	266	253	253	62.8	(101.5)	43.8	72.2	45.9	25.5	38	840 (86)	25
24	260	247	247	62.4	(101.0)	43.1	71.6	45.0	24.3	37	825 (84)	24
23	254	243	243	62.0	100.0	42.1	71.0	44.0	23.1	36	805 (82)	23
22	248	237	237	61.5	99.0	41.6	70.5	43.2	22.0	35	785 (80)	22
21	243	231	231	61.0	98.5	40.9	69.9	42.3	20.7	35	770 (79)	21
20	238	226	226	60.5	97.8	40.1	69.4	41.5	19.6	34	760 (77)	20
(18)	230	219	219	—	96.7	—	—	—	—	33	730 (75)	(18)
(16)	222	212	212	—	95.5	—	—	—	—	32	705 (72)	(16)
(14)	213	203	203	—	93.9	—	—	—	—	31	675 (69)	(14)
(12)	204	194	194	—	92.3	—	—	—	—	29	650 (66)	(12)
(10)	196	187	187	—	90.7	—	—	—	—	28	620 (63)	(10)
(8)	188	179	179	—	89.5	—	—	—	—	27	600 (61)	(8)
(6)	180	171	171	—	87.1	—	—	—	—	26	580 (59)	(6)
(4)	173	165	165	—	85.5	—	—	—	—	25	550 (56)	(4)
(2)	166	158	158	—	83.5	—	—	—	—	24	530 (54)	(2)
(0)	160	152	152	—	81.7	—	—	—	—	24	515 (53)	(0)

注⁽¹⁾ 蓝色的数字参见ASTM E 140表1(由SAE、ASM、ASTM合并调整而成)

⁽²⁾ 带括号()的单位及数值为根据JIS Z 8413及Z 8438换算表从psi换算来的值。
另, 1MPa=1N/mm²

⁽³⁾ 表中括号()中的数字很少使用, 仅供参考。



$$H = 0.866025P \quad D = d$$

$$H_1 = 0.541266P \quad D_2 = d_2$$

$$D_1 = d_1$$

$$d_2 = d - 0.649519P$$

$$d_1 = d - 1.082532P$$

单位: mm

螺纹的公称尺寸 ^{(1)*}			螺距 P	旋合高度 H ₁	内 螺 纹		
第1栏	第2栏	第3栏			螺纹牙根直径D	有效直径D ₂	内径D ₁
			外径d	有效直径d ₂	螺纹牙根直径d ₁		
M 1	M 1.1		0.25	0.135	1.000	0.838	0.729
M 1.2			0.25	0.135	1.100	0.938	0.829
M 1.6	M 1.4		0.3	0.162	1.400	1.205	1.075
			0.35	0.189	1.600	1.373	1.221
M 2	M 1.8		0.35	0.189	1.800	1.573	1.421
			0.4	0.217	2.000	1.740	1.567
M 2.5	M 2.2		0.45	0.244	2.200	1.908	1.713
			0.45	0.244	2.500	2.208	2.013
M 3	M 3.5		0.5	0.271	3.000	2.675	2.459
M 4			0.6	0.325	3.500	3.110	2.850
M 5	M 4.5		0.7	0.379	4.000	3.545	3.242
			0.75	0.406	4.500	4.013	3.688
M 6			0.8	0.433	5.000	4.480	4.134
			1	0.541	6.000	5.350	4.917
M 8	M 7		1	0.541	7.000	6.350	5.917
			1.25	0.677	8.000	7.188	6.647
M 10	M 9		1.25	0.677	9.000	8.188	7.647
			1.5	0.812	10.000	9.026	8.376
M 12	M 11		1.5	0.812	11.000	10.026	9.376
			1.75	0.947	12.000	10.863	10.106
M 16	M 14		2	1.083	14.000	12.701	11.835
			2	1.083	16.000	14.701	13.835
M 20	M 18		2.5	1.353	18.000	16.376	15.294
			2.5	1.353	20.000	18.376	17.294
M 24	M 22		2.5	1.353	22.000	20.376	19.294
			3	1.624	24.000	22.051	20.752
M 30	M 27		3	1.624	27.000	25.051	23.752
			3.5	1.894	30.000	27.727	26.211
M 36	M 33		3.5	1.894	33.000	30.727	29.211
			4	2.165	36.000	33.402	31.670
M 42	M 39		4	2.165	39.000	36.402	34.670
			4.5	2.436	42.000	39.077	37.129
M 48	M 45		4.5	2.436	45.000	42.077	40.129
			5	2.706	48.000	44.752	42.587
M 56	M 52		5	2.706	52.000	48.752	46.587
			5.5	2.977	56.000	52.428	50.046
M 64	M 60		5.5	2.977	60.000	56.428	54.046
			6	3.248	64.000	60.103	57.505
	M 68		6	3.248	68.000	64.103	61.505

*以第1栏为优先进行选择, 并根据需要按照第2栏、第3栏的顺序进行选择。