

常见金属（如碳钢，合金钢等）的硬度换算表

| 洛氏硬度 | | | | 表面洛氏硬度 | | | 维氏 | 布氏 | 肖氏 |
|-------|--------|--------|--------|--------|-------|-------|-------|---------|------|
| HRA | HRB | HRC | HRD | 15N | 30N | 45N | HV | HB | HS |
| 60kgf | 100kgf | 150kgf | 100kgf | 15kgf | 30kgf | 45kgf | 50kgf | 3000kgf | JIS |
| 85.6 | | 68 | 76.9 | 93.2 | 84.4 | 75.4 | 940 | | 97.6 |
| 85.3 | | 67.5 | 76.5 | 93 | 84 | 74.3 | 920 | | 96.4 |
| 85 | | 67 | 76.1 | 92.9 | 83.6 | 74.2 | 900 | | 95.2 |
| 84.7 | | 66.5 | 75.7 | 92.7 | 83.1 | 73.6 | 880 | | 94 |
| 84.4 | | 65.9 | 75.3 | 92.5 | 82.7 | 73.1 | 860 | | 92.8 |
| 84.1 | | 65.3 | 74.8 | 92.3 | 82.2 | 72.2 | 840 | | 91.5 |
| 83.8 | | 64.7 | 74.3 | 92.1 | 81.7 | 71.8 | 820 | | 90.2 |
| 83.4 | | 64 | 73.8 | 91.8 | 81.1 | 71 | 800 | | 88.9 |
| 83 | | 63.3 | 73.3 | 91.5 | 80.4 | 70.2 | 780 | | 87.5 |
| 82.6 | | 62.5 | 72.6 | 91.2 | 79.7 | 69.4 | 760 | | 86.2 |
| 82.2 | | 61.8 | 72.1 | 91 | 79.1 | 68.6 | 740 | | 84.8 |
| 81.8 | | 61 | 71.5 | 90.7 | 78.4 | 67.7 | 720 | | 83.3 |
| 81.3 | | 60.1 | 70.8 | 90.3 | 77.6 | 66.7 | 700 | | 81.8 |
| 81.1 | | 59.7 | 70.5 | 90.1 | 77.2 | 66.2 | 690 | | 81.1 |
| 80.8 | | 59.2 | 70.1 | 89.8 | 76.8 | 65.7 | 680 | | 80.3 |
| 80.6 | | 58.8 | 69.8 | 89.7 | 76.4 | 65.3 | 670 | | 79.6 |
| 80.3 | | 58.3 | 69.4 | 89.5 | 75.9 | 64.7 | 660 | | 78.8 |
| 80 | | 57.8 | 69 | 89.2 | 75.5 | 64.1 | 650 | | 78 |
| 79.8 | | 57.3 | 68.7 | 89 | 75.1 | 63.5 | 640 | | 77.2 |
| 79.5 | | 56.8 | 68.3 | 88.8 | 74.6 | 63 | 630 | | 76.4 |
| 79.2 | | 56.3 | 67.9 | 88.5 | 74.2 | 62.4 | 620 | | 75.6 |
| 78.9 | | 55.7 | 67.5 | 88.2 | 73.6 | 61.7 | 610 | | 74.7 |
| 78.6 | | 55.2 | 67 | 88 | 73.2 | 61.2 | 600 | | 73.9 |
| 78.4 | | 54.7 | 66.7 | 87.8 | 72.7 | 60.5 | 590 | | 73.1 |
| 78 | | 54.1 | 66.2 | 87.5 | 72.1 | 59.9 | 580 | | 72.2 |
| 77.8 | | 53.6 | 65.8 | 87.2 | 71.7 | 59.3 | 570 | | 71.3 |
| 77.4 | | 53 | 65.4 | 86.9 | 71.2 | 58.6 | 560 | | 70.4 |
| 77 | | 52.3 | 64.8 | 86.6 | 70.5 | 57.8 | 550 | 505 | 69.6 |
| 76.7 | | 51.7 | 64.4 | 86.3 | 70 | 57 | 540 | 496 | 68.7 |
| 76.4 | | 51.1 | 63.9 | 86 | 69.5 | 56.2 | 530 | 488 | 67.7 |
| 76.1 | | 50.5 | 63.5 | 85.7 | 69 | 55.6 | 520 | 480 | 66.8 |
| 75.7 | | 49.8 | 62.9 | 85.4 | 68.3 | 54.7 | 510 | 473 | 65.9 |
| 75.3 | | 49.1 | 62.2 | 85 | 67.7 | 53.9 | 500 | 465 | 64.9 |
| 74.9 | | 48.4 | 61.6 | 84.7 | 67.1 | 53.1 | 490 | 456 | 64 |
| 74.5 | | 47.7 | 61.3 | 84.3 | 66.4 | 52.2 | 480 | 448 | 63 |
| 74.1 | | 46.9 | 60.7 | 83.9 | 65.7 | 51.3 | 470 | 441 | 62 |
| 73.6 | | 46.1 | 60.1 | 83.6 | 64.9 | 50.4 | 460 | 433 | 61 |
| 73.3 | | 45.3 | 59.4 | 83.2 | 64.3 | 49.4 | 450 | 425 | 60 |
| 72.8 | | 44.5 | 58.8 | 82.8 | 63.5 | 48.4 | 440 | 415 | 59 |
| 72.3 | | 43.6 | 58.2 | 82.3 | 62.7 | 47.4 | 430 | 405 | 58 |
| 71.8 | | 42.7 | 57.5 | 81.8 | 61.9 | 46.4 | 420 | 397 | 56.9 |
| 71.4 | | 41.8 | 56.8 | 81.4 | 61.1 | 45.3 | 410 | 388 | 55.9 |

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|------|-------|------|------|------|------|------|-----|-----|------|
| 70.8 | | 40.8 | 65 | 81 | 60.2 | 44.1 | 400 | 379 | 54.8 |
| 70.3 | | 39.8 | 55.2 | 80.3 | 59.3 | 42.9 | 390 | 369 | 53.7 |
| 69.8 | 110 | 38.8 | 54.4 | 79.8 | 58.4 | 41.7 | 380 | 360 | 52.6 |
| 69.2 | | 37.7 | 53.6 | 79.2 | 57.4 | 40.4 | 370 | 350 | 51.5 |
| 68.7 | 109 | 36.6 | 52.8 | 78.6 | 56.4 | 39.1 | 360 | 341 | 50.4 |
| 68.1 | | 35.5 | 51.9 | 78 | 55.4 | 37.8 | 350 | 331 | 49.3 |
| 67.6 | 108 | 34.4 | 51.1 | 77.4 | 54.4 | 36.5 | 340 | 322 | 48.1 |
| 67 | | 33.3 | 50.2 | 76.8 | 53.6 | 35.2 | 330 | 313 | 47 |
| 66.4 | 107 | 32.2 | 49.4 | 76.2 | 52.3 | 33.9 | 320 | 303 | 45.8 |
| 65.8 | | 31.6 | 48.4 | 75.8 | 51.8 | 32.8 | 310 | 294 | 44.6 |
| 65.2 | 105.5 | 29.8 | 47.5 | 74.9 | 50.2 | 31.1 | 300 | 284 | 43.4 |
| 64.8 | | 29.2 | 47.1 | 74.6 | 49.7 | 30.4 | 295 | 280 | 42.8 |
| 64.5 | 104.5 | 28.5 | 46.5 | 74.2 | 49 | 29.5 | 290 | 275 | 42.2 |
| 64.2 | | 27.8 | 46 | 73.8 | 48.4 | 28.7 | 285 | 270 | 41.6 |
| 63.8 | 103.5 | 27.1 | 45.3 | 73.4 | 47.8 | 27.9 | 280 | 265 | 40.9 |
| 63.5 | | 26.4 | 44.9 | 73 | 47.2 | 27.1 | 275 | 261 | 40.3 |
| 63.1 | 102 | 25.6 | 44.3 | 72.6 | 46.4 | 26.2 | 270 | 256 | 39.7 |
| 62.7 | | 24.8 | 43.7 | 72.1 | 45.7 | 25.2 | 265 | 252 | 39 |
| 62.4 | 101 | 24 | 43.1 | 71.6 | 45 | 24.3 | 260 | 247 | 38.4 |
| 62 | | 23.1 | 42.2 | 71.1 | 44.2 | 23.2 | 255 | 243 | 37.8 |
| 61.6 | 99.5 | 22.2 | 41.7 | 70.6 | 43.4 | 22.2 | 250 | 238 | 37.2 |
| 61.2 | | 21.3 | 41.1 | 70.1 | 42.5 | 21.1 | 245 | 233 | 36.5 |
| 60.7 | 98.1 | 20.3 | 40.3 | 69.6 | 41.7 | 19.9 | 240 | 228 | 35.9 |
| | 96.7 | 18 | | | | | 230 | 219 | 34.1 |
| | 95 | 15.7 | | | | | 220 | 209 | 33.2 |
| | 93.4 | 13.4 | | | | | 210 | 200 | 31.8 |
| | 91.5 | 11 | | | | | 200 | 190 | 30.4 |
| | 89.5 | 8.5 | | | | | 190 | 181 | 29 |
| | 87.1 | 6 | | | | | 180 | 171 | 27.7 |
| | 85 | 3 | | | | | 170 | 162 | 26.5 |
| | 81.7 | 0 | | | | | 160 | 152 | 25 |
| | 78.7 | | | | | | 150 | 143 | 23.7 |
| | 78 | | | | | | 140 | 133 | 22.1 |
| | 71.2 | | | | | | 130 | 124 | 20.6 |
| | 66.7 | | | | | | 120 | 114 | 19.1 |
| | 62.3 | | | | | | 110 | 105 | 17.6 |
| | 56.2 | | | | | | 100 | 95 | 16.1 |

软金属（如铜 铝）的硬度换算表

| 洛氏硬度 | | 表面洛氏 | | | 维氏 |
|--------|-------|-------|-------|-------|-------|
| HRB | HRF | 15T | 30T | 45T | HV |
| 100kgf | 60kgf | 15kgf | 30kgf | 45kgf | 50kgf |
| 93.5 | 110 | 90 | 77.5 | 66 | 196 |
| | 109.5 | | | 65.5 | 194 |
| 93 | | | 77 | 65 | 192 |
| 92.5 | 109 | | 76.5 | 64.5 | 190 |
| 92 | | 89.5 | | 64 | 188 |
| 91.5 | 108.5 | | 76 | 63.5 | 186 |
| 91 | | | 75.5 | 63 | 184 |
| 90.5 | 108 | 89 | | 62.5 | 182 |
| 90 | 107.5 | | 75 | 62 | 180 |
| 89 | | | 74.5 | 61.5 | 178 |
| 88.5 | 107 | | | 61 | 176 |
| 88 | | 88.5 | 74 | 60.5 | 174 |
| 87.5 | 106.5 | | 73.5 | 60 | 172 |
| 87 | | | | 59.5 | 170 |
| 86 | 106 | 88 | 73 | 59 | 168 |
| 85.5 | | | 72.5 | 58.5 | 166 |
| 85 | 105.5 | | 72 | 58 | 164 |
| 84 | 105 | 87.5 | | 57.5 | 162 |
| 83.5 | | | 71.5 | 56.7 | 160 |
| 83 | 104.5 | | 71 | 56 | 158 |
| 82 | 104 | 87 | 70.5 | 55.5 | 156 |
| 81.5 | 103.5 | | 70 | 54.5 | 154 |
| 80.5 | 103 | | | 54 | 152 |
| 80 | | 86.5 | 69.5 | 53.5 | 150 |
| 79 | 102.5 | | 69 | 53 | 148 |
| 78 | 102 | | 68.5 | 52.5 | 146 |
| 77.5 | 101.5 | 86 | 68 | 51.5 | 144 |
| 77 | 101 | | 67.5 | 51 | 142 |
| 76 | 100.5 | 85.5 | 67 | 50 | 140 |
| 75 | 100 | | 66.5 | 49 | 138 |
| 74.5 | 99.5 | 85 | 66 | 48 | 136 |
| 73.5 | 99 | | 65.5 | 47.5 | 134 |
| 73 | 98.5 | 84.5 | 65 | 46.5 | 132 |
| 72 | 98 | 84 | 64.5 | 45.5 | 130 |
| 71 | 97.5 | | 63.5 | 45 | 128 |
| 70 | 97 | 83.5 | 63 | 44 | 126 |
| 69 | 96.5 | | 62.5 | 43 | 124 |
| 68 | 96 | 83 | 62 | 42 | 122 |
| 67 | 95.5 | | 61 | 41 | 120 |
| 66 | 95 | 82.5 | 60.5 | 40 | 118 |

| | | | | | |
|------|------|------|------|------|-----|
| 65 | 94.5 | 82 | 60 | 39 | 116 |
| 64 | 94 | 81.5 | 59.5 | 38 | 114 |
| 63 | 93 | 81 | 58.5 | 37 | 112 |
| 62 | 92.6 | 80.5 | 58 | 35.5 | 110 |
| 61 | 92 | | 57 | 34.5 | 108 |
| 59.5 | 91.2 | 80 | 56 | 33 | 106 |
| 58 | 90.5 | 79.5 | 55 | 32 | 104 |
| 57 | 89.8 | 79 | 54.5 | 30.5 | 102 |
| 56 | 89 | 78.5 | 53.5 | 29.5 | 100 |
| 54 | 88 | 78 | 52.5 | 28 | 98 |
| 53 | 87.2 | 77.5 | 51.5 | 26.5 | 96 |
| 61.6 | 86.6 | 77 | 50.5 | 24.5 | 94 |
| 49.5 | 85.4 | 76.5 | 49 | 23 | 92 |
| 47.5 | 84.4 | 75.5 | 48 | 21 | 90 |
| 46 | 83.5 | 75 | 47 | 19 | 88 |
| 44 | 82.3 | 74.5 | 45.5 | 17 | 86 |
| 42 | 81.2 | 73.5 | 44 | 14.5 | 84 |
| 40 | 80 | 73 | 43 | 12.5 | 82 |
| 37.5 | 78.6 | 72 | 41 | 10 | 80 |
| 35 | 77.4 | 71.5 | 39.5 | 7.5 | 78 |
| 32.5 | 76 | 70.5 | 38 | 4.5 | 76 |
| 30 | 74.8 | 70 | 36 | 1 | 74 |
| 27.5 | 73.2 | 69 | 34 | | 72 |
| 24.5 | 71.6 | 68 | 32 | | 70 |
| 21.5 | 70 | 67 | 30 | | 68 |
| 18.5 | 68.5 | 66 | 28 | | 66 |
| 15.5 | 66.8 | 65 | 25.5 | | 64 |
| 12.5 | 65 | 63.5 | 23 | | 62 |
| 10 | 63 | 62.5 | 20.5 | | 60 |
| | 61 | 61 | 18 | | 58 |
| | 58.8 | 60 | 15 | | 56 |
| | 56.5 | 58.5 | 12 | | 54 |
| | 53.5 | 57 | | | 52 |
| | 50.5 | 55.5 | | | 50 |
| | 49 | 54.5 | | | 49 |
| | 47 | 53.5 | | | 48 |
| | 45 | | | | 47 |
| | 43 | | | | 46 |
| | 40 | | | | 45 |