



# Repair & Maintenance

Hardness conversion table

With this conversion table you can determine the approximate hardness of deposit weld metal. Please note that conversion tables must be regarded only as an estimate of comparative values.

Rm = tensile strength (MPa)

HV = Vickers hardness

HB = Brinell hardness

HRc = Rockwell hardness

| Rm  | HV  | HB  | HRc | Rm   | HV  | HB  | HRc | Rm   | HV  | HB | HRc |
|-----|-----|-----|-----|------|-----|-----|-----|------|-----|----|-----|
| 200 | 63  | 60  | -   | 1000 | 311 | 296 | ~31 | 1800 | 547 | -  | ~52 |
| 220 | 69  | 66  | -   | 1020 | 317 | 301 | 32  | 1820 | 553 | -  | -   |
| 240 | 75  | 71  | -   | 1040 | 323 | 307 | -   | 1840 | 559 | -  | -   |
| 260 | 82  | 78  | -   | 1060 | 330 | 314 | ~33 | 1860 | 564 | -  | ~53 |
| 280 | 88  | 84  | -   | 1080 | 367 | 349 | 34  | 1880 | 570 | -  | -   |
| 300 | 94  | 89  | -   | 1100 | 342 | 325 | -   | 1900 | 575 | -  | -   |
| 320 | 100 | 95  | -   | 1120 | 349 | 332 | ~35 | 1920 | 580 | -  | ~54 |
| 340 | 107 | 102 | -   | 1140 | 355 | 337 | 36  | 1940 | 586 | -  | -   |
| 360 | 113 | 107 | -   | 1160 | 361 | 343 | -   | 1960 | 591 | -  | -   |
| 380 | 119 | 113 | -   | 1180 | 367 | 349 | ~37 | 1980 | 596 | -  | 55  |
| 400 | 125 | 119 | -   | 1200 | 373 | 354 | 38  | 2000 | 602 | -  | -   |
| 420 | 132 | 125 | -   | 1220 | 380 | 361 | -   | 2020 | 607 | -  | -   |
| 440 | 138 | 131 | -   | 1240 | 385 | 366 | ~39 | 2040 | 613 | -  | -   |
| 460 | 143 | 136 | -   | 1260 | 392 | 371 | 40  | 2060 | 618 | -  | ~56 |
| 480 | 150 | 143 | -   | 1280 | 397 | 377 | -   | 2080 | 623 | -  | -   |
| 500 | 157 | 149 | -   | 1300 | 403 | 383 | 41  | 2100 | 629 | -  | -   |
| 520 | 163 | 155 | -   | 1320 | 410 | 390 | -   | 2120 | 634 | -  | -   |
| 540 | 168 | 160 | -   | 1340 | 417 | 396 | ~42 | 2140 | 639 | -  | 57  |
| 560 | 175 | 166 | -   | 1360 | 423 | 402 | 43  | 2160 | 644 | -  | -   |
| 580 | 181 | 172 | -   | 1380 | 430 | 409 | -   | 2180 | 650 | -  | -   |
| 600 | 187 | 178 | -   | 1400 | 434 | 413 | 44  | 2200 | 655 | -  | 58  |
| 620 | 193 | 184 | -   | 1420 | 440 | 418 | -   | -    | 675 | -  | 59  |
| 640 | 200 | 190 | -   | 1440 | 446 | 424 | ~45 | -    | 698 | -  | 60  |
| 660 | 205 | 195 | -   | 1460 | 452 | 429 | -   | -    | 720 | -  | 61  |
| 680 | 212 | 201 | -   | 1480 | 458 | 435 | 46  | -    | 745 | -  | 62  |
| 700 | 219 | 208 | -   | 1500 | 464 | 441 | -   | -    | 773 | -  | 63  |
| 720 | 225 | 214 | -   | 1520 | 470 | 447 | -   | -    | 800 | -  | 64  |
| 740 | 230 | 219 | -   | 1540 | 473 | 449 | ~47 | -    | 829 | -  | 65  |
| 760 | 237 | 225 | -   | 1560 | 481 | -   | -   | -    | 864 | -  | 66  |
| 780 | 243 | 231 | 21  | 1580 | 486 | -   | ~48 | -    | 900 | -  | 67  |
| 800 | 250 | 238 | 22  | 1600 | 491 | -   | -   | -    | 940 | -  | 68  |
| 820 | 255 | 242 | 23  | 1620 | 497 | -   | 49  |      |     |    |     |
| 840 | 262 | 249 | ~24 | 1640 | 503 | -   | -   |      |     |    |     |
| 860 | 268 | 255 | 25  | 1660 | 509 | -   | -   |      |     |    |     |
| 880 | 275 | 261 | ~26 | 1680 | 514 | -   | 50  |      |     |    |     |
| 900 | 280 | 266 | 27  | 1700 | 520 | -   | -   |      |     |    |     |
| 920 | 287 | 273 | 28  | 1720 | 525 | -   | -   |      |     |    |     |
| 940 | 293 | 278 | 29  | 1740 | 527 | -   | ~51 |      |     |    |     |
| 960 | 299 | 284 | -   | 1760 | 536 | -   | -   |      |     |    |     |
| 980 | 305 | 290 | ~30 | 1780 | 541 | -   | -   |      |     |    |     |