



Hardness Conversions

| VPN | Rockwell Scales | | Brinell | U.T.S. | |
|-----|-----------------|----|---------|--------|------------|
| | DPH HV/10 | B | | C | BHN 3000KG |
| 746 | | 62 | 688 | | |
| 720 | | 61 | 670 | | |
| 697 | | 60 | 654 | 320 | 2206 |
| 674 | | 59 | 634 | 310 | 2137 |
| 653 | | 58 | 615 | 300 | 2069 |
| 633 | | 57 | 595 | 290 | 2000 |
| 613 | | 56 | 577 | 282 | 1944 |
| 595 | 120 | 55 | 560 | 274 | 1889 |
| 577 | 120 | 54 | 543 | 266 | 1834 |
| 560 | 119 | 53 | 523 | 257 | 1772 |
| 544 | 119 | 52 | 512 | 245 | 1689 |
| 528 | 118 | 51 | 496 | 239 | 1648 |
| 513 | 117 | 50 | 481 | 233 | 1607 |
| 498 | 117 | 49 | 469 | 227 | 1565 |
| 484 | 116 | 48 | 455 | 221 | 1524 |
| 471 | 116 | 47 | 443 | 217 | 1496 |
| 458 | 115 | 46 | 432 | 212 | 1462 |
| 446 | 115 | 45 | 421 | 206 | 1420 |
| 434 | 114 | 44 | 409 | 200 | 1379 |
| 423 | 113 | 43 | 400 | 196 | 1351 |
| 412 | 113 | 42 | 390 | 191 | 1317 |
| 402 | 112 | 41 | 381 | 187 | 1289 |
| 392 | 112 | 40 | 371 | 182 | 1255 |
| 382 | 111 | 39 | 362 | 177 | 1220 |
| 372 | 110 | 38 | 353 | 173 | 1193 |
| 363 | 110 | 37 | 344 | 169 | 1165 |
| 354 | 109 | 36 | 336 | 165 | 1138 |
| 345 | 109 | 35 | 327 | 160 | 1103 |
| 336 | 108 | 34 | 319 | 156 | 1076 |
| 327 | 108 | 33 | 311 | 152 | 1048 |
| 318 | 107 | 32 | 301 | 147 | 1014 |
| 310 | 106 | 31 | 294 | 144 | 993 |
| 302 | 105 | 30 | 286 | 140 | 965 |
| 294 | 104 | 29 | 279 | 137 | 945 |
| 286 | 104 | 28 | 271 | 133 | 917 |
| 279 | 103 | 27 | 264 | 129 | 889 |
| 272 | 103 | 26 | 258 | 126 | 869 |

| VPN | Rockwell Scales | | Brinell | U.T.S. | |
|-----|-----------------|----|---------|--------|------------|
| | DPH HV/10 | B | | C | BHN 3000KG |
| 266 | 102 | 25 | 253 | 124 | 855 |
| 260 | 101 | 24 | 247 | 121 | 834 |
| 254 | 100 | 23 | 240 | 118 | 814 |
| 248 | 99 | 22 | 234 | 115 | 793 |
| 243 | 98 | 21 | 228 | 112 | 772 |
| 238 | 97 | 20 | 222 | 109 | 752 |
| 234 | 97 | 19 | 218 | 107 | 738 |
| 230 | 96 | 18 | 214 | 106 | 731 |
| 226 | 96 | 17 | 210 | 104 | 717 |
| 222 | 95 | 16 | 208 | 102 | 703 |
| 217 | 95 | 15 | 205 | 100 | 690 |
| 213 | 94 | 14 | 203 | 99 | 683 |
| 208 | 93 | 13 | 200 | 98 | 676 |
| 204 | 92 | 12 | 195 | 96 | 662 |
| 200 | 92 | 11 | 193 | 95 | 655 |
| 196 | 91 | 10 | 190 | 93 | 641 |
| 192 | 90 | 9 | 185 | 91 | 627 |
| 188 | 89 | 8 | 180 | 88 | 607 |
| 184 | 88 | 7 | 176 | 86 | 593 |
| 180 | 87 | 6 | 172 | 84 | 579 |
| 176 | 86 | 5 | 169 | 83 | 572 |
| 172 | 85 | 4 | 165 | 81 | 558 |
| 168 | 84 | 3 | 162 | 79 | 545 |
| 164 | 83 | 2 | 159 | 78 | 538 |
| 160 | 82 | 1 | 156 | 76 | 524 |
| 156 | 81 | 0 | 153 | 75 | 517 |
| 152 | 80 | | 150 | 73 | 503 |
| 148 | 79 | | 147 | | |
| 144 | 78 | | 144 | | |
| 141 | 77 | | 141 | | |
| 139 | 76 | | 139 | | |
| 137 | 75 | | 137 | | |
| 135 | 74 | | 135 | | |
| 132 | 73 | | 132 | | |
| 130 | 72 | | 130 | | |
| 127 | 71 | | 127 | | |
| 125 | 70 | | 125 | | |

Approx. Weight Calculations Formulae

| | | |
|-----------------------------|-----------------------------|---------------|
| Rounds (inches) | $\text{Dia}^2 \times 1.211$ | kgs per foot |
| Rounds (inches) | $\text{Dia}^2 \times 3.973$ | kgs per metre |
| Rounds (millimetres) | $\text{Dia}^2 \div 533$ | kgs per foot |
| Rounds (millimetres) | $\text{Dia}^2 \div 162$ | kgs per metre |
| Hexagons (inches) | $A/F^2 \times 1.337$ | kgs per foot |
| Hexagons (inches) | $A/F^2 \times 4.387$ | kgs per metre |
| Hexagons (millimetres) | $A/F^2 \div 482.6$ | kgs per foot |
| Hexagons (millimetres) | $A/F^2 \div 147.1$ | kgs per metre |
| Squares/Flats (inches) | $W \times T \times 1.542$ | kgs per foot |
| Squares/Flats (inches) | $W \times T \times 5.059$ | kgs per metre |
| Squares/Flats (millimetres) | $W \times T \div 418$ | kgs per foot |
| Squares/Flats (millimetres) | $W \times T \div 127$ | kgs per metre |