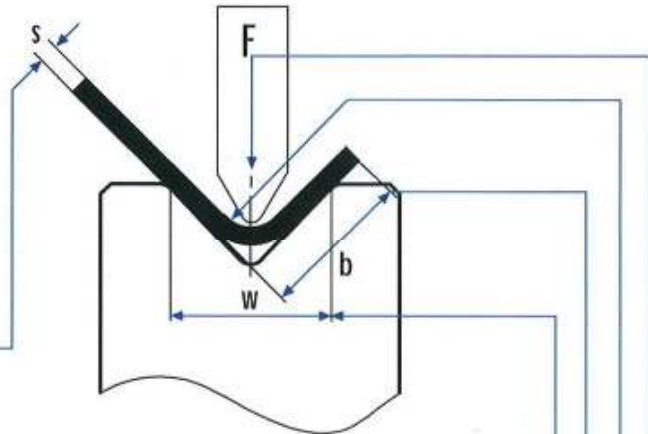


Calculating the press force



Tonnage based for 90° air bending

Material: 400 N/mm², Steel



| s | 6 | 8 | 10 | 12 | 16 | 20 | 24 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | w | b | Ri |
|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|-----|------|-----|-----|-----|---|----|
| | 4.5 | 6 | 7.5 | 9 | 12 | 15 | 18 | 22.5 | 30 | 37.5 | 45 | 52.5 | 60 | 67.5 | 75 | 90 | | | |
| | 1 | 1.3 | 1.6 | 1.9 | 2.6 | 3.2 | 3.8 | 4.8 | 6.4 | 8 | 9.6 | 11 | 13 | 14 | 16 | 19 | | | |
| 0.75 | 52 | 39 | 31 | 26 | | | | | | | | | | | | | | | |
| 1 | 93 | 70 | 56 | 47 | 35 | | | | | | | | | | | | | | |
| 1.25 | 145 | 109 | 87 | 73 | 55 | 44 | | | | | | | | | | | | | |
| 1.5 | 209 | 157 | 126 | 105 | 79 | 63 | | | | | | | | | | | | | |
| 1.75 | | 214 | 171 | 143 | 107 | 86 | 71 | | | | | | | | | | | | |
| 2 | | | 223 | 186 | 140 | 112 | 93 | | | | | | | | | | | | |
| 2.5 | | | | 291 | 218 | 175 | 145 | 116 | | | | | | | | | | | |
| 3 | | | | | 314 | 251 | 209 | 168 | 126 | | | | | | | | | | |
| 3.5 | | | | | 428 | 342 | 285 | 228 | 171 | 137 | | | | | | | | | |
| 4 | | | | | | 447 | 372 | 298 | 223 | 179 | 149 | | | | | | | | |
| 4.5 | | | | | | 566 | 471 | 377 | 283 | 226 | 189 | 162 | | | | | | | |
| 5 | | | | | | | | 466 | 349 | 279 | 233 | 200 | 175 | | | | | | |
| 6 | | | | | | | | 670 | 503 | 402 | 335 | 287 | 251 | 223 | | | | | |
| 7 | | | | | | | | | 684 | 547 | 456 | 391 | 342 | 304 | 274 | | | | |
| 8 | | | | | | | | | | 715 | 596 | 511 | 447 | 397 | 358 | 298 | | | |
| 10 | | | | | | | | | | | | 798 | 698 | 621 | 559 | 466 | | | |
| 12 | | | | | | | | | | | | | | 1005 | 894 | 804 | 670 | | |

F in kN

s, w, b, Ri in mm

■ = optimum die

Material: 700 N/mm², NIRO

| s | 6 | 8 | 10 | 12 | 16 | 20 | 24 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | w | b | Ri |
|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|------|------|------|------|------|------|---|----|
| | 4.5 | 6 | 7.5 | 9 | 12 | 15 | 18 | 22.5 | 30 | 37.5 | 45 | 52.5 | 60 | 67.5 | 75 | 90 | | | |
| | 1 | 1.3 | 1.6 | 1.9 | 2.6 | 3.2 | 3.8 | 4.8 | 6.4 | 8 | 9.6 | 11 | 13 | 14 | 16 | 19 | | | |
| 0.75 | 87 | 65 | 52 | 44 | | | | | | | | | | | | | | | |
| 1 | 155 | 116 | 93 | 78 | 58 | | | | | | | | | | | | | | |
| 1.25 | 242 | 182 | 145 | 121 | 91 | 73 | | | | | | | | | | | | | |
| 1.5 | 349 | 262 | 209 | 175 | 131 | 105 | | | | | | | | | | | | | |
| 1.75 | | 356 | 285 | 238 | 178 | 143 | 119 | | | | | | | | | | | | |
| 2 | | | 372 | 310 | 233 | 186 | 155 | | | | | | | | | | | | |
| 2.5 | | | | 485 | 364 | 291 | 242 | 194 | | | | | | | | | | | |
| 3 | | | | | 524 | 419 | 349 | 279 | 209 | | | | | | | | | | |
| 3.5 | | | | | | 570 | 475 | 380 | 285 | 228 | | | | | | | | | |
| 4 | | | | | | | 621 | 497 | 372 | 298 | 248 | | | | | | | | |
| 4.5 | | | | | | | | 628 | 471 | 377 | 314 | 269 | | | | | | | |
| 5 | | | | | | | | | 582 | 466 | 388 | 333 | 291 | | | | | | |
| 6 | | | | | | | | | 838 | 670 | 559 | 479 | 419 | | | | | | |
| 7 | | | | | | | | | | 912 | 760 | 652 | 570 | 507 | | | | | |
| 8 | | | | | | | | | | | 1192 | 993 | 851 | 745 | 662 | 596 | | | |
| 10 | | | | | | | | | | | | 1330 | 1164 | 1034 | 931 | 776 | | | |
| 12 | | | | | | | | | | | | | | 1675 | 1490 | 1340 | 1118 | | |

F in kN

s, w, b, Ri in mm

■ = optimum die