



| Frezy z monolitu węglika, promieniowe, Z=2<br>(Obróbka kształtowa) |           |           |           |           | Stale <800 N/mm <sup>2</sup><br>(Vc = 350 m/min) |               |              | Stale <1000 N/mm <sup>2</sup><br>Żeliwa szare <180 HB<br>(Vc = 280 m/min) |               |              | Stale <1450 N/mm <sup>2</sup><br>(Vc = 220 m/min) |               |              |
|--------------------------------------------------------------------|-----------|-----------|-----------|-----------|--------------------------------------------------|---------------|--------------|---------------------------------------------------------------------------|---------------|--------------|---------------------------------------------------|---------------|--------------|
| Kod                                                                | D<br>[mm] | d<br>[mm] | l<br>[mm] | L<br>[mm] | n<br>[obr/min]                                   | F<br>[mm/min] | fz<br>[mm/z] | n<br>[obr/min]                                                            | F<br>[mm/min] | fz<br>[mm/z] | n<br>[obr/min]                                    | F<br>[mm/min] | fz<br>[mm/z] |
| VK45-ZK2-010                                                       | 1         | 4         | 3         | 50        | 111 408                                          | 13 592        | 0,061        | 89 127                                                                    | 9 804         | 0,055        | 70 028                                            | 7 003         | 0,050        |
| VK45-ZK2-015                                                       | 1,5       | 4         | 3         | 50        | 74 272                                           | 12 626        | 0,085        | 59 418                                                                    | 9 507         | 0,080        | 46 685                                            | 7 003         | 0,075        |
| VK45-ZK2-020                                                       | 2         | 4         | 5         | 50        | 55 704                                           | 12 812        | 0,115        | 44 563                                                                    | 9 358         | 0,105        | 35 014                                            | 6 583         | 0,094        |
| VK45-ZK2-025                                                       | 2,5       | 4         | 5         | 50        | 44 563                                           | 12 478        | 0,140        | 35 651                                                                    | 8 556         | 0,120        | 28 011                                            | 6 723         | 0,120        |
| VK45-ZK2-030                                                       | 3         | 4         | 7         | 50        | 37 136                                           | 12 255        | 0,165        | 29 709                                                                    | 9 091         | 0,153        | 23 343                                            | 6 536         | 0,140        |
| VK45-ZK2-035                                                       | 3,5       | 4         | 7         | 50        | 31 831                                           | 11 459        | 0,180        | 25 465                                                                    | 8 658         | 0,170        | 20 008                                            | 6 403         | 0,160        |
| VK45-ZK2-040                                                       | 4         | 4         | 10        | 50        | 27 852                                           | 12 199        | 0,219        | 22 282                                                                    | 8 868         | 0,199        | 17 507                                            | 6 268         | 0,179        |
| VK45-ZK2-040-L75                                                   | 4         | 4         | 8         | 75        | 27 852                                           | 11 141        | 0,200        | 22 282                                                                    | 8 021         | 0,180        | 17 507                                            | 5 952         | 0,170        |
| VK45-ZK2-040-L100                                                  | 4         | 4         | 8         | 100       | 27 852                                           | 10 305        | 0,185        | 22 282                                                                    | 7 130         | 0,160        | 17 507                                            | 5 427         | 0,155        |
| VK45-ZK2-050                                                       | 5         | 5         | 13        | 50        | 22 282                                           | 10 740        | 0,241        | 17 825                                                                    | 7 879         | 0,221        | 14 006                                            | 5 630         | 0,201        |
| VK45-ZK2-050-L75                                                   | 5         | 5         | 10        | 75        | 22 282                                           | 9 804         | 0,220        | 17 825                                                                    | 7 130         | 0,200        | 14 006                                            | 5 042         | 0,180        |
| VK45-ZK2-050-L100                                                  | 5         | 5         | 10        | 100       | 22 282                                           | 8 913         | 0,200        | 17 825                                                                    | 6 952         | 0,195        | 14 006                                            | 4 482         | 0,160        |
| VK45-ZK2-060                                                       | 6         | 6         | 15        | 50        | 18 568                                           | 9 804         | 0,264        | 14 854                                                                    | 7 249         | 0,244        | 11 671                                            | 5 229         | 0,224        |
| VK45-ZK2-060-L75                                                   | 6         | 6         | 12        | 75        | 18 568                                           | 8 913         | 0,240        | 14 854                                                                    | 6 536         | 0,220        | 11 671                                            | 4 902         | 0,210        |
| VK45-ZK2-060-L100                                                  | 6         | 6         | 12        | 100       | 18 568                                           | 7 799         | 0,210        | 14 854                                                                    | 6 090         | 0,205        | 11 671                                            | 4 552         | 0,195        |
| VK45-ZK2-060-L150                                                  | 6         | 6         | 12        | 150       | 18 568                                           | 7 427         | 0,200        | 14 854                                                                    | 5 942         | 0,200        | 11 671                                            | 4 202         | 0,180        |
| VK45-ZK2-080                                                       | 8         | 8         | 19        | 63        | 13 926                                           | 8 885         | 0,319        | 11 141                                                                    | 6 662         | 0,299        | 8 754                                             | 4 884         | 0,279        |
| VK45-ZK2-080-L75                                                   | 8         | 8         | 20        | 60        | 13 926                                           | 7 799         | 0,280        | 11 141                                                                    | 5 793         | 0,260        | 8 754                                             | 4 464         | 0,255        |
| VK45-ZK2-080-L100                                                  | 8         | 8         | 16        | 100       | 13 926                                           | 7 242         | 0,260        | 11 141                                                                    | 5 570         | 0,250        | 8 754                                             | 4 027         | 0,230        |
| VK45-ZK2-080-L150                                                  | 8         | 8         | 16        | 150       | 13 926                                           | 6 685         | 0,240        | 11 141                                                                    | 5 125         | 0,230        | 8 754                                             | 3 676         | 0,210        |
| VK45-ZK2-100                                                       | 10        | 10        | 25        | 75        | 11 141                                           | 8 333         | 0,374        | 8 913                                                                     | 6 310         | 0,354        | 7 003                                             | 4 678         | 0,334        |
| VK45-ZK2-100-L100                                                  | 10        | 10        | 20        | 100       | 11 141                                           | 7 576         | 0,340        | 8 913                                                                     | 5 704         | 0,320        | 7 003                                             | 4 342         | 0,310        |
| VK45-ZK2-100-L150                                                  | 10        | 10        | 20        | 150       | 11 141                                           | 7 130         | 0,320        | 8 913                                                                     | 5 348         | 0,300        | 7 003                                             | 3 992         | 0,285        |
| VK45-ZK2-120                                                       | 12        | 12        | 30        | 75        | 9 284                                            | 7 761         | 0,418        | 7 427                                                                     | 5 912         | 0,398        | 5 836                                             | 4 412         | 0,378        |
| VK45-ZK2-120-L100                                                  | 12        | 12        | 24        | 100       | 9 284                                            | 7 056         | 0,380        | 7 427                                                                     | 5 348         | 0,360        | 5 836                                             | 3 968         | 0,340        |
| VK45-ZK2-120-L150                                                  | 12        | 12        | 24        | 150       | 9 284                                            | 6 685         | 0,360        | 7 427                                                                     | 5 051         | 0,340        | 5 836                                             | 3 618         | 0,310        |
| VK45-ZK2-140                                                       | 14        | 14        | 45        | 100       | 7 958                                            | 7 162         | 0,450        | 6 366                                                                     | 5 602         | 0,440        | 5 002                                             | 4 002         | 0,400        |
| VK45-ZK2-160                                                       | 16        | 16        | 45        | 100       | 6 963                                            | 6 740         | 0,484        | 5 570                                                                     | 5 169         | 0,464        | 4 377                                             | 3 887         | 0,444        |

Naddatki:

ap=0,02xD

ae=0,06xD