

**Einsatzwerte**  
**Hochvorschubbohrer VHM-TiAlNplus HPC 5xD mit IK HA (Art.-Nr.**  
**1011141 101-224)**



| Materialgruppen für<br>Schnittwerte | Festigkeit<br>[N/mm <sup>2</sup> ]     | Bezeichnung<br>nach DIN | Vc<br>[m/min]  | f [mm/U] bei Durchmesser |           |           |           |           |           |           |
|-------------------------------------|--|-------------------------|----------------|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                     |  |                         |                | 0-3                      | 3-5       | 5-8       | 8-12      | 12-16     | 16-20     |           |
| <b>1. Stähle</b>                    |  |                         |                |                          |           |           |           |           |           |           |
| 1.1                                 | Automatenstahl                         | < 900                   | 9 S 20         | 110-150                  | 0.08-0.19 | 0.19-0.26 | 0.26-0.38 | 0.38-0.45 | 0.45-0.52 | 0.52-0.58 |
| 1.2                                 | Baustahl                               | <500                    | ST 37-2        | 120-160                  | 0.08-0.19 | 0.19-0.26 | 0.26-0.38 | 0.38-0.45 | 0.45-0.52 | 0.52-0.58 |
| 1.3                                 | Baustahl                               | > 500                   | ST 60-2        | 110-150                  | 0.08-0.19 | 0.19-0.26 | 0.26-0.38 | 0.38-0.45 | 0.45-0.52 | 0.52-0.58 |
| 1.4                                 | Vergütungsstahl                        | <1000                   | 42 CrMo 4      | 100-130                  | 0.09-0.22 | 0.22-0.30 | 0.30-0.44 | 0.44-0.52 | 0.52-0.60 | 0.60-0.65 |
| 1.5                                 | Stahlguss                              | <1000                   | GS-45          | 90-125                   | 0.08-0.19 | 0.19-0.26 | 0.26-0.38 | 0.38-0.45 | 0.45-0.52 | 0.52-0.60 |
| 1.6                                 | Einsatzstahl                           | <1200                   | 16 MnCr 5      | 90-130                   | 0.08-0.19 | 0.19-0.26 | 0.26-0.38 | 0.38-0.45 | 0.45-0.52 | 0.52-0.60 |
| 1.7                                 | Edelstahl ferritisch/<br>martensitisch | <1100                   | X 10 Cr 13     |                          |           |           |           |           |           |           |
| 1.8                                 | Vergütungsstahl                        | >1000                   | 43 CrMo 4      | 50-100                   | 0.09-0.22 | 0.22-0.30 | 0.30-0.44 | 0.44-0.52 | 0.52-0.60 | 0.60-0.65 |
| 1.9                                 | Nitrierstahl                           | <1300                   | 31 CrMoV 9     | 100-130                  | 0.09-0.22 | 0.22-0.30 | 0.30-0.44 | 0.44-0.52 | 0.52-0.60 | 0.60-0.65 |
| 1.10                                | Werkzeugstahl                          | <1300                   | X 38 CrMoV 5 1 | 40-80                    | 0.06-0.15 | 0.15-0.20 | 0.20-0.35 | 0.35-0.40 | 0.40-0.46 | 0.46-0.51 |
| <b>4. Guss</b>                      |  |                         |                |                          |           |           |           |           |           |           |
| 4.1                                 | Grauguss                               | <260 HB                 | GG10           | 85-130                   | 0.20-0.32 | 0.32-0.38 | 0.38-0.55 | 0.55-0.65 | 0.65-0.70 | 0.70-0.75 |
| 4.2                                 | Sphäroguss                             | <310 HB                 | GGG 40         | 60-80                    | 0.05-0.12 | 0.12-0.16 | 0.16-0.27 | 0.27-0.35 | 0.35-0.45 | 0.45-0.50 |
| 4.3                                 | Gusseisen mit<br>Kugelgraphit          | <280 HB                 | GTW-55         | 75-115                   | 0.15-0.29 | 0.29-0.35 | 0.35-0.50 | 0.50-0.60 | 0.60-0.65 | 0.65-0.70 |

