



| ISO | Workpiece | | Surface Speed vc (m/min) | Feed rate (mm/rev) | | | | |
|-------------------------|-------------------------------------|-------------------|-----------------------------|--------------------|-------------|-------------|-------------|-------------|
| | Material | Hardness (Bhn) | | ø12 - 16 | ø17 - 23 | ø4 - 29 | ø30 - 42 | ø43 - 100 |
| P CARBON STEEL | Low Carbon Steel | 80-180 | 190 (130 - 250) | 0.04 - 0.08 | 0.04 - 0.08 | 0.04 - 0.08 | 0.04 - 0.08 | 0.04 - 0.08 |
| | High Carbon Steel | 180-280 | 140 (80 - 200) | 0.04 - 0.10 | 0.04 - 0.12 | 0.05 - 0.16 | 0.08 - 0.18 | 0.10 - 0.22 |
| P ALLOY STEEL | Low Alloy Steel | 140-260 | 130 (70 - 200) | 0.04 - 0.10 | 0.06 - 0.12 | 0.08 - 0.16 | 0.08 - 0.20 | 0.08 - 0.24 |
| | Low Alloy Steel | 50-260 | 100 (50 - 160) | 0.04 - 0.18 | 0.06 - 0.12 | 0.08 - 0.16 | 0.08 - 0.18 | 0.08 - 0.22 |
| | Low Pre-Hardened | 200-400 | 100 (50 - 150) | 0.04 - 0.10 | 0.06 - 0.12 | 0.08 - 0.16 | 0.08 - 0.18 | 0.08 - 0.22 |
| | High Pre-Hardened Steel | 220-450 | 70 (30 - 120) | 0.04 - 0.12 | 0.06 - 0.14 | 0.08 - 0.17 | 0.08 - 0.17 | 0.08 - 0.20 |
| M STAINLESS STEEL | Austenite Series | 135-275 Ni>8% | 90 (40 - 150) | 0.04 - 0.10 | 0.06 - 0.12 | 0.06 - 0.14 | 0.06 - 0.16 | 0.06 - 0.20 |
| | Ferrite Series Martensite Series | 135-275 | 100 (60 - 160) | 0.04 - 0.10 | 0.04 - 0.12 | 0.06 - 0.14 | 0.06 - 0.16 | 0.06 - 0.20 |
| K CAST IRON | Gray Cast Iron | 150-230 | 190 (150 - 250) | 0.04 - 0.10 | 0.05 - 0.14 | 0.06 - 0.16 | 0.10 - 0.22 | 0.10 - 0.26 |
| | Ductile Cast Iron | 160-260 | 150 (100 - 200) | 0.04 - 0.12 | 0.06 - 0.16 | 0.08 - 0.18 | 0.08 - 0.20 | 0.10 - 0.22 |

*For 4 x D reduce the cutting conditions by 30-40%. In interrupted cutting reduce feed by 30-50%