

Operating Guidelines

| ISO | Matl. Group No. | Material | Examples | fz Feed/Tooth (inch) | Vx Cutting Speed (SFM) | Coolant |
|----------|-----------------|--|-----------------------------|----------------------|------------------------|------------------------------------|
| P | 1-5 | Non-alloy steel | 1018, A36, 1045, A572, 1070 | .001 - .002 | 400 - 600 | No |
| | 6-9 | Low alloy steel | 4140, 4340, P20, 8620, 300M | | | |
| | 10-11 | High alloy steel | H13, A2, D2, M2, T1 | .001 - .002 | 300 - 500 | |
| M | 12-13 | Stainless Steel (ferritic & martensitic) | 410, 416, 440 | .001 - .002 | 250 - 400 | Yes |
| | 14 | Stainless Steel (austenitic) | 303, 304, 316, 15-5, 17-4 | | | May not be required at high speeds |
| K | 15-16 | Grey cast iron | CLS, 20, 30, 45 | .001 - .002 | 400 - 700 | No |
| | 17-18 | Nodular cast iron | 60-40-18, 100-70-03 | | | |
| N | 21-30 | Aluminum | 7075, 6061 | .001 - .002 | 1000 - 2500 | Yes |
| | | Copper | | .001 - .002 | 250 - 450 | No |

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases.