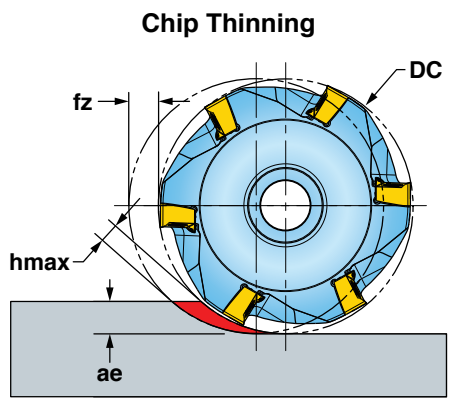


DIPOSQUAD™ 07 OPERATING GUIDELINES



* When ae is less than 25%, Chip Thinning Calculator is recommended to ensure hmax is within fz range.

| ISO | Materials | | | Vc Cutting Speed SFM | fz* Feed/Tooth (inch) | Harder Tougher | | | Coolant |
|-----|--------------------------|--|------------------------------------|----------------------------|-----------------------------|----------------------|--------|--------|------------------------------------|
| | Mat'l Group #VDI 3323 | Type | Examples | | | IN2510 | IN2505 | IN2530 | |
| P | 1 - 5 | Non-alloy Steel | 1018, A36, 1045, A572, 1070 | 400-1000 | .003-.008 | | | | No |
| | 6 - 9 | Low-alloy Steel | 4140, 4340, P20, 8620, 300M | 350-700 | | | 2 | 1 | |
| | 10 - 11 | High-alloy Steel | H13, A2, D2, M2, T1 | 300-600 | | | | | |
| M | 12 - 13 | Stainless Steel (ferritic & martensitic) | 410, 416, 440 | 350-600 | .003-.006 | | 2 | 1 | Yes |
| | 14 | Stainless Steel (austenitic) | 303, 304, 316, 15-5, 17-4 | 300-550 | | | | | May not be required at high speeds |
| K | 15 - 16 | Gray Cast Iron | CLS. 20, 30, 45 | 500-1000 | .003-.008 | 1 | 2 | | No |
| | 17 - 18 | Nodular Cast Iron | 60-40-18, 100-70-03 | 400-800 | | | | | |
| S | 31 - 35 | High-Temp Alloys | Inconel, Hastelloy, Nimonic, Monel | 65-120 | .003-.006 | | 1 | 2 | Yes |
| | 36 - 37 | Titanium Alloys | 6Al-4V, 5Al-5Mo-5V-3Cr | 85-130 | | | 2 | 1 | |

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. Additionally, DOC and WOC may need to be revised to optimize the tools performance.