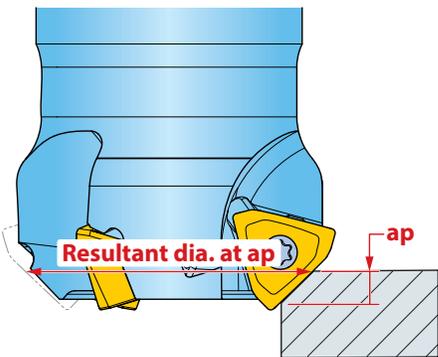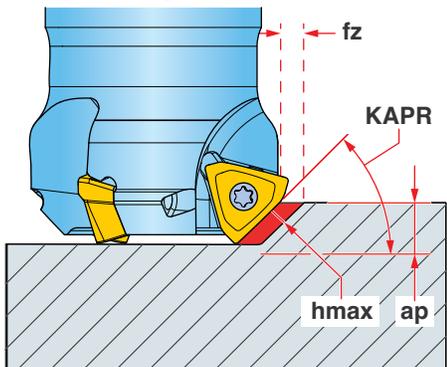## HIPOSTRIO 06  OPERATING GUIDELINES - SERIES 1K_1D

**RPM Calculation**



Calculation is to be made using the resultant diameter at ap.

**Chip Thinning**



Chip Thinning calculator is recommended to ensure hmax falls within fz range

| ISO | Mat'l Group #VDI 3323 | Type | Examples | Vc Cutting Speed SFM | fz* Feed/Tooth (inch) | DLC IN3310 | IN2504 | IN2540 | IN10K | IN2510 | IN2505 | IN2530 IN4030 | IN2036 | Coolant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 1 thru 5 | Non-alloy Steel | 1018, A36, 1045, A572, 1070 | 400-1000 | .003-.006 | | | 3 | | | 2 | 1 | | No |
| | 6 thru 9 | Low-alloy Steel | 4140, 4340, P20, 8620, 300M | 350-700 | | | | | | | | | | |
| | 10, 11 | High-alloy Steel | H13, A2, D2, M2, T1 | 300-600 | | | | | | | | | | |
| M | 12 thru 13 | Stainless Steel (Ferritic & Martensitic) | 410, 416, 440 | 350-600 | .003-.005 | | | 4 | | | 3 | 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 thru 16 | Gray Cast Iron | CLS. 20, 30, 45 | 500-1000 | .003-.006 | | | 2 | 1 | | 3 | | | No |
| | 17 thru 20 | Nodular Cast Iron | 60-40-18, 100-70-03 | 400-800 | | | | | | | | | | |
| N | 21 - 30 | Aluminum | 7075, 6061 | 1000-3000 | .003-.007 | | | | 1 | | | | | Yes |
| | | | | 1500-4500 | | | 1 | | | | | | | |
| S | 31 thru 35 | High-Temp Alloys | Inconel, Hastelloy, Nimonic, Monel | 65-200 | .003-.005 | | | | | | 2 | 3 | 1 | Yes |
| | 36 thru 37 | Titanium Alloys | 6Al-4V, 5Al-5Mo-5V-3Cr | 85-200 | | | | | | | 3 | 2 | 1 | |
| H | 38 thru 39 | Hardened Steel >48 | A2, O1, D2 | 130-250 | .002-.004 | | | | | 1 | 2 | | | 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. Additionally, DOC and WOC may need to be revised to optimize the tools performance.