

20,000 RPM vs. 40,000 RPM

Machine

VIBRA-FREE super high-speed machine center

- Cutting feed-rate 472 in/min
- Advanced FANUC 16i-MA CNC with High Precision Contour Control (HPCC)
- Direct drive (motorized) Super-High-Speed spindle (42000RPM)
- Vibration-free rigid NT bridge structure
- Compact ATC with 18 tools
- Graphite & direct hard milling (Up to HRC62) capability
-

Case #1 20000 RPM



Case #2 30000RPM



Case #3 40000RPM



TOOLPATH	CUTTER	COATING	RPM			IPM	TIME (min)
			Case #1	Case #2	Case #3		
Rough	4mm Ball EM	TIALN	20000	30000	40000	315	24.0
Finish	4mm Ball EM		20000	30000	40000	60	31.0
Total time							55.0

Summary

Superior surface finish based on higher RPM. Reducing chip load, not feed-rate.