

Graphite & Steel Cutting Demo

Machine

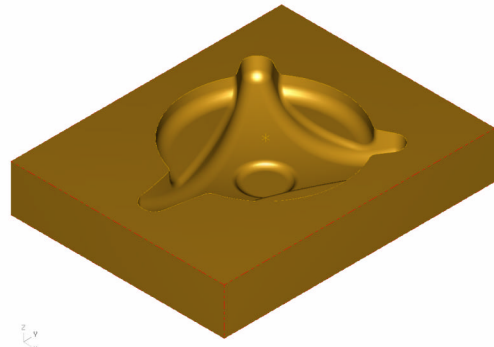
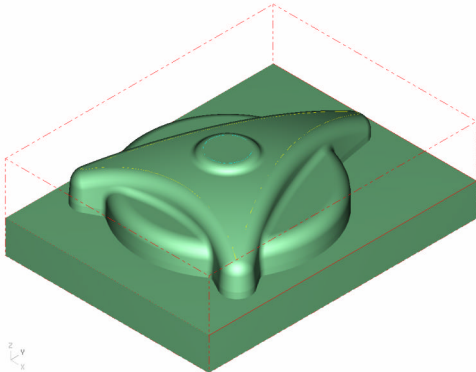
VIBRA-FREE high-speed machine center



- 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 bridge type structure
- Compact ATC with 18 tools
- Graphite milling & harden tool steel milling (Up to HRC62) capability

Part (Blank size: 3.75" x 3." x 1.")

Shower knob core and cavity



Specifications

Number of Sub-programs: 9 (G58)
Number of cutting tool: 4
Stock material: Graphite, P20 (35RHC), Stainless 420 (34RHC), Harden stainless 420 (50RHC).

Demo Summary

Graphite core:

TOOLPATH	CUTTER	COATING	RPM	IPM	TIME (Min.)
Rough	3/8" Flat EM	Diamond	32000	250	5.0
Finish	1/8" Ball EM	Diamond	40000	300	18.0
Total time					23.0

P20 (35RHC) cavity:

TOOLPATH	CUTTER	COATING	RPM	IPM	TIME (Min.)
Rough	4mm Ball EM	TiALN	28000	200	16.0
Finish	3mm Ball EM	TiALN	36000	300	32.0
Total time					48.0

Pre harden Stainless 420 (34RHC) cavity:

TOOLPATH	CUTTER	COATING	RPM	IPM	TIME (Min.)
Rough	4mm Ball EM	TiALN	28000	200	16.0
Finish	3mm Ball EM	TiALN	36000	300	32.0
Total time					48.0

Final harden Stainless 420 (50RHC) cavity:

TOOLPATH	CUTTER	COATING	RPM	IPM	TIME (Min.)
Rough	4mm Ball EM	TiALN	26000	150	60.0
Finish	3mm Ball EM	TiALN	36000	300	32.0
Total time					92.0