

Machine Information	Greenleaf Tool Information	Competitor Tool Information
Machine: Conventional		Competitor: N/A
Hp: 12	Insert: RNGN45	Insert: N/A
Max RPM: 1200	Grade: WG-300	Grade: N/A
Condition: Very Good	Edge Prep: T2A	Edge Prep: N/A
Fixture:	Toolholder: C405 5" cutter	Toolholder: N/A
Coolant: No	Comments: The C-405 cutter has only one insert mounted	Comments: N/A

Part Information

Part Name: Cooling rest button

Material: Hi Temp alloy-Cobalt base-Cast

Description: Umco 51

Hardness: 45-50

Scale: Rc

Condition: As Cast

Operation: Mill-Periphery-Climb

Diameter: 4 Inch

Greenleaf Performance Information	Unit of Measure	Competitor Performance Information
Rpm: 1200	Unit of Measure	Rpm: N/A
Sfpm: 1570	Inch	Sfpm: N/A
Feed: 21		Feed: N/A
Feed Mode: INCH - REV		Feed Mode: N/A
DOC: .080		DOC: N/A
Length of Cut: 4.5		Length of Cut: N/A
Width of Cut:		Width of Cut: N/A
Time in Cut: 30 seconds		Time in Cut: N/A
# of Parts: 30 per insert		# of Parts: N/A

Successful Operation: Yes

Test Summary: This high cobalt material contains 51% cobalt and 39% chromium carbide. Coated carbide could not cut through the casting scale. Not feasible. When first attempted with all inserts loaded in the setup produced too much vibration and tool pressure. With one insert loaded, the customer achieved good tool life and quick cycle time. The customer would take 2 plunge passes to produce the 2.5 radius required at the end of the button. The same style of inserts were also used for turning and facing operations on a lathe.