

Setup Sheet for Program 00451

PROGRAM COMMENT: IME 450 Top Mold OP#1
DOCUMENT PATH: C:\Users\hendrik\Desktop\IME 450\450 project v2\Botha Screwdriver Handle v2 MOLDABLE-TOP.SLDprt

Setup

1

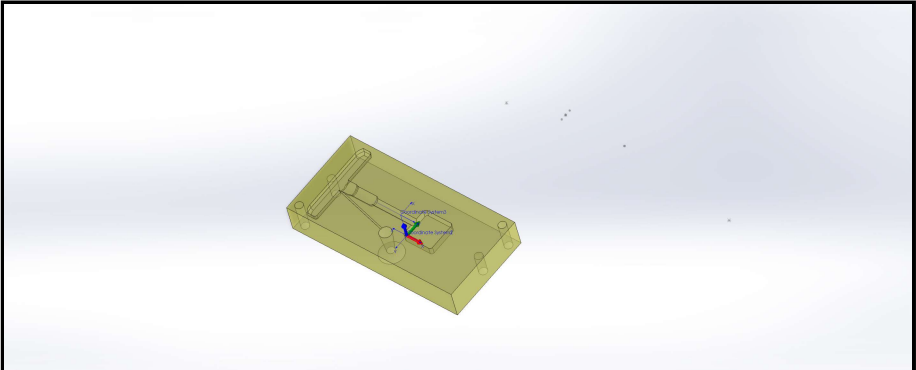
WCS: #1

Stock:
DX: 5.875in
DY: 2.875in
DZ: 0.95in

Part:
DX: 5.875in
DY: 2.875in
DZ: 0.95in

Stock Lower in WCS #1:
X: -2.938in
Y: -1.438in
Z: 0in

Stock Upper in WCS #1:
X: 2.938in
Y: 1.438in
Z: 0.95in



Total

Number of Operations: 10
Number of Tools: 9
Tools: T2 T3 T7 T8 T10 T11 T14 T17 T18
Maximum Z: 1.114in
Minimum Z: -0.088in
Maximum Feedrate: 100in/min
Maximum Spindle Speed: 10000rpm
Cutting Distance: 1357.367in
Rapid Distance: 109.008in
Estimated Cycle Time: 21m:40s

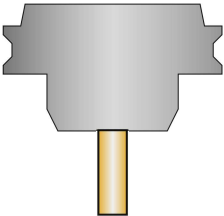
Tools

T2 D2 L2

Type: flat end mill
Diameter: 0.25in
Length: 0.75in
Flutes: 2

Minimum Z: 0.704in
Maximum Feed: 28in/min
Maximum Spindle Speed: 6875rpm
Cutting Distance: 37.189in
Rapid Distance: 0.385in
Estimated Cycle Time: 1m:37s (7.5%)

Holder: Default Holder

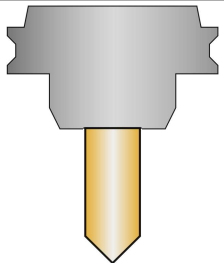



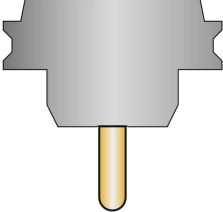
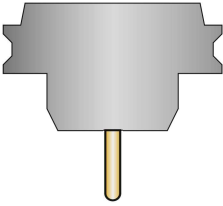
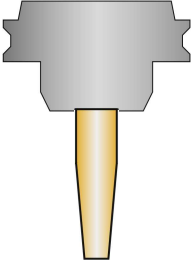
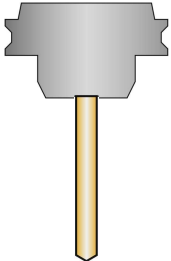

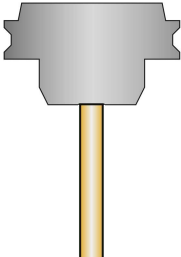
T3 D3 L3

Type: spot drill
Diameter: 0.5in
Tip Angle: 90°
Length: 1.25in
Flutes: 2

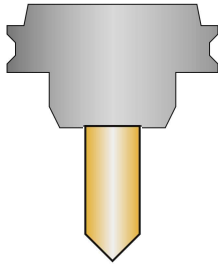
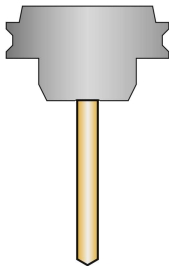
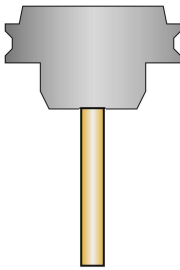

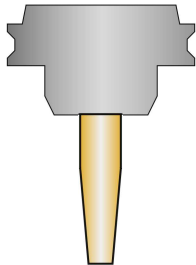
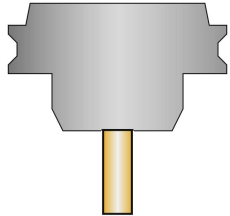
Minimum Z: 0.85in
Maximum Feed: 22in/min
Maximum Spindle Speed: 5730rpm
Cutting Distance: 0.6in
Rapid Distance: 6.611in
Estimated Cycle Time: 2s (0.1%)


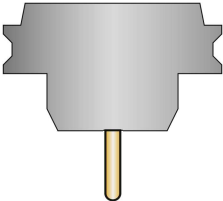
Holder: Default Holder



T7 D7 L7 TYPE: ball end mill DIAMETER: 0.25in CORNER RADIUS: 0.125in LENGTH: 0.75in FLUTES: 2	MINIMUM Z: 0.756in MAXIMUM FEED: 48in/min MAXIMUM SPINDLE SPEED: 9931rpm CUTTING DISTANCE: 77.116in RAPID DISTANCE: 0.28in ESTIMATED CYCLE TIME: 1m:45s (8.1%)	
T8 D8 L8 TYPE: ball end mill DIAMETER: 0.234in CORNER RADIUS: 0.117in LENGTH: 0.75in FLUTES: 2	MINIMUM Z: 0.833in MAXIMUM FEED: 40in/min MAXIMUM SPINDLE SPEED: 9778rpm CUTTING DISTANCE: 35.049in RAPID DISTANCE: 10.541in ESTIMATED CYCLE TIME: 54s (4.2%)	HOLDER: Default Holder 
T10 D10 L10 TYPE: ball end mill DIAMETER: 0.125in CORNER RADIUS: 0.062in LENGTH: 0.625in FLUTES: 2	MINIMUM Z: 0.746in MAXIMUM FEED: 100in/min MAXIMUM SPINDLE SPEED: 10000rpm CUTTING DISTANCE: 1196.412in RAPID DISTANCE: 24.828in ESTIMATED CYCLE TIME: 12m:38s (58.3%)	HOLDER: Default Holder 
T11 D11 L11 TYPE: tapered mill DIAMETER: 0.25in TAPER ANGLE: 5° LENGTH: 1.563in FLUTES: 3	MINIMUM Z: 0.125in MAXIMUM FEED: 1.2in/min MAXIMUM SPINDLE SPEED: 400rpm CUTTING DISTANCE: 2.139in RAPID DISTANCE: 2.531in ESTIMATED CYCLE TIME: 1m:50s (8.5%)	HOLDER: Default Holder 
T14 D14 L14 TYPE: drill DIAMETER: 0.242in TIP ANGLE: 118° LENGTH: 2in FLUTES: 1	MINIMUM Z: -0.088in MAXIMUM FEED: 16in/min MAXIMUM SPINDLE SPEED: 3946rpm CUTTING DISTANCE: 2.472in RAPID DISTANCE: 57.955in ESTIMATED CYCLE TIME: 10s (0.8%)	HOLDER: Default Holder 
T17 D17 L17 TYPE: reamer DIAMETER: 0.25in LENGTH: 4in FLUTES: 3	MINIMUM Z: -0.015in MAXIMUM FEED: 13in/min MAXIMUM SPINDLE SPEED: 2292rpm CUTTING DISTANCE: 2.13in RAPID DISTANCE: 0in ESTIMATED CYCLE TIME: 10s (0.8%)	
T18 D18 L18 TYPE: reamer DIAMETER: 0.251in LENGTH: 1.753in FLUTES: 1	MINIMUM Z: -0.015in MAXIMUM FEED: 13in/min MAXIMUM SPINDLE SPEED: 2283rpm CUTTING DISTANCE: 4.26in RAPID DISTANCE: 5.876in ESTIMATED CYCLE TIME: 20s (1.5%)	HOLDER: Default Holder 

Operations

Operation 1/10 DESCRIPTION: Spot Drill Holes 1/2" Spot Drill (1) STRATEGY: Drilling WCS: #1 TOLERANCE: 0in	MAXIMUM Z: 1.05in MINIMUM Z: 0.85in MAXIMUM SPINDLE SPEED: 5730rpm MAXIMUM FEEDRATE: 22in/min CUTTING DISTANCE: 0.6in RAPID DISTANCE: 6.611in ESTIMATED CYCLE TIME: 2s (0.1%) COOLANT: Flood	T3 D3 L3 TYPE: spot drill DIAMETER: 0.5in TIP ANGLE: 90° LENGTH: 1.25in FLUTES: 2	
Operation 2/10 DESCRIPTION: Drill Dowel Pin Holes STRATEGY: Drilling WCS: #1 TOLERANCE: 0in	MAXIMUM Z: 1.05in MINIMUM Z: -0.088in MAXIMUM SPINDLE SPEED: 3946rpm MAXIMUM FEEDRATE: 16in/min CUTTING DISTANCE: 2.472in RAPID DISTANCE: 57.955in ESTIMATED CYCLE TIME: 10s (0.8%) COOLANT: Flood	T14 D14 L14 TYPE: drill DIAMETER: 0.242in TIP ANGLE: 118° LENGTH: 2in FLUTES: 1	
Operation 3/10 DESCRIPTION: Ream Dowel Pin Holes STRATEGY: Drilling WCS: #1 TOLERANCE: 0in	MAXIMUM Z: 1.05in MINIMUM Z: -0.015in MAXIMUM SPINDLE SPEED: 2283rpm MAXIMUM FEEDRATE: 13in/min CUTTING DISTANCE: 4.26in RAPID DISTANCE: 5.876in ESTIMATED CYCLE TIME: 20s (1.5%) COOLANT: Flood	T18 D18 L18 TYPE: reamer DIAMETER: 0.251in LENGTH: 1.753in FLUTES: 1	
Operation 4/10 DESCRIPTION: Ream Sprue Hole STRATEGY: Drilling WCS: #1 TOLERANCE: 0in	MAXIMUM Z: 1.05in MINIMUM Z: -0.015in MAXIMUM SPINDLE SPEED: 2292rpm MAXIMUM FEEDRATE: 13in/min CUTTING DISTANCE: 2.13in RAPID DISTANCE: 0in ESTIMATED CYCLE TIME: 10s (0.8%) COOLANT: Flood	T17 D17 L17 TYPE: reamer DIAMETER: 0.25in LENGTH: 4in FLUTES: 3	
Operation 5/10 DESCRIPTION: Drill Tapered Sprue STRATEGY: Drilling WCS: #1 TOLERANCE: 0in	MAXIMUM Z: 1.05in MINIMUM Z: 0.125in MAXIMUM SPINDLE SPEED: 400rpm MAXIMUM FEEDRATE: 1.2in/min CUTTING DISTANCE: 2.139in RAPID DISTANCE: 2.531in ESTIMATED CYCLE TIME: 1m:50s (8.5%) COOLANT: Flood	T11 D11 L11 TYPE: tapered mill DIAMETER: 0.25in TAPER ANGLE: 5° LENGTH: 1.563in FLUTES: 3	
Operation 6/10 DESCRIPTION: Pocket Blade Core Pocket STRATEGY: Pocket 2D WCS: #1 TOLERANCE: 0.004in STOCK TO LEAVE: 0.02in/0.004in MAXIMUM STEPDOWN: 0.125in MAXIMUM STEPOVER: 0.075in	MAXIMUM Z: 1.114in MINIMUM Z: 0.704in MAXIMUM SPINDLE SPEED: 6875rpm MAXIMUM FEEDRATE: 28in/min CUTTING DISTANCE: 37.189in RAPID DISTANCE: 0.385in ESTIMATED CYCLE TIME: 1m:37s (7.5%) COOLANT: Flood	T2 D2 L2 TYPE: flat end mill DIAMETER: 0.25in LENGTH: 0.75in FLUTES: 2	

Operation 7/10 DESCRIPTION: Rough Handle Cavity STRATEGY: Pocket WCS: #1 TOLERANCE: 0.004in STOCK TO LEAVE: 0.01in MAXIMUM STEPDOWN: 0.05in MAXIMUM STEPOVER: 0.038in	MAXIMUM Z: 1.05in MINIMUM Z: 0.756in MAXIMUM SPINDLE SPEED: 9931rpm MAXIMUM FEEDRATE: 48in/min CUTTING DISTANCE: 77.116in RAPID DISTANCE: 0.28in ESTIMATED CYCLE TIME: 1m:45s (8.1%) COOLANT: Flood	T7 D7 L7 TYPE: ball end mill DIAMETER: 0.25in CORNER RADIUS: 0.125in LENGTH: 0.75in FLUTES: 2	
Operation 8/10 DESCRIPTION: Contour Blade Core Print STRATEGY: Contour 2D WCS: #1 TOLERANCE: 0in STOCK TO LEAVE: 0in MAXIMUM STEPDOWN: 0.025in MAXIMUM STEPOVER: 0.012in COMPENSATION: unspecified (left) SAFE TOOL DIAMETER: < 0.258in	MAXIMUM Z: 1.081in MINIMUM Z: 0.833in MAXIMUM SPINDLE SPEED: 9778rpm MAXIMUM FEEDRATE: 40in/min CUTTING DISTANCE: 35.049in RAPID DISTANCE: 10.541in ESTIMATED CYCLE TIME: 54s (4.2%) COOLANT: Flood	T8 D8 L8 TYPE: ball end mill DIAMETER: 0.234in CORNER RADIUS: 0.117in LENGTH: 0.75in FLUTES: 2	
Operation 9/10 DESCRIPTION: Contour Runner STRATEGY: Contour 2D WCS: #1 TOLERANCE: 0in STOCK TO LEAVE: 0in MAXIMUM STEPDOWN: 0.01in MAXIMUM STEPOVER: 0.006in COMPENSATION: unspecified (left) SAFE TOOL DIAMETER: < 0.137in	MAXIMUM Z: 1.05in MINIMUM Z: 0.888in MAXIMUM SPINDLE SPEED: 10000rpm MAXIMUM FEEDRATE: 30in/min CUTTING DISTANCE: 27.302in RAPID DISTANCE: 0.163in ESTIMATED CYCLE TIME: 55s (4.2%) COOLANT: Flood	T10 D10 L10 TYPE: ball end mill DIAMETER: 0.125in CORNER RADIUS: 0.062in LENGTH: 0.625in FLUTES: 2	
Operation 10/10 DESCRIPTION: Finish Handle Cavity STRATEGY: Parallel WCS: #1 TOLERANCE: 0in STOCK TO LEAVE: 0in MAXIMUM STEPOVER: 0.004in	MAXIMUM Z: 1.05in MINIMUM Z: 0.746in MAXIMUM SPINDLE SPEED: 10000rpm MAXIMUM FEEDRATE: 100in/min CUTTING DISTANCE: 1169.11in RAPID DISTANCE: 24.665in ESTIMATED CYCLE TIME: 11m:43s (54%) COOLANT: Flood	T10 D10 L10 TYPE: ball end mill DIAMETER: 0.125in CORNER RADIUS: 0.062in LENGTH: 0.625in FLUTES: 2	