

Setup Sheet for Program SA_Injection_Mold_Part

DOCUMENT PATH: \\coeit.osu.edu\home\a\alhalbi.1\Documents\Mold\SA_Injection_Mold_Part.SLDPRT

Setup

WCS: #0

Stock:

DX: 3in

DY: 3in

DZ: 1in

Part:

DX: 3in

DY: 3in

DZ: 1.005in

Stock Lower in WCS #0:

X: -1.5in

Y: -1.5in

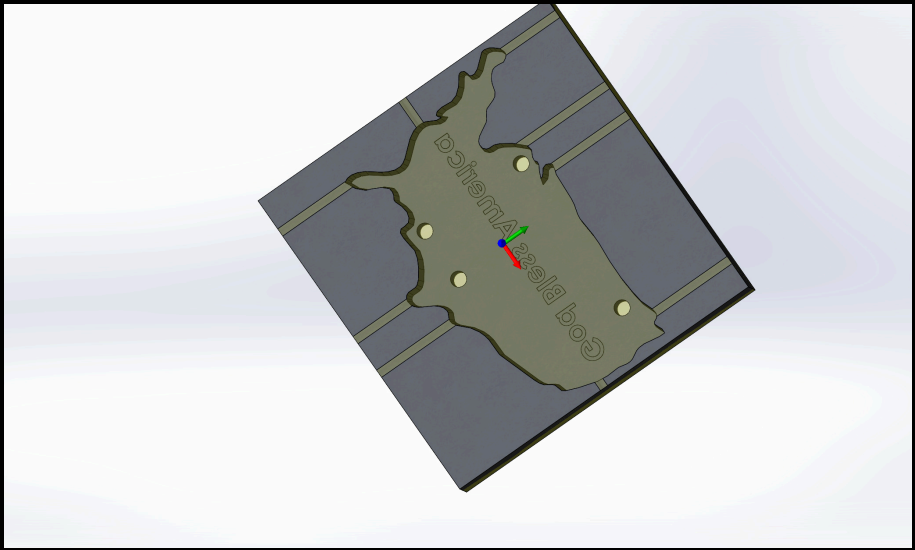
Z: -1.002in

Stock Upper in WCS #0:

X: 1.5in

Y: 1.5in

Z: -0.002in



Total

NUMBER OF OPERATIONS: 6

NUMBER OF TOOLS: 6

TOOLS: T3 T7 T8 T9 T10 T14

MAXIMUM Z: 0.598in

MINIMUM Z: -1.145in

MAXIMUM FEEDRATE: 30in/min

MAXIMUM SPINDLE SPEED: 9167rpm

CUTTING DISTANCE: 417.836in

RAPID DISTANCE: 315.639in

ESTIMATED CYCLE TIME: 26m:39s

Tools

T3 D3 L3

MANUAL TOOL CHANGE

TYPE: bullnose end mill

DIAMETER: 0.25in

CORNER RADIUS: 0.02in

LENGTH: 0.8in

FLUTES: 3

DESCRIPTION: 1/4" Flat End Mill

VENDOR: Titan USA

PRODUCT: TC63604

MINIMUM Z: -0.5in

MAXIMUM FEED: 25in/min

MAXIMUM SPINDLE SPEED: 4584rpm

CUTTING DISTANCE: 208.705in

RAPID DISTANCE: 25.529in

ESTIMATED CYCLE TIME: 10m:42s (40.1%)

HOLDER: TTS Collet

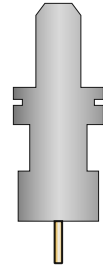


T7 D7 L7**MANUAL TOOL CHANGE**

TYPE: bullnose end mill
 DIAMETER: 0.125in
 CORNER RADIUS: 0.01in
 LENGTH: 0.7in
 FLUTES: 3
 DESCRIPTION: 1/8" Flat End Mill
 COMMENT: Bull Nose Cutter
 VENDOR: Titan USA
 PRODUCT: TC65908

MINIMUM Z: -0.51in
 MAXIMUM FEED: 30in/min
 MAXIMUM SPINDLE SPEED: 9167rpm
 CUTTING DISTANCE: 166.341in
 RAPID DISTANCE: 44.417in
 ESTIMATED CYCLE TIME: 7m:45s (29.1%)

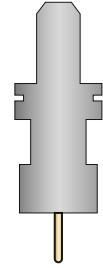
HOLDER: TTS Collet

**T8 D8 L8****MANUAL TOOL CHANGE**

TYPE: ball end mill
 DIAMETER: 0.125in
 CORNER RADIUS: 0.062in
 LENGTH: 0.85in
 FLUTES: 3
 DESCRIPTION: 1/8" Ball End Mill
 VENDOR: Titan USA
 PRODUCT: TC63145

MINIMUM Z: -0.067in
 MAXIMUM FEED: 30in/min
 MAXIMUM SPINDLE SPEED: 9167rpm
 CUTTING DISTANCE: 9.454in
 RAPID DISTANCE: 12.992in
 ESTIMATED CYCLE TIME: 28s (1.8%)

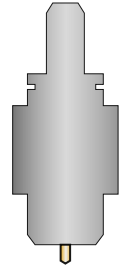
HOLDER: TTS Collet

**T9 D9 L9****MANUAL TOOL CHANGE**

TYPE: center drill
 DIAMETER: 0.187in
 TIP ANGLE: 118°
 LENGTH: 0.373in
 FLUTES: 2
 DESCRIPTION: #2 Center Drill

MINIMUM Z: -0.102in
 MAXIMUM FEED: 29in/min
 MAXIMUM SPINDLE SPEED: 6110rpm
 CUTTING DISTANCE: 1.2in
 RAPID DISTANCE: 4.914in
 ESTIMATED CYCLE TIME: 3s (0.2%)

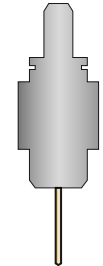
HOLDER: TTS Chuck

**T10 D10 L10**

TYPE: drill
 DIAMETER: 0.141in
 TIP ANGLE: 118°
 LENGTH: 2in
 FLUTES: 1
 DESCRIPTION: 9/64

MINIMUM Z: -1.145in
 MAXIMUM FEED: 6in/min
 MAXIMUM SPINDLE SPEED: 1800rpm
 CUTTING DISTANCE: 5.999in
 RAPID DISTANCE: 208.153in
 ESTIMATED CYCLE TIME: 1m:2s (3.9%)

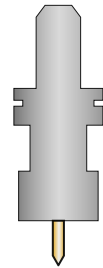
HOLDER: TTS Chuck

**T14 D14 L14****MANUAL TOOL CHANGE**

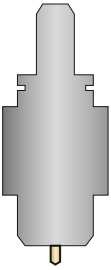
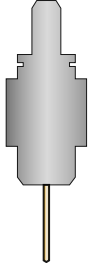
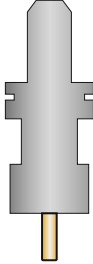
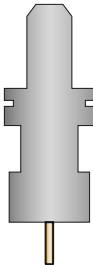
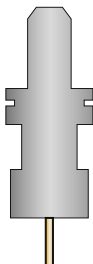
TYPE: chamfer mill
 DIAMETER: 0.187in
 TAPER ANGLE: 30°
 LENGTH: 0.75in
 FLUTES: 1
 DESCRIPTION: Engraving Bit
 VENDOR: Harvey Tool
 PRODUCT: 30020

MINIMUM Z: -0.525in
 MAXIMUM FEED: 8in/min
 MAXIMUM SPINDLE SPEED: 7000rpm
 CUTTING DISTANCE: 26.138in
 RAPID DISTANCE: 19.633in
 ESTIMATED CYCLE TIME: 5m:9s (19.3%)

HOLDER: TTS Collet



Operations

Operation 1/6 DESCRIPTION: Drill1 STRATEGY: Drilling WCS: #0 TOLERANCE: 0in	MAXIMUM Z: 0.598in MINIMUM Z: -0.102in MAXIMUM SPINDLE SPEED: 6110rpm MAXIMUM FEEDRATE: 29in/min CUTTING DISTANCE: 1.2in RAPID DISTANCE: 4.914in ESTIMATED CYCLE TIME: 3s (0.2%) COOLANT: Flood	T9 D9 L9 MANUAL TOOL CHANGE TYPE: center drill DIAMETER: 0.187in TIP ANGLE: 118° LENGTH: 0.373in FLUTES: 2 DESCRIPTION: #2 Center Drill	
Operation 2/6 DESCRIPTION: Drill2 STRATEGY: Drilling WCS: #0 TOLERANCE: 0in	MAXIMUM Z: 0.598in MINIMUM Z: -1.145in MAXIMUM SPINDLE SPEED: 1800rpm MAXIMUM FEEDRATE: 6in/min CUTTING DISTANCE: 5.999in RAPID DISTANCE: 208.153in ESTIMATED CYCLE TIME: 1m:2s (3.9%) COOLANT: Flood	T10 D10 L10 TYPE: drill DIAMETER: 0.141in TIP ANGLE: 118° LENGTH: 2in FLUTES: 1 DESCRIPTION: 9/64	
Operation 3/6 DESCRIPTION: Adaptive1 STRATEGY: Adaptive WCS: #0 TOLERANCE: 0.004in STOCK TO LEAVE: 0.005in/0.01in MAXIMUM STEPDOWN: 0.2in OPTIMAL LOAD: 0.1in LOAD DEVIATION: 0.01in	MAXIMUM Z: 0.598in MINIMUM Z: -0.5in MAXIMUM SPINDLE SPEED: 4584rpm MAXIMUM FEEDRATE: 25in/min CUTTING DISTANCE: 208.705in RAPID DISTANCE: 25.529in ESTIMATED CYCLE TIME: 10m:42s (40.1%) COOLANT: Flood	T3 D3 L3 MANUAL TOOL CHANGE TYPE: bullnose end mill DIAMETER: 0.25in CORNER RADIUS: 0.02in LENGTH: 0.8in FLUTES: 3 DESCRIPTION: 1/4" Flat End Mill VENDOR: Titan USA PRODUCT: TC63604	
Operation 4/6 DESCRIPTION: Pocket1 STRATEGY: Pocket WCS: #0 TOLERANCE: 0.004in STOCK TO LEAVE: 0in MAXIMUM STEPDOWN: 0.04in MAXIMUM STEPOVER: 0.1in	MAXIMUM Z: 0.598in MINIMUM Z: -0.51in MAXIMUM SPINDLE SPEED: 9167rpm MAXIMUM FEEDRATE: 30in/min CUTTING DISTANCE: 166.341in RAPID DISTANCE: 44.417in ESTIMATED CYCLE TIME: 7m:45s (29.1%) COOLANT: Flood	T7 D7 L7 MANUAL TOOL CHANGE TYPE: bullnose end mill DIAMETER: 0.125in CORNER RADIUS: 0.01in LENGTH: 0.7in FLUTES: 3 DESCRIPTION: 1/8" Flat End Mill COMMENT: Bull Nose Cutter VENDOR: Titan USA PRODUCT: TC65908	
Operation 5/6 DESCRIPTION: Pencil1 STRATEGY: Pencil WCS: #0 TOLERANCE: 0in STOCK TO LEAVE: 0in MAXIMUM STEPOVER: 0.002in	MAXIMUM Z: 0.598in MINIMUM Z: -0.067in MAXIMUM SPINDLE SPEED: 9167rpm MAXIMUM FEEDRATE: 30in/min CUTTING DISTANCE: 9.454in RAPID DISTANCE: 12.992in ESTIMATED CYCLE TIME: 28s (1.8%) COOLANT: Flood	T8 D8 L8 MANUAL TOOL CHANGE TYPE: ball end mill DIAMETER: 0.125in CORNER RADIUS: 0.062in LENGTH: 0.85in FLUTES: 3 DESCRIPTION: 1/8" Ball End Mill VENDOR: Titan USA PRODUCT: TC63145	

Operation 6/6

DESCRIPTION: Engrave1

WCS: #0

TOLERANCE: 0in

MAXIMUM Z: -0.002in

MINIMUM Z: -0.525in

MAXIMUM SPINDLE SPEED: 7000rpm

MAXIMUM FEEDRATE: 8in/min

CUTTING DISTANCE: 26.138in

RAPID DISTANCE: 19.633in

ESTIMATED CYCLE TIME: 5m:9s (19.3%)

COOLANT: Off

T14 D14 L14**MANUAL TOOL CHANGE**

TYPE: chamfer mill

DIAMETER: 0.187in

TAPER ANGLE: 30°

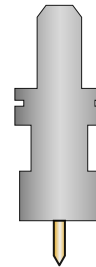
LENGTH: 0.75in

FLUTES: 1

DESCRIPTION: Engraving Bit

VENDOR: Harvey Tool

PRODUCT: 30020

**HSMWORKS**
The CAM solution for SolidWorksGenerated by [HSMWorks 2025 R0.44297](#) Thursday, March 06, 2025 14:46:34