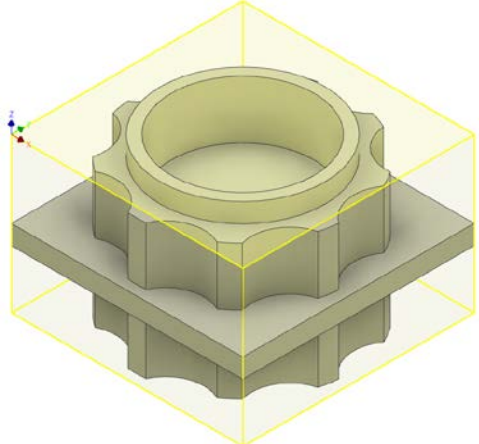

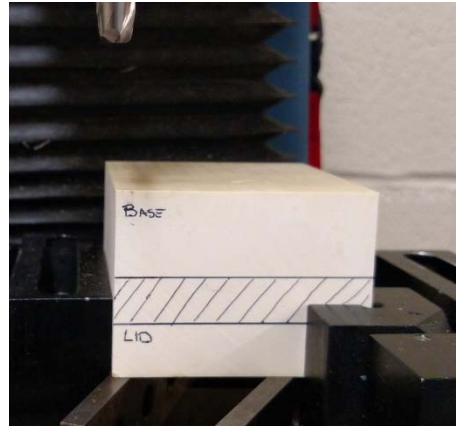
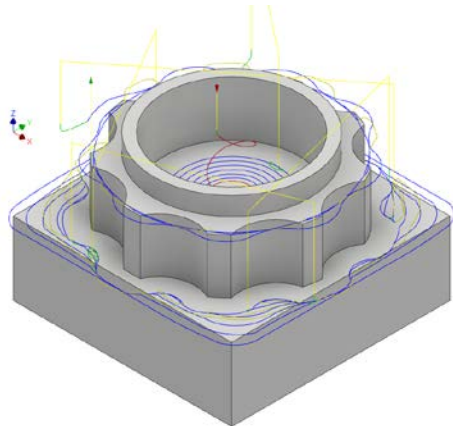
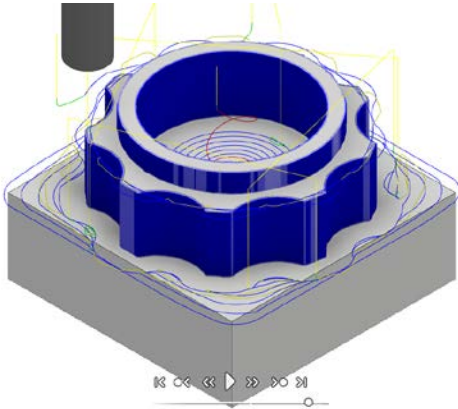
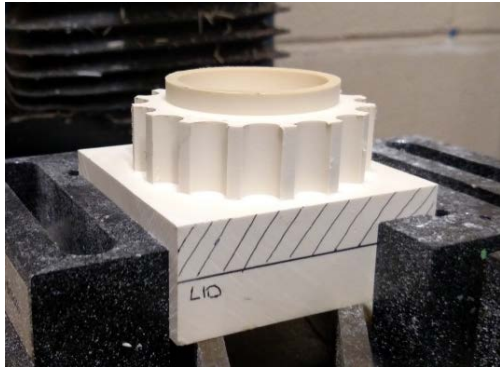


BASE & LID

Operations & Tooling	Tool Paths	Simulation	Production
<p>Lid and Base Stock – 3"x3"x2"</p>			
<p>2D Adaptive - Base Tooling <i>3/8 or 1/2 Dia End Mill</i> Geometry Pocket Roughing Outer Body Roughing Outer Lip Roughing Passes <i>Tolerance – 0.01"</i> <i>Optimal Load – 20%</i> <i>Stock to Leave – Radial 0.02"</i> <i>Stock to Leave – Axial 0"</i> <i>Smoothing – 0.01"</i> Linking <i>Minimum Retraction</i> <i>Stay-Down Level – 40%</i> <i>Lift Height – 0.06"</i> <i>Ramping Angle – 25 Deg</i></p>			



2D Contour - Base

Tooling

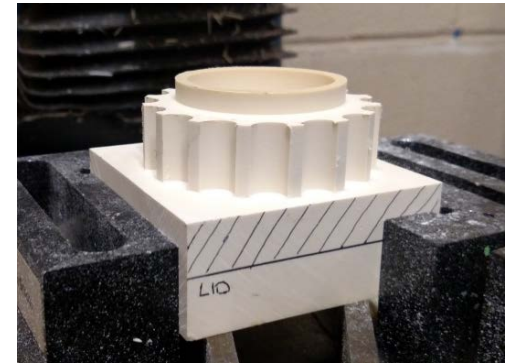
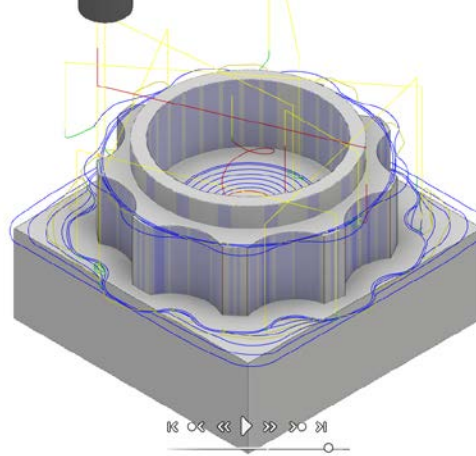
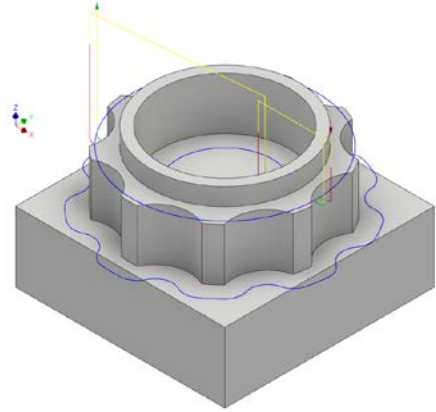
3/8 or 1/2 Dia End Mill

Geometry

Pocket Finishing

Outer Body Finishing

Outer Lip Finishing



2D Adaptive - Lid

Tooling

3/8 or 1/2 Dia End Mill

Geometry

Pocket Roughing

Outer Body Roughing

Outer Lip Roughing

Passes

Tolerance – 0.01"

Optimal Load – 20%

*Stock to Leave – Radial
0.02"*

Stock to Leave – Axial 0"

Smoothing – 0.01"

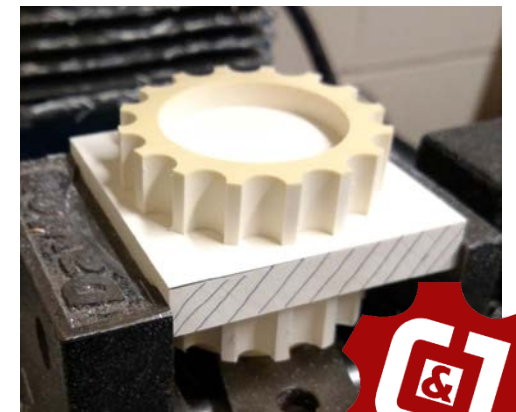
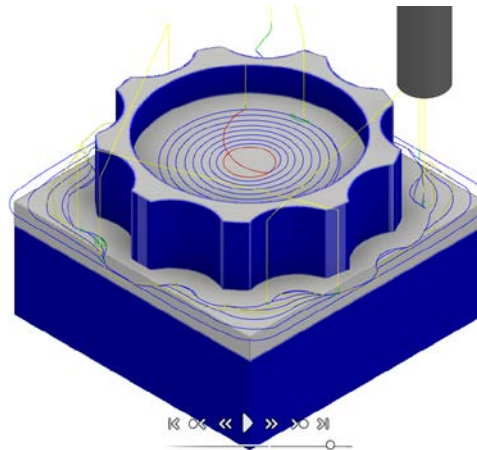
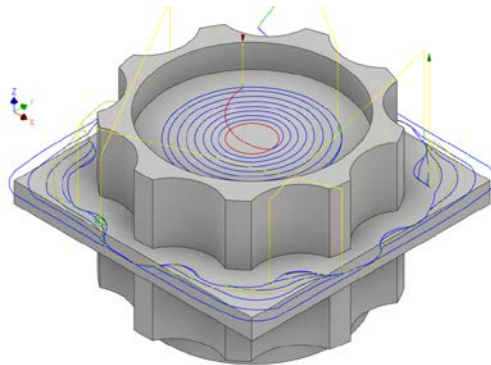
Linking

Minimum Retraction

Stay-Down Level – 40%

Lift Height – 0.06"

Ramping Angle – 25 Deg



2D Contour - Lid

Tooling

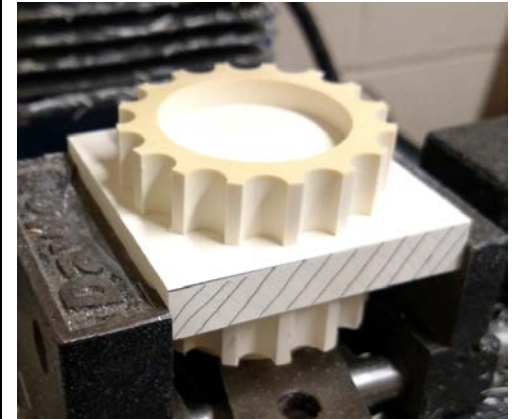
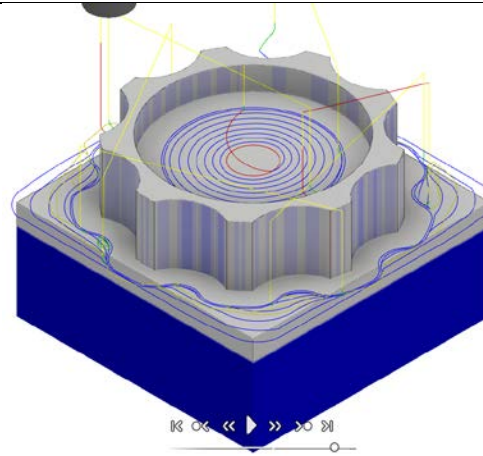
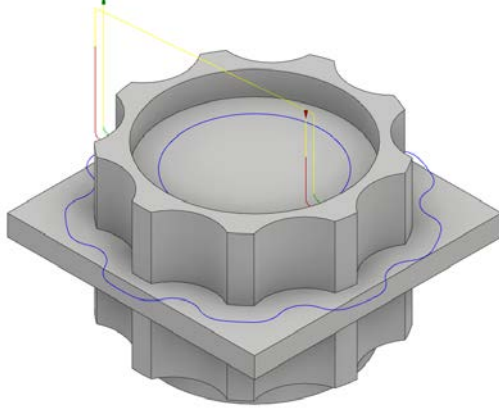
3/8 or 1/2 Dia End Mill

Geometry

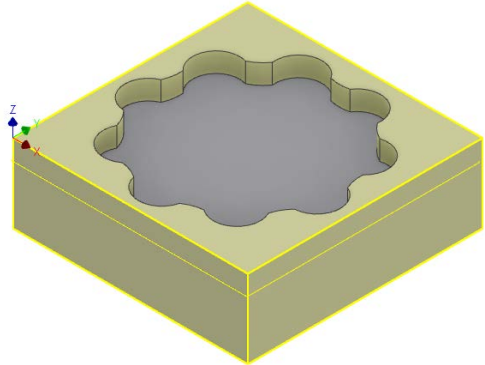
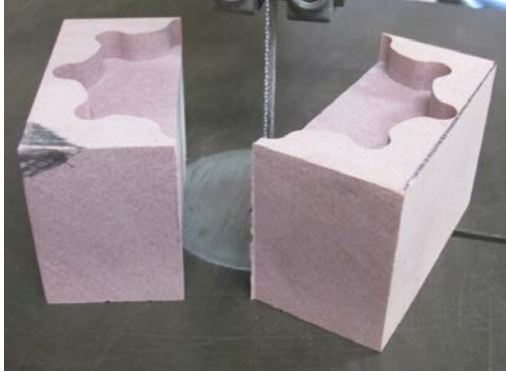

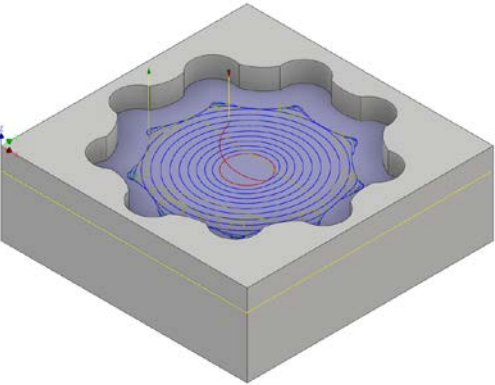
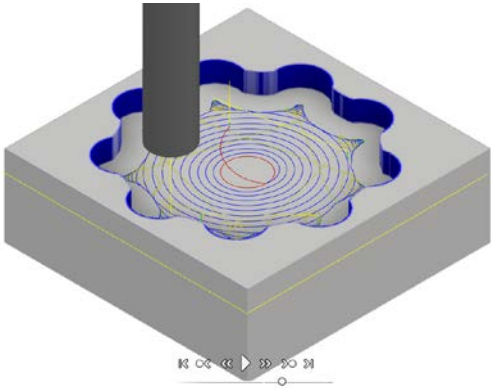
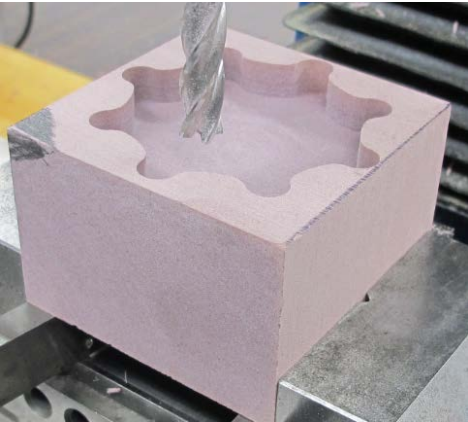
Pocket Finishing

Outer Body Finishing

Outer Lip Finishing



FIXTURE

Operations & Tooling	Tool Paths	Simulation	Production
<p>Fixture Stock – 3"x3"x1"</p>			
<p>2D Adaptive - Fixture Tooling <i>3/8 or 1/2 Dia End Mill</i></p> <p>Geometry Pocket Roughing</p> <p>Passes Tolerance – 0.01" Optimal Load – 20% Minimum Radius – 0.02" Stock to Leave – Radial 0.02" Stock to Leave – Axial 0" Smoothing – 0.01"</p> <p>Linking Minimum Retraction Stay-Down Level – 40% Lift Height – 0.06" Ramping Angle – 25 Deg</p>			



2D Contour - Base

Tooling

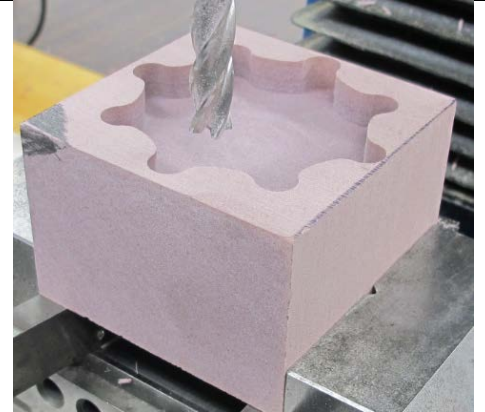
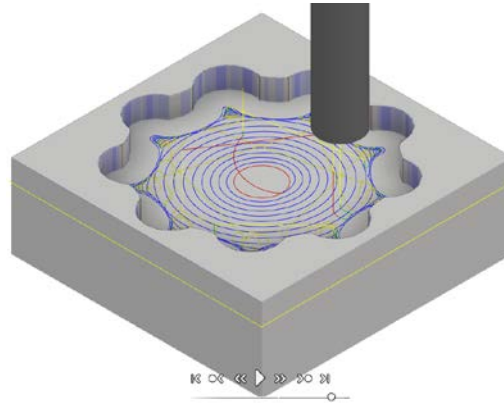
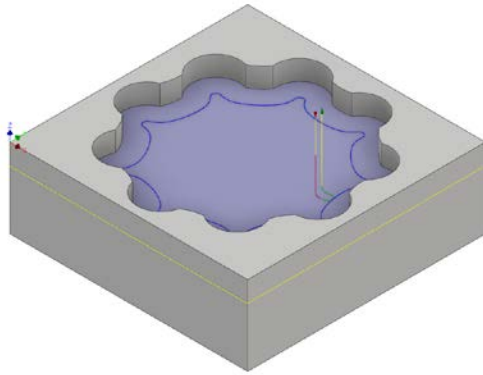
3/8 or 1/2 Dia End Mill

Geometry

Pocket Finishing

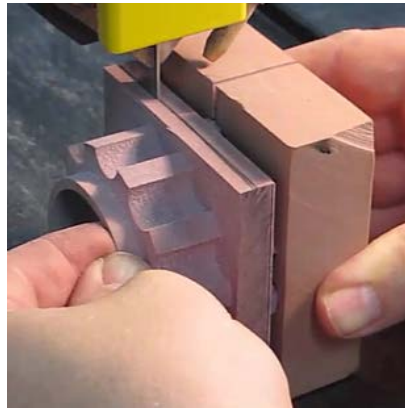
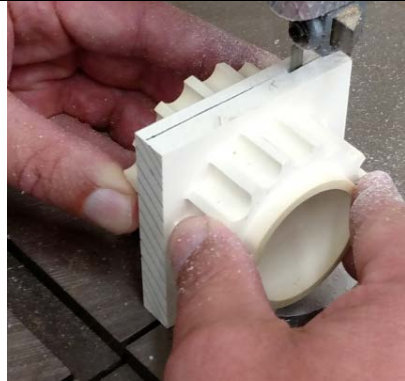
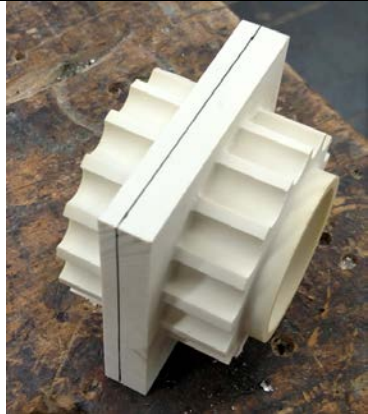
Outer Body Finishing

Outer Lip Finishing

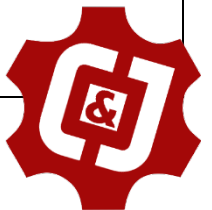
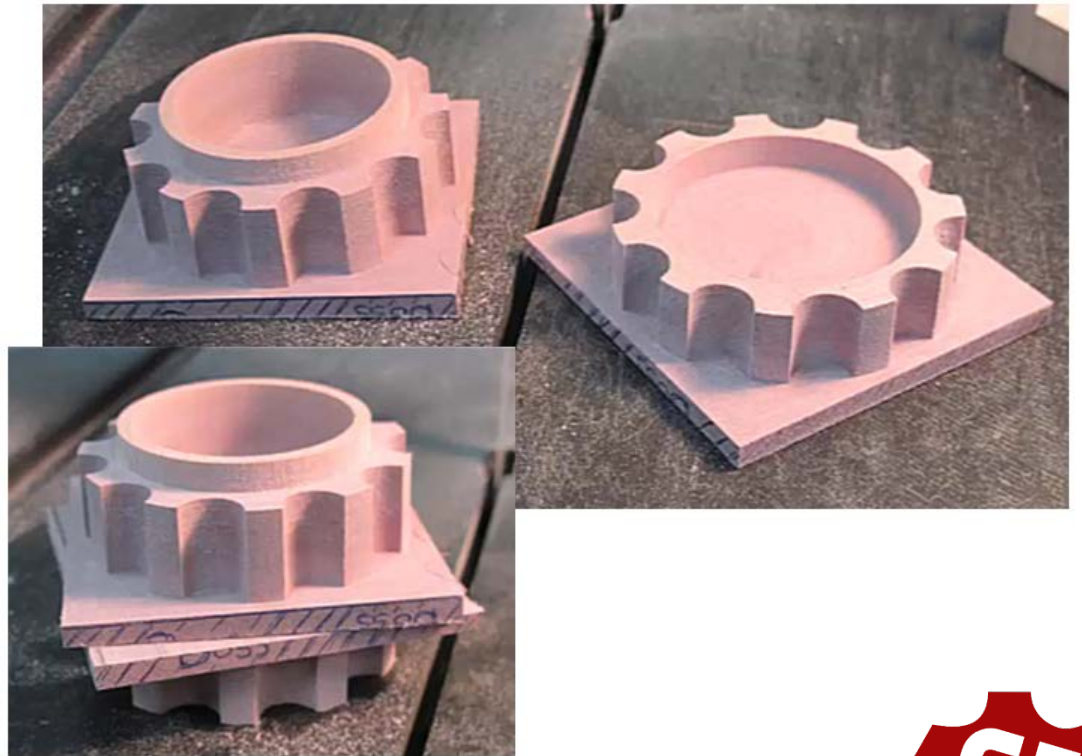


Split Fixture with a Band Saw with a thin blade (Small Kerf)

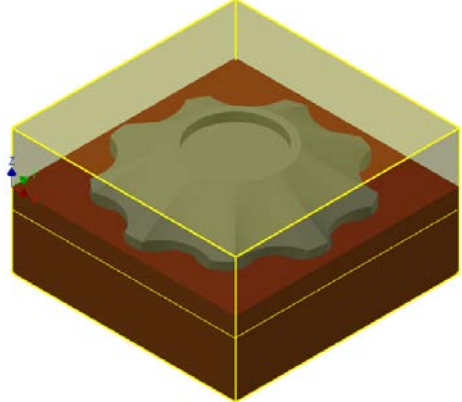
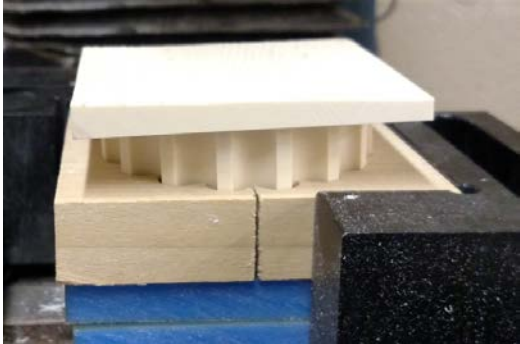

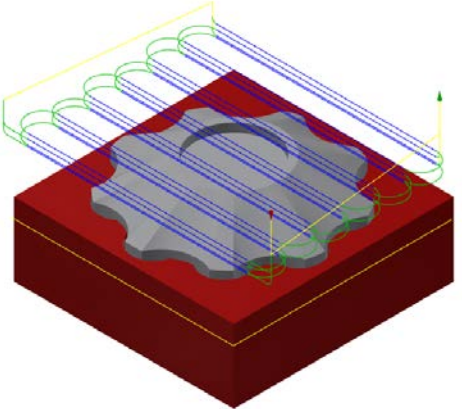
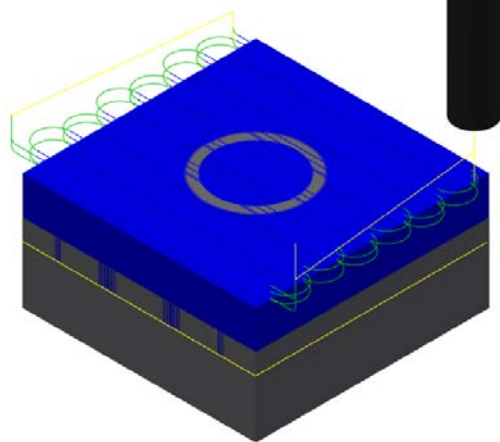
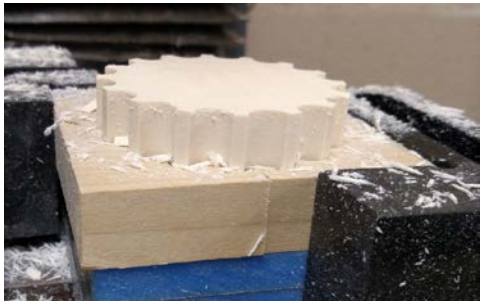
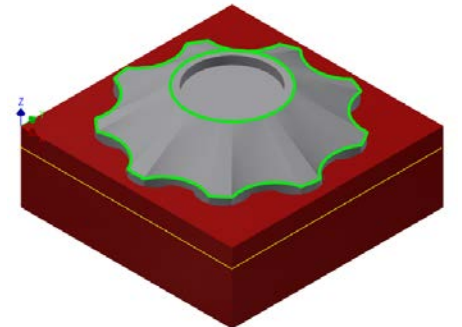
Divide Clamping Boss



Split Base and Lid with Bandsaw (Use fixture to hold Lid side if needed)



LID SURFACE

Operations & Tooling	Tool Paths	Simulation	Production
<p>Lid Surface Stock – 3"x3"x1"</p>			
<p>Facing – Band Saw Boss Tooling <i>3/8 or 1/2 Dia End Mill</i> Passes <i>Multiple Depths –</i> <i>-Max Stepdown – 0.07"</i> <i>-Finishing Step</i> <i>Finishing Stepdown – 0.02"</i></p>			
<p>Morphed Spiral – 3D Contour Tooling <i>3/8 or 1/2 Dia Ball End</i> Geometry <i>Machining Boundary</i> <i>Contour Outside</i> <i>Loft Top</i> <i>Additional Offset – 0.03"</i></p>			



Morphed Spiral – 3D Contour Heights

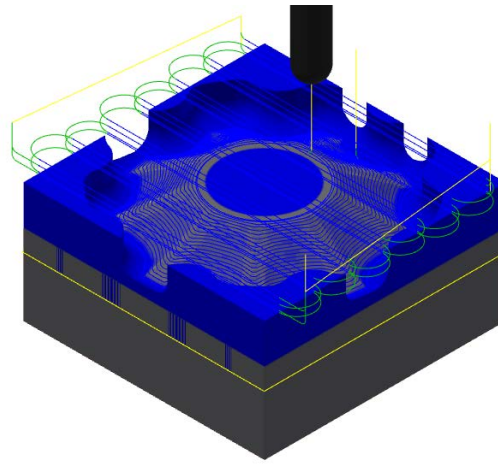
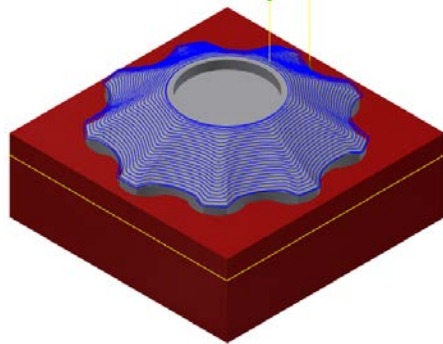
*Top Height – Model Top
 Bottom Height – Selection
 (Pick any point along the contour outside)
 Bottom Offset - -0.1"*

Passes

*Passes
 Tolerance – 0.01"
 Inside/Outside Direction
 Outside -> In
 Stepover – 0.04"
 Smoothing – 0.01"*

Linking

*Retraction Policy – Minimum
 Retract*



BASE FACING

Operations & Tooling	Tool Paths	Simulation	Production
<p>Base Facing Stock – 3"x3"x1"</p>	<p><i>Facing Can be done manually or with the same process that was used to remove the boss from the lid surface</i></p>	