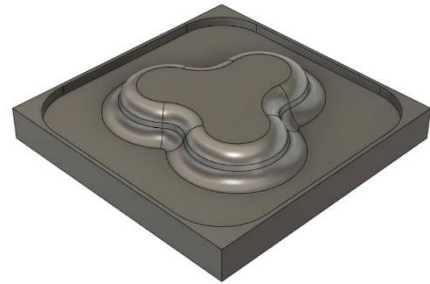


Practice

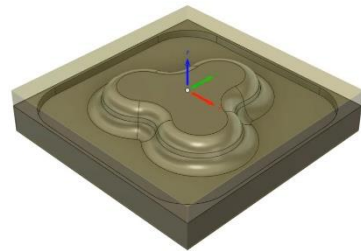
Practice: Create a new milling setup and create adaptive roughing and rest toolpaths and 2D contour toolpaths on complex geometry.

- Create a milling setup.
- Create an adaptive clearing toolpath.
- Create an adaptive rest toolpath.
- Create a 2D contour toolpath.
- Simulate a toolpath.

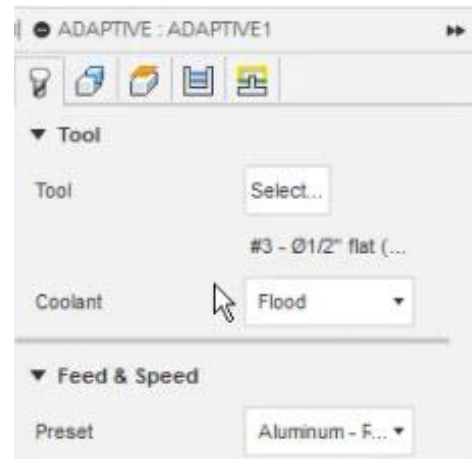
1. Upload the supplied dataset *complex finish* – *pe.f3d*.



2. Navigate to the Manufacture Workspace and ensure the units are set to inch. Create a new milling setup with the WCS located at the top-center of the part with the stock being the exact size of the part.



3. Create a 3D Adaptive Clearing operation with a 1/2" flat endmill using the appropriate roughing defaults for the tool.



4. Set the passes to machine shallow areas, cavities and use flat area detection. Set the max roughing stepdown to 0.5" and the fine stepdown to 0.01". Ensure stock is only left in the radial direction.

ADAPTIVE : ADAPTIVE1

Passes

Tolerance 0.004 in

Machine Shallow Areas ☒

Minimum Shallow Stepdown 0.001 in

Maximum Shallow Stepover 0.01 in

Optimal Load 0.125 in

Both Ways ☐

Minimum Cutting Radius 0.05 in

Machine Cavities ☒

Use Slot Clearing ☐

Direction Climb

Maximum Roughing Stepdown 0.5 in

Fine Stepdown 0.01 in

Flat Area Detection ☒

Minimum Stepdown 0.001 in

Minimum Axial Engagement 0 in

Order by Depth ☐

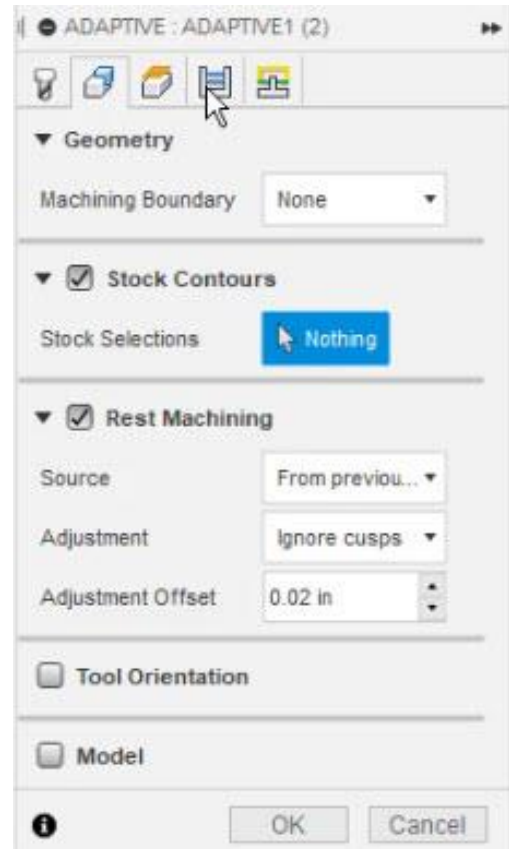
Order By Area ☐

Stock to Leave ☒

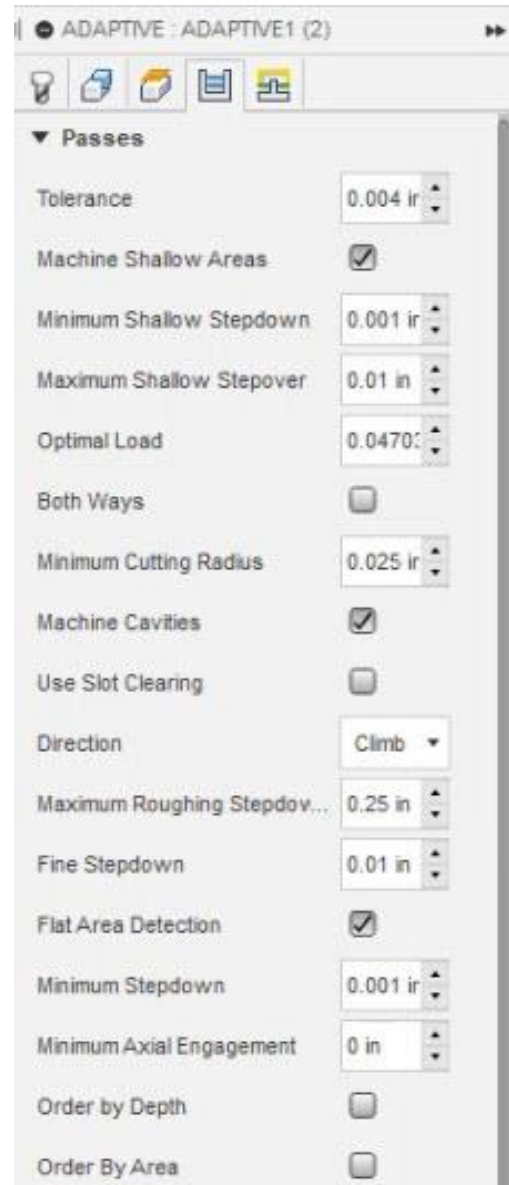
Radial Stock to Leave 0.02 in

Axial Stock to Leave 0.0 in

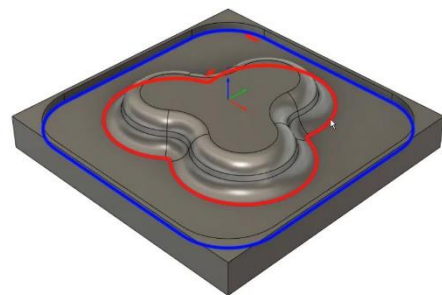
5. Duplicate Adaptive1 and edit the operation using a 1/4" flat endmill with aluminum roughing presets and rest machining from previous operations.



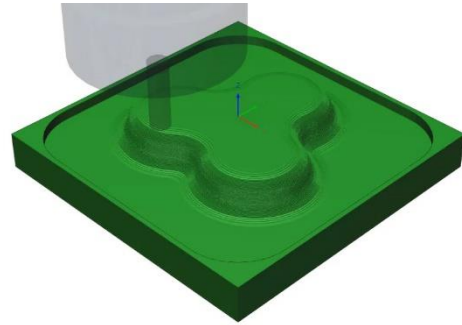
6. Set the passes so the maximum roughing stepdown 0.25" and turn off stock to leave.



7. Create a 2D contour operation with the same 1/4" flat endmill to finish off the pocket and base of the fillet.



8. Preview the material removal.



9. Save the design.

