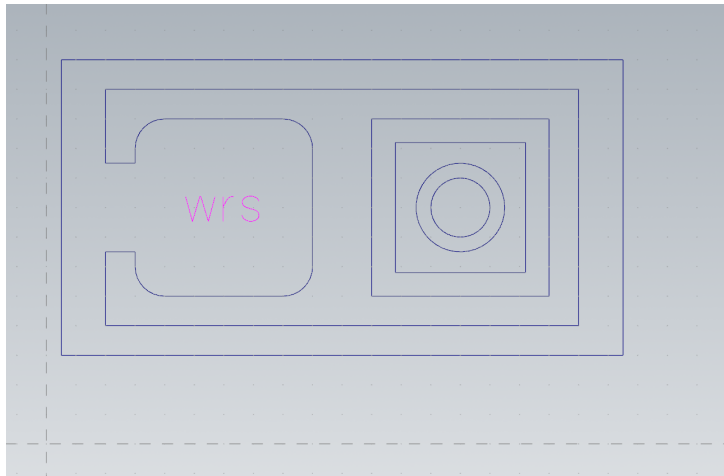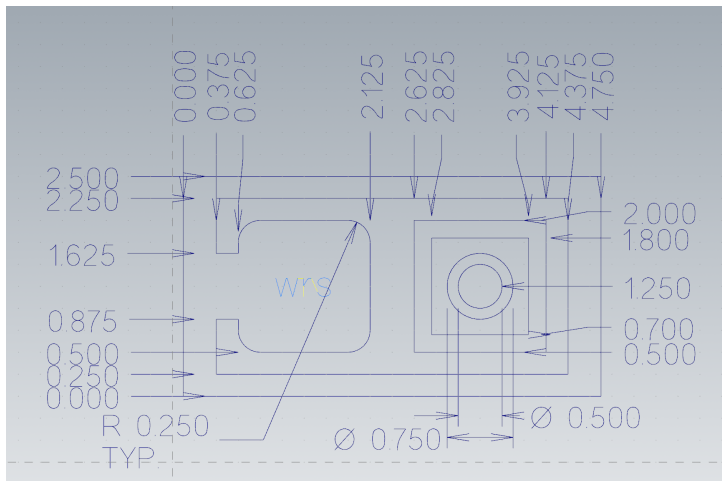Report by Weston Shakespear
Spring 2023

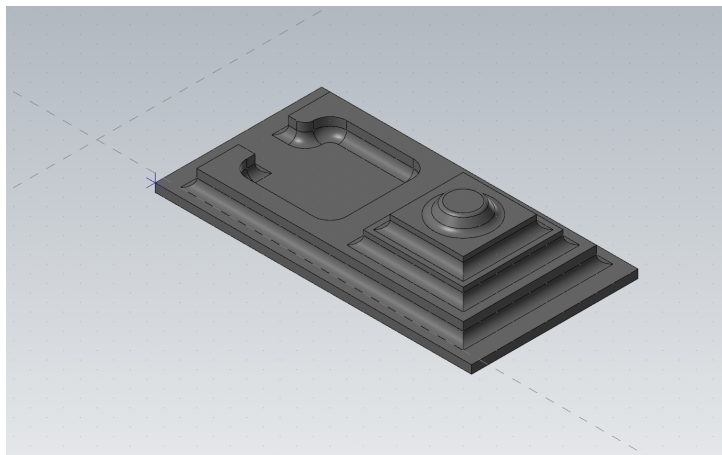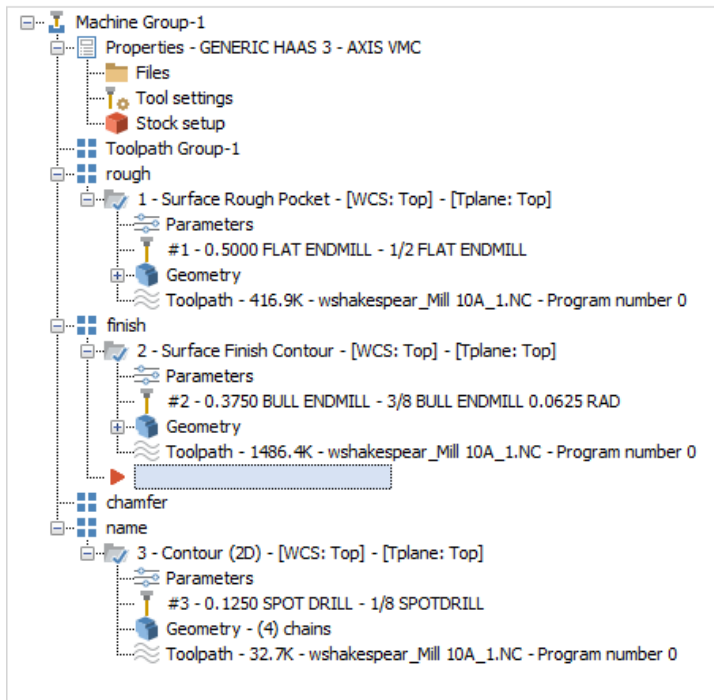# CCET 3680
Mill Lesson 14 Second Exercise
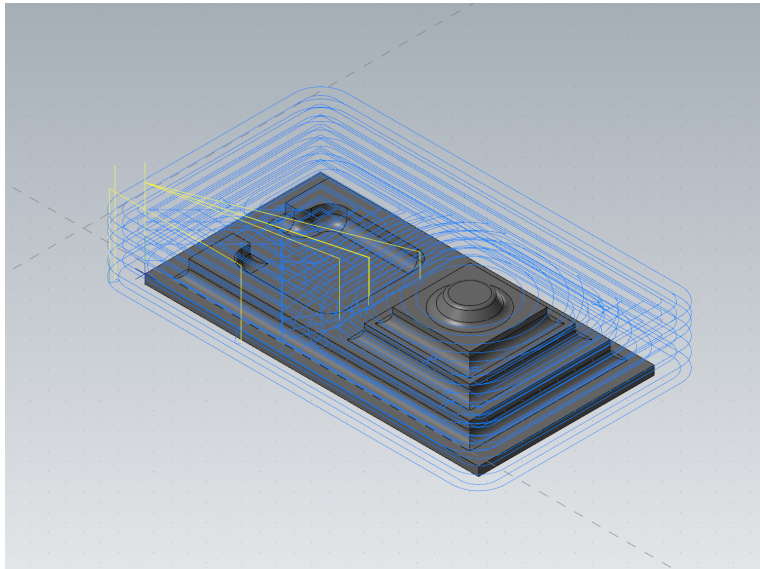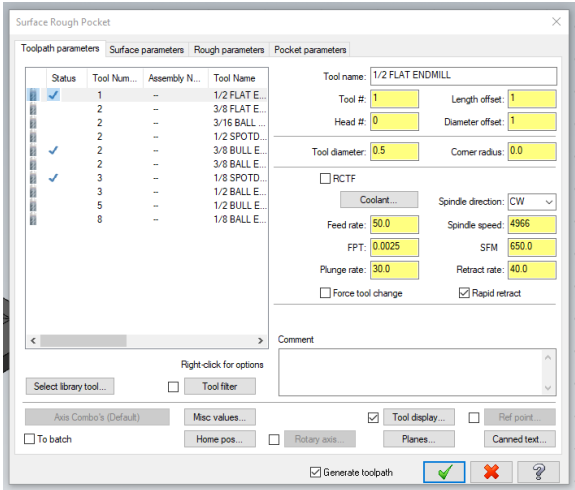
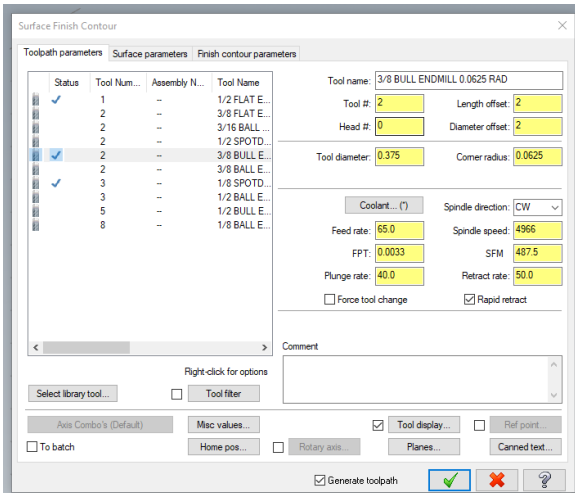## I. Wireframe:

II. Dimensions:

III. Solid:

IV. Toolpaths:

- Machine Group-1
  - Properties - GENERIC HAAS 3 - AXIS VMC
    - Files
    - Tool settings
    - Stock setup
  - Toolpath Group-1
  - rough
    - 1 - Surface Rough Pocket - [WCS: Top] - [Tplane: Top]
      - Parameters
      - #1 - 0.5000 FLAT ENDMILL - 1/2 FLAT ENDMILL
      - Geometry
      - Toolpath - 416.9K - wshakespear_Mill 10A_1.NC - Program number 0
  - finish
    - 2 - Surface Finish Contour - [WCS: Top] - [Tplane: Top]
      - Parameters
      - #2 - 0.3750 BULL ENDMILL - 3/8 BULL ENDMILL 0.0625 RAD
      - Geometry
      - Toolpath - 1486.4K - wshakespear_Mill 10A_1.NC - Program number 0
  - chamfer
  - name
    - 3 - Contour (2D) - [WCS: Top] - [Tplane: Top]
      - Parameters
      - #3 - 0.1250 SPOT DRILL - 1/8 SPOTDRILL
      - Geometry - (4) chains
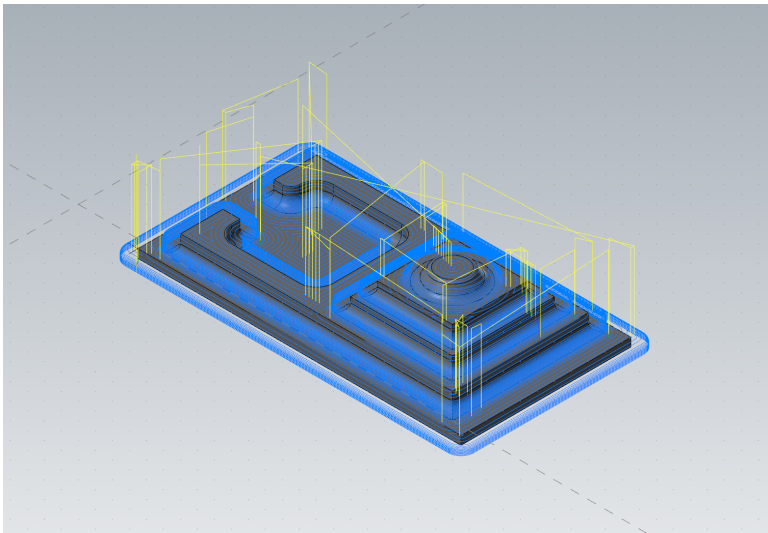   - Toolpath - 32.7K - wshakespear_Mill 10A_1.NC - Program number 0
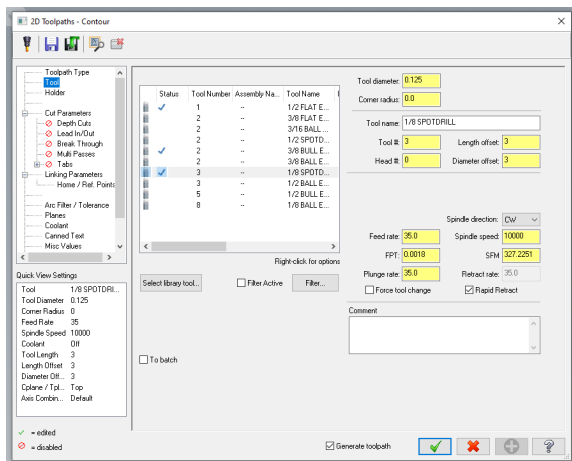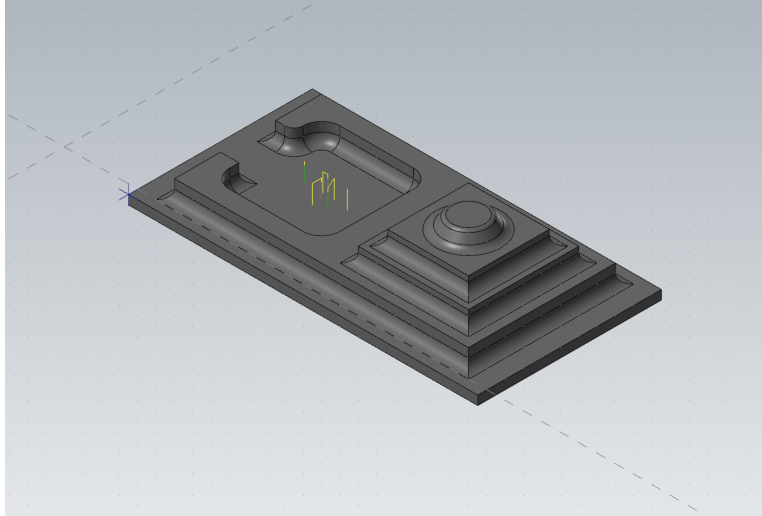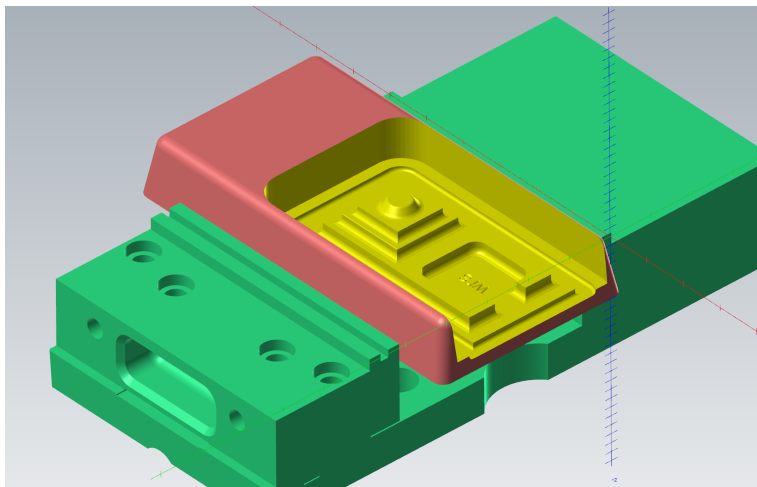
V. ½" Endmill:

VI. ⅜" Bull Endmill (0.0625" corner):

VII. ⅛" Spot Drill:

VIII. Simulation Final Model

IX. Method:

For this lesson I did the same steps as in the tutorial for this module. This one wasn't that much different and ended up being a little easier to draw.

X. GCode Changes

      To modify my gcode to be compatible with the machine I first made sure the HAAS 3 axis post processor was selected when exporting the gcode. Then I removed the long lines at the beginning and edited the last G28 home command to not zero the x axis.

XI. Finished Part