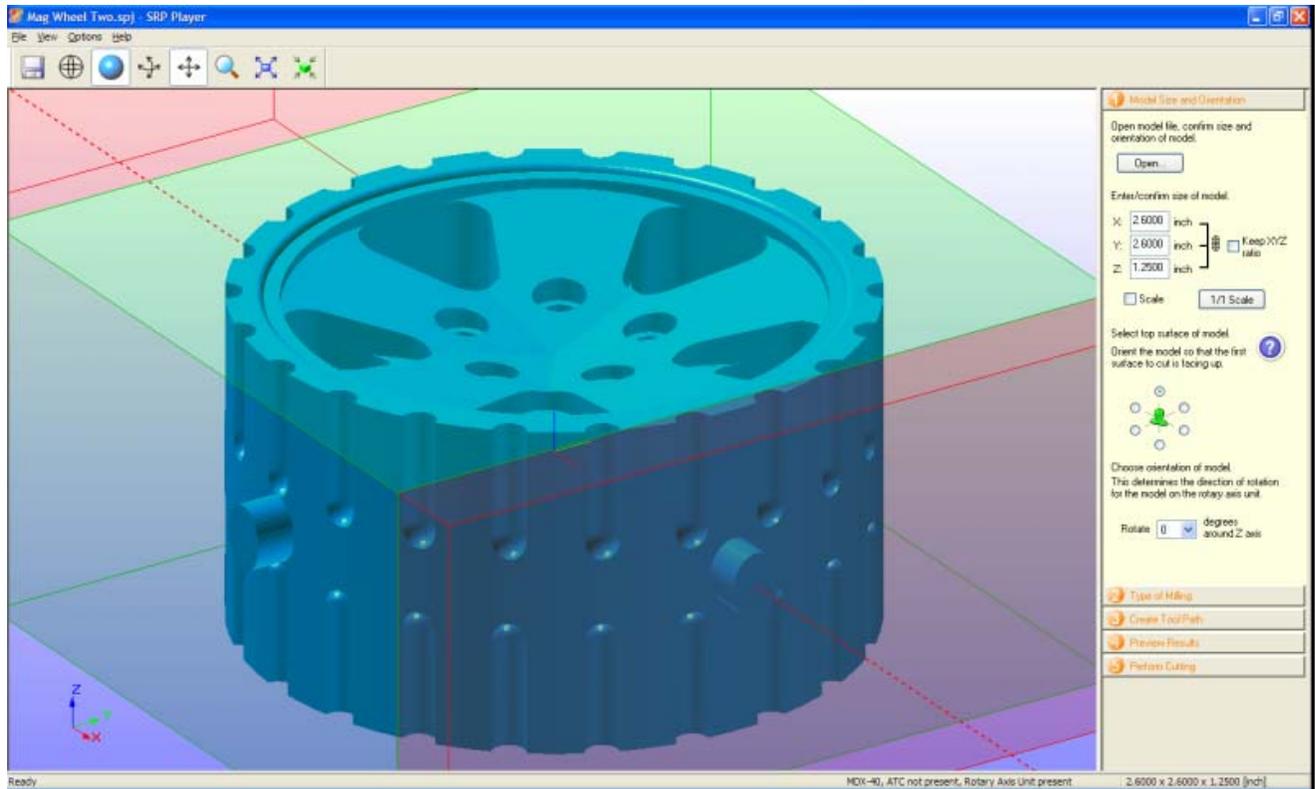


Show Demo Wheel



Demo file to be used at a show

Materials Required:

- Medium Density Tooling Board Material (US-SRP-MD)
- 0.125 Ball End Mill (EMB-125-3F-125)
- 0.125(3.175mm) Collet (ZC-23-3175, Included with MDX-40)
- SRP Player Software



Creating Demo Piece

1



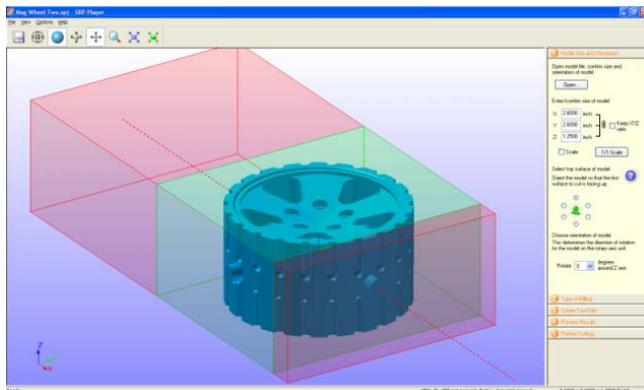
Install SRP Player Software

2



Double click the SPJ project file to open

3

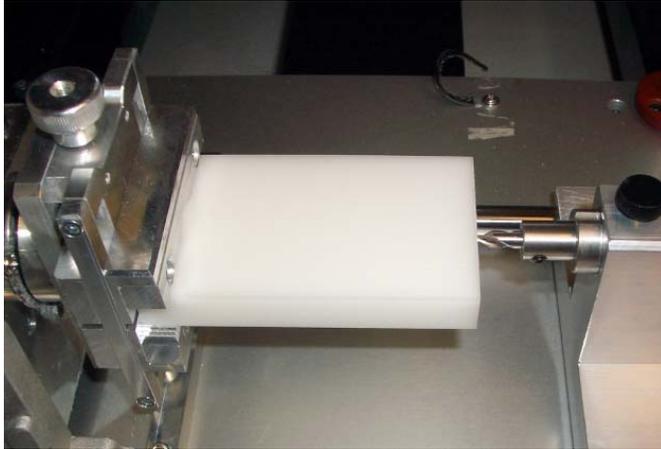


File opened

Installing Tool, Material

1

MATERIAL SHOWN MAY DIFFER FROM ACTUAL MATERIAL

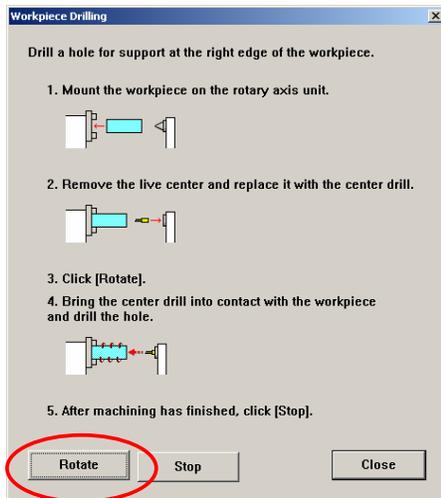


Place material into the self centering clamp. Install center drill and place next to end of material. The center drill will be used to place a small hole for the live center to placed into.



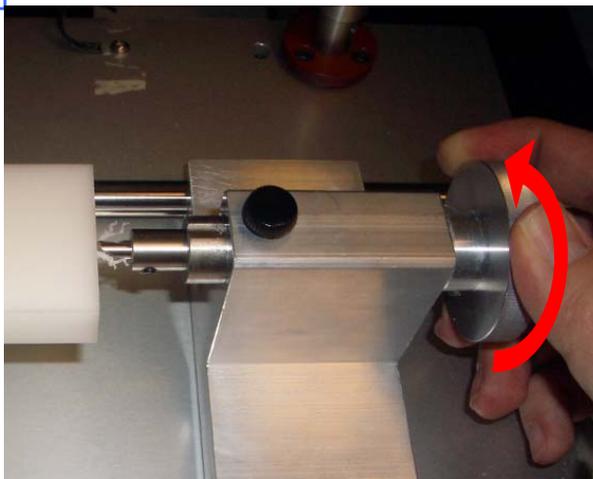
Use the lever to tighten and loosen the live center support

2



From the Virtual Control Panel, Click on the “Workpiece Drilling” Function. Click on the Rotate button to start the A-Axis spinning. Please make sure the machine is not in “view” mode.

3

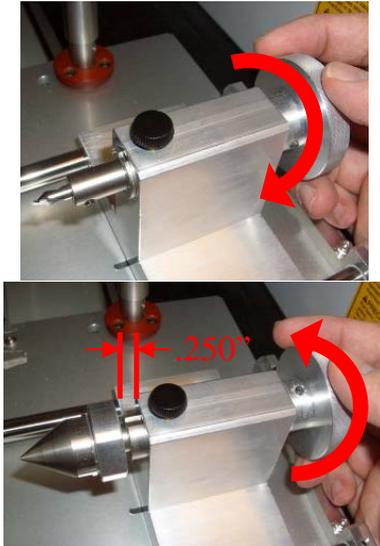


As the A-Axis rotates, **slowly** feed the center drill deeper into the part by turning the core support adjuster on the 4th axis support. Press the stop button when the drill cone is about half ways in the material.



Installing Tool, Material

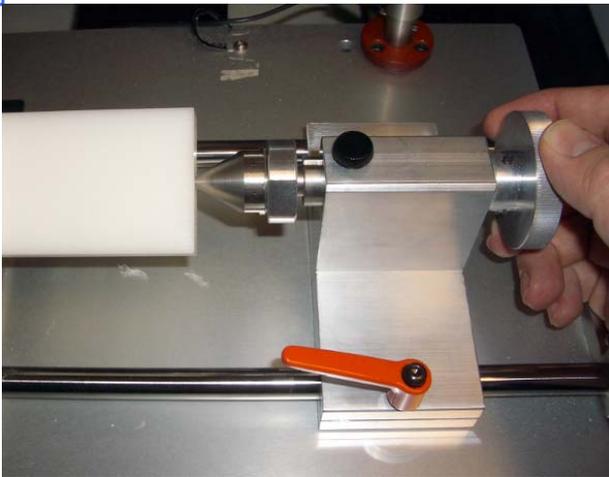
4



Remove the center drill by turning the core support adjuster until the center drill is free. Remove and place live center in the 4th axis support. Turn the core support adjuster until the support is about .250" out.

*Please note material may have to be removed in order to install Live Center

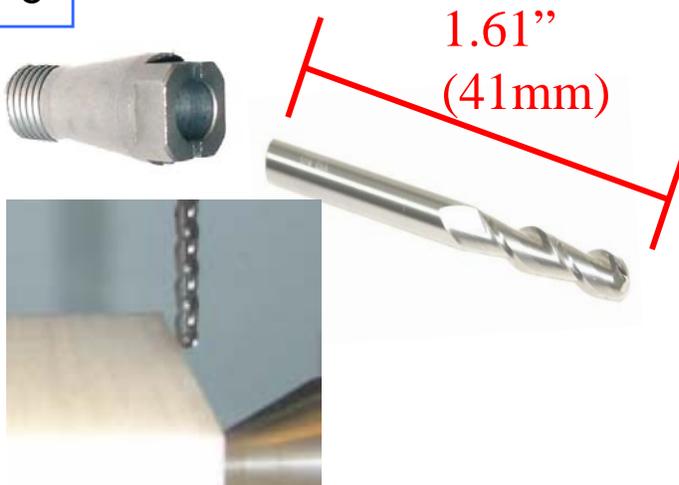
5



Move the live center support until the live center is touching the material stock. Turn the core support adjuster to ensure that the material is firmly supported. Turn the black adjuster lock to lock the core support adjuster.

Press View button to install tool.

6



Select your 1/8" collet and 1/8" (.125") Ball End Mill. Make sure the tool is sticking out about 41mm below the collet. You can measure the tool length **or place the tool so it is just above the material to get the correct length.**

Installing Tool, Material

7



Install the collet and tool in the spindle. Place the 17mm tool in your left hand 1st and over the spindle nut as shown. Place the 10mm tool in your right hand and over the collet. To tighten, pull the wrenches away from each other.

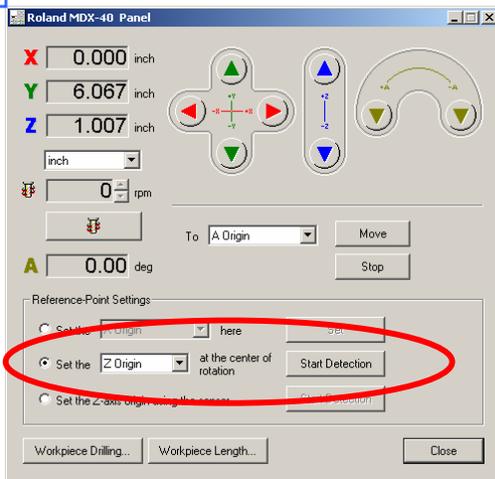
Z-Origin

1



Ensure that the sensor cable is connected to the Z-Origin sensor.

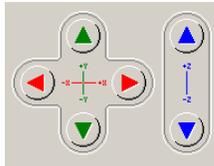
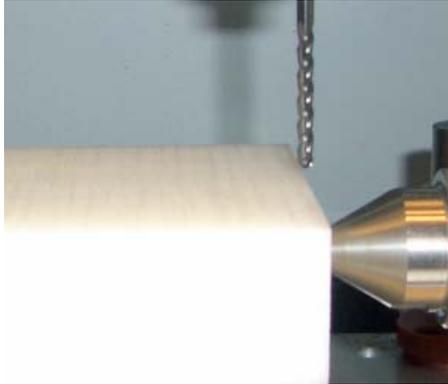
2



Select the **Z-Origin** for the “Set the Z-Origin at the center of rotation” reference point settings. Click on the **Start Detection** button. The Tool will move down, touch the Tool Sensor several times, and the Z-Origin will be set after this.

X Origin

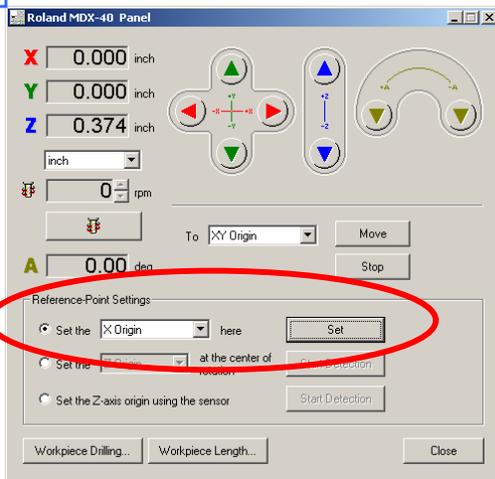
1



First move tool to XY Origin.

Since you are using a 4th axis, Y will always be 0. You will only be changing X when using the 4th axis. To set the X origin, use the virtual control panel to move the tool to the end of the material.

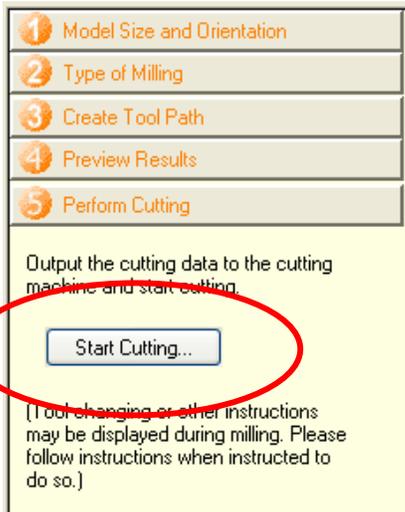
2



Set the X Origin by selecting the **Reference Point Settings** and selecting **X Origin**, and clicking on Set to set the X Origin. You will notice that the Virtual Control Panel will now display X 0.00.

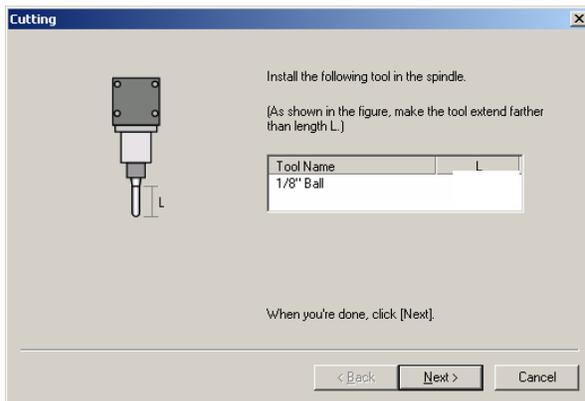
Cutting

1



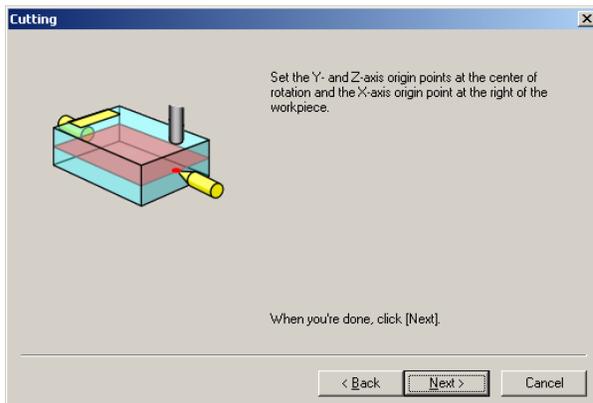
Move down space bar and select step 5. Click “Start Cutting” to begin cutting.

2



The software will ask you to make sure the tool length is set to the proper height, which we did in a previous step.

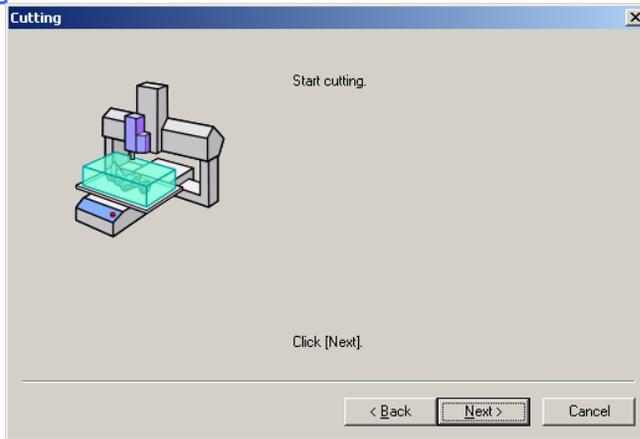
3



The software will ask you to set the X-Origin at the end of the material which we did previously.

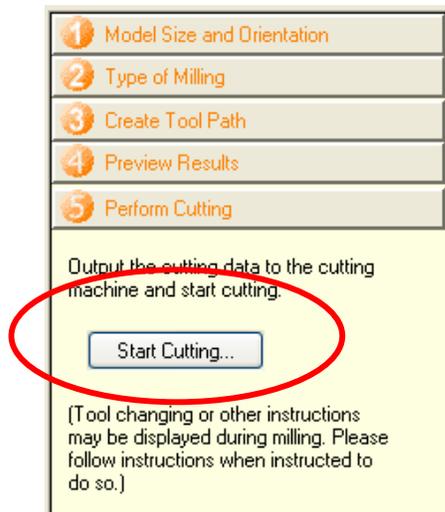
Cutting

1



Click “Next” to begin cutting.
Make tool changes if required.

2



Once the program has finished, run the job again but don't change the material. Just let the machine “ghost” over the finished piece again. You can run the roughing process over and over again or run the finishing program over and over again.

3



Once the show is completed, remove the part from the machine, cut the piece out of its supports.