

How to 3D Finish

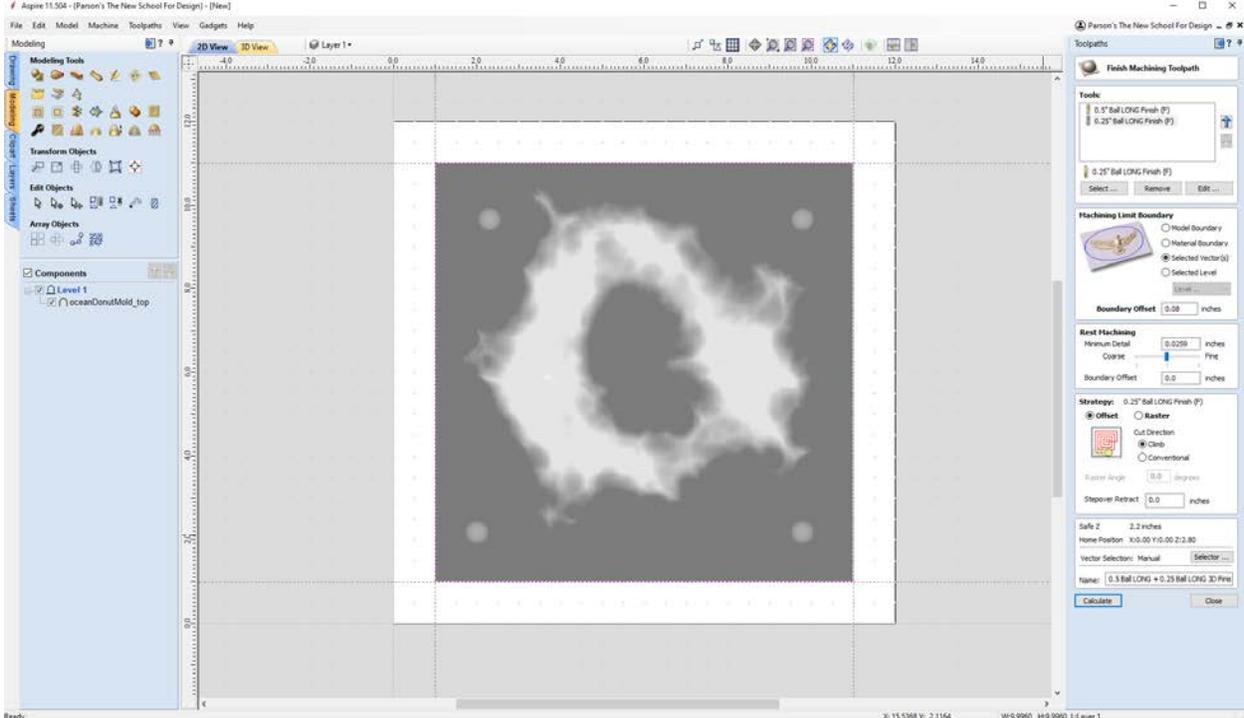
Removing exact amounts of material at varying depths

STEP 1: Select 3D Finishing Toolpath Operation

On the right side of the screen, under Toolpath Operations, select the 3D Finishing Toolpath.

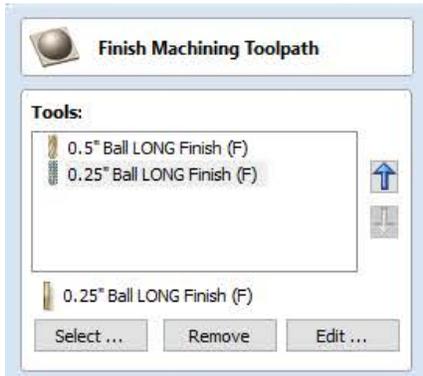


STEP 2: Select Vectors



Select the vectors that will be your 3D finishing boundary. They will turn pink when selected.

STEP 3: Configure 3D Finishing

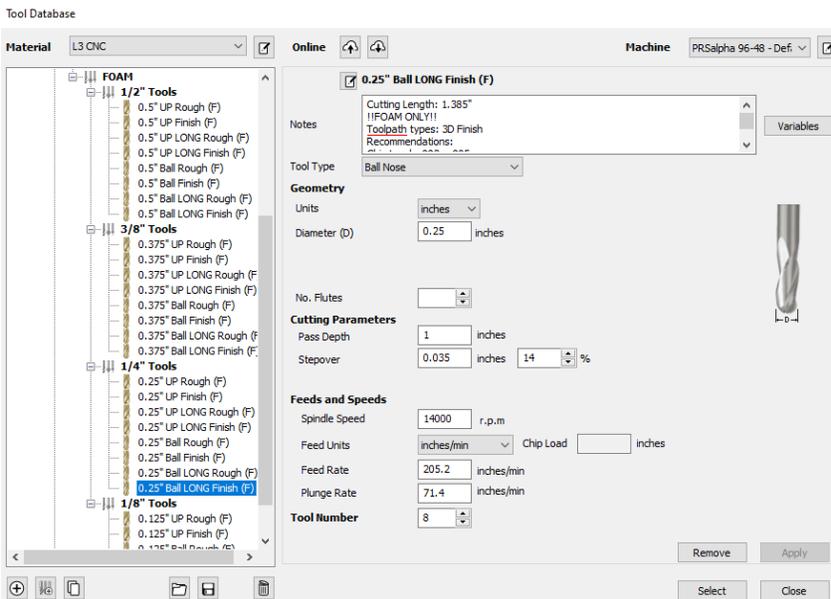


Tool

Press “Select” to open up the Tool Database and choose the most appropriate tool.

You can optimize your pocket with rest machining, a technique that uses multiple tools to optimize machining time and material removal. Each tool will remove any remaining material that the previous tool was unable to machine.

STEP 4: Select Tool



Look under the tool settings that correspond to your material. Use the **largest tool** possible, while still achieving your desired fidelity.

Up tools are generally used for flat topologies, **ball** tools are for curved topologies.

Long tools are used for foam only.

Finish settings are generally used for 3D finish.

STEP 5: Configure 3D Roughing cont.



Machining Limit Boundary

This specifies the boundary for the 3D finishing.

Choose **Selected Vector(s)**.

Strategy

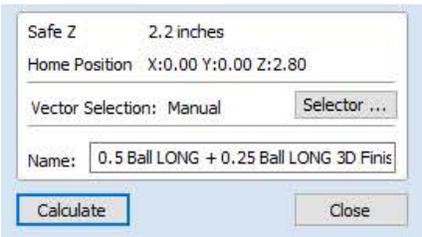
This defines the method that the machine clears away the material.



Offset starts from the center and works its way out. This method works well with organic geometry.

Raster allows you to select the axis you want to machine across. This method works best for hardwood and topographies.

STEP 6: Rename + Calculate Toolpath

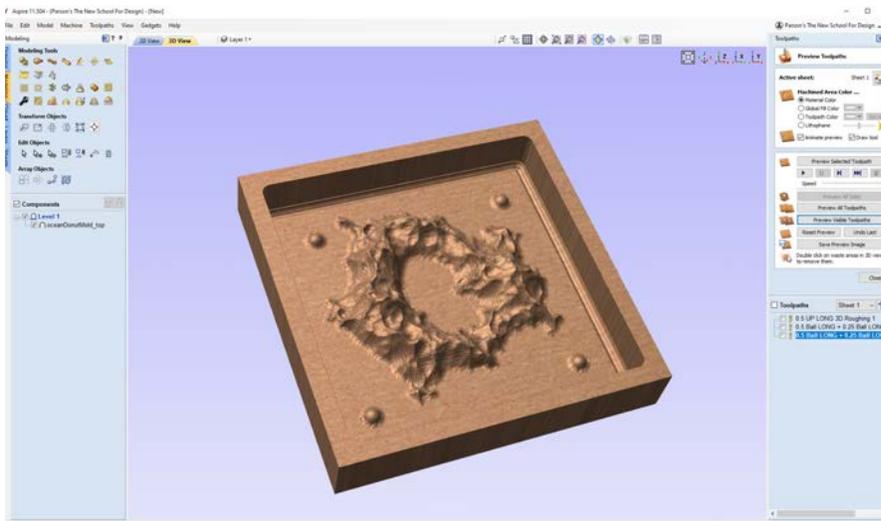


Rename your toolpath to follow the naming convention of “[**toolsize**] [**tooltype**] [**operation**]”. If there’s multiple tools, list all of them.

This will come in handy when optimizing your toolpath order.

Press “Calculate” to finish the operation.

STEP 7: Preview



Click “Preview All Toolpaths” to preview the results.

If you need to edit the toolpath, double click the name of the operation.

When finished, click “Close” to exit out of the preview and click “2D View” towards the top of the screen to continue writing your operations.