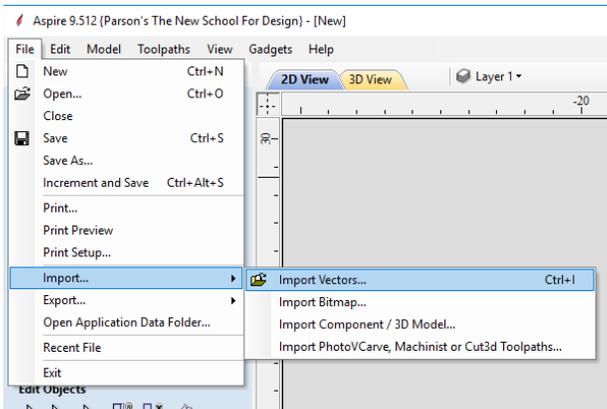# HOW TO WRITE A POCKET

A pocket uses a closed vector to machine down at a fixed depth. This results in the removal of material from the inside of a defined path.
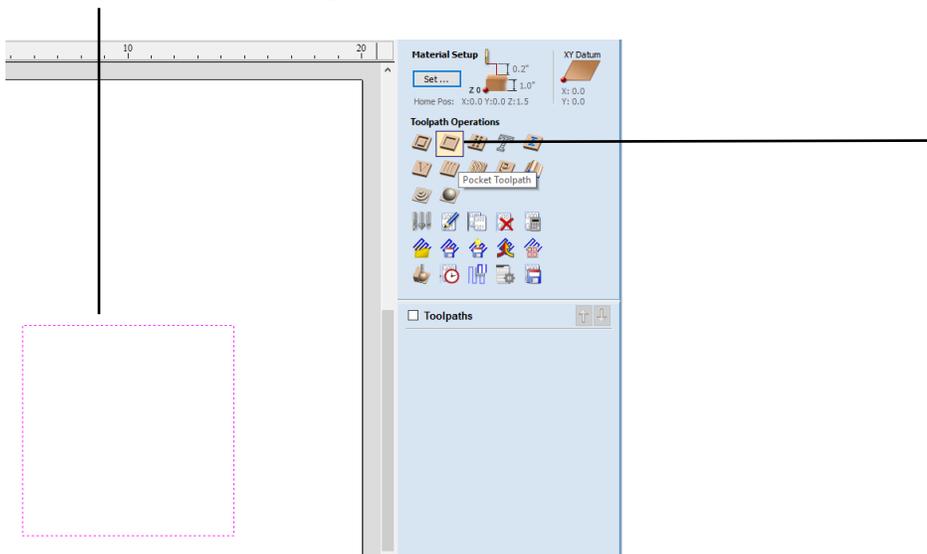
Step 1: Import Vectors
File -> Import...-> Import Vectors

Import the vectors into Aspire that were created inside your preferred program (ie. Rhino/Fusion/Illustrator)

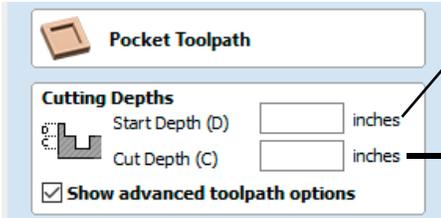## Select the Pocket Toolpath on the right toolpath menu.

Make sure the vector you want to pocket is selected. (it will be a pink dashed line)
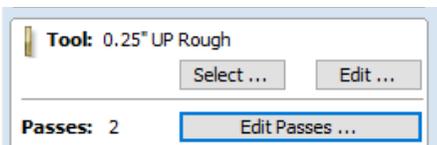
Step 2: Configuring Pockets

This will open a menu with a series of options to configure. Start from the top and work your way down one section at a time.

Cutting Depths

Start Depth(D) should always be set to 0.0 inches.
(the math is always calculated from the top of your material)
Cut Depth (C) this is set to how deep you want you pocket to go.

Tool Selection

Press **Select** to open a new window.
You will want to pick the correct tool for the type of material you are using.
Edit Passes controls how agressive the cut is. It is recommended to leave the default unless discussed with the technician.

Tool Database
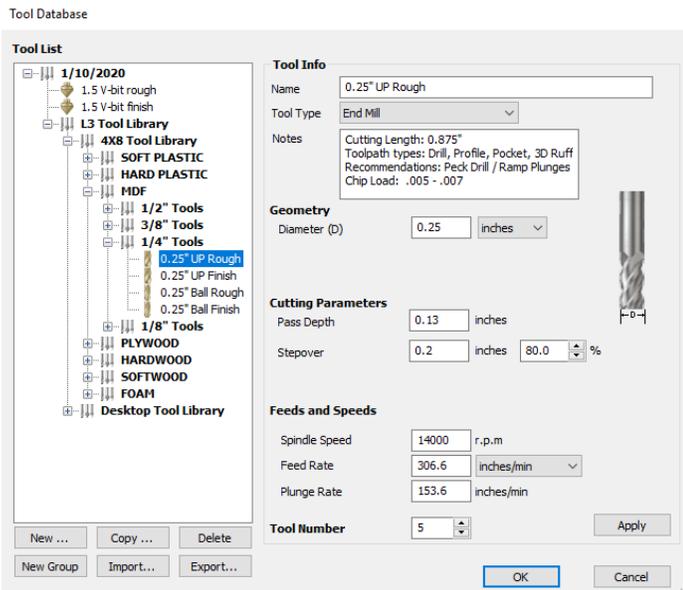
This is where you pick a tool for the active toolpath operation.

note Please make sure to select the correct Tool Library!!!
4x8 Tool Library vs. Desktop Tool Library
Based on what machine you plan to use.

Up Rough tooling is used for most general purpose operations.

Ball Finish tooling is generally used for 3D finishing.

In this example, we have selected the **_4x8 MDF 1/4" UP Rough_**.

Click **OK** to continue.

Clear Pocket

This defines the method that the machine will clear away the material.
There are advantages & disadvantages to both.
Rastering with the grain of wood can result in a better cut.
Offests can create a better tooling mark for organic shapes.
We recommend using Conventional cut direction.
*read "**Things to Consider**" for more information.

Ramp Plunge Moves
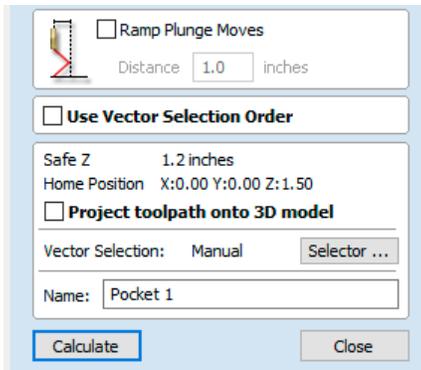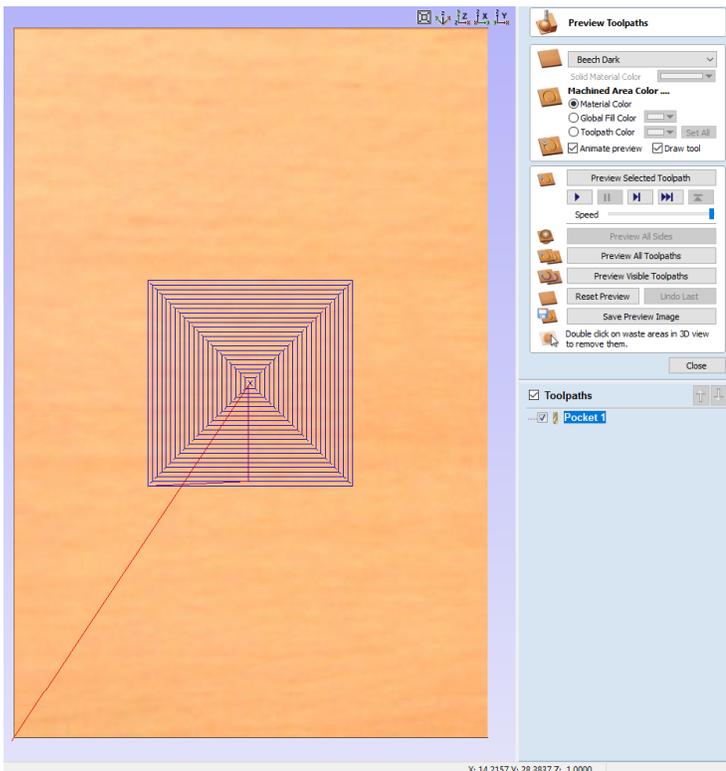
These are not required, but can create a more gentle approach and can improve surface quality. This will increase the cut time and is not supported on the Desktops.

It is recommended to rename the operation to keep track of where you are in your file.

Ex. "0.25_up_Pocket_1"

Press **Calcuate** to finish the operation.

After it finishes calculating, you can simulate & preview the results.

Click **Preview Visible Toolpaths**

If you want to edit the pocket after viewing, right click the name of the operation and click **edit** or double click the name.

This will allow you to make changes to the operation and recalculate.

When finished, click **Close** to close the preview and Click **2D view** to continue writing your operations.