



## Toolpath Tiling for Handibot

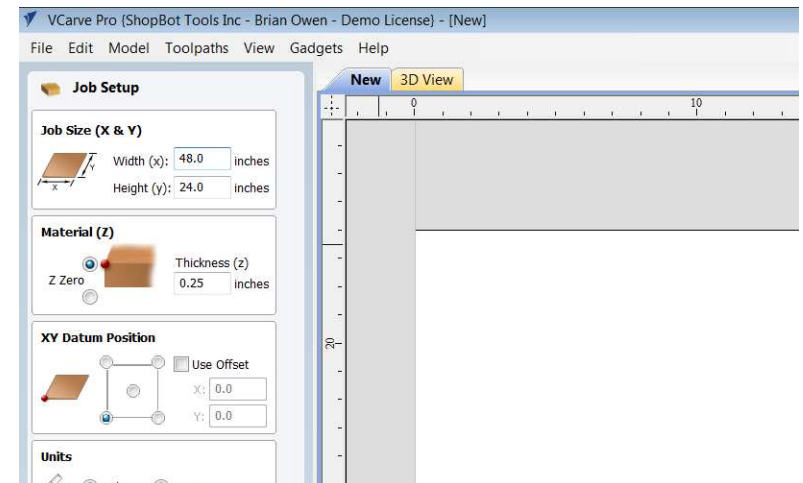
- Handibot has developed a number of accessories to make tiling easier—and users themselves have come up with an endless array of jigs and measurement devices for this purpose.



- What is tiling? Imagine trying to print a large photograph using just a small desktop printer. You might print the photo out on a dozen sheets of paper; each sheet containing a small part of the larger image. Once joined together in the proper order, the smaller sheets would form a larger image.

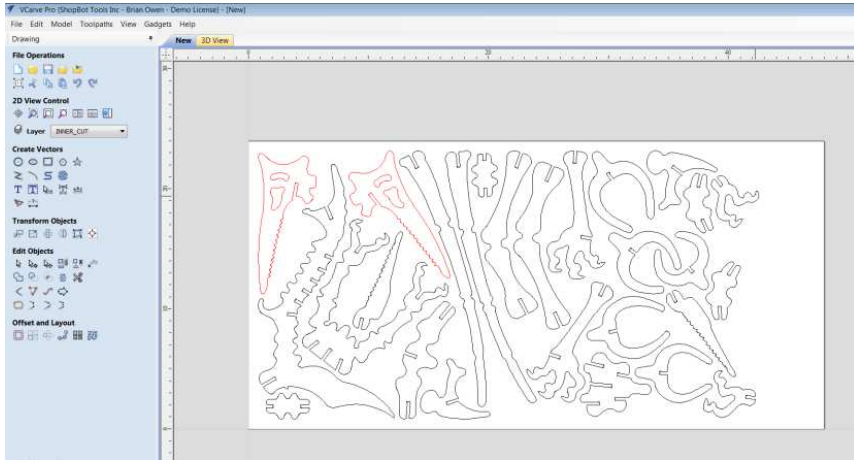
Tiling applies that same strategy to cutting out large patterns with a small CNC router. Take a plan for a chair or a bookshelf--break the cut up into "tiles" that fit the tool--then move the tool across the material, stopping to cut out each tile as you go.

- Tiling jobs are set up just as if you were designing a job for a much bigger tool. Enter the size of your material in the setup window in Vcarve.



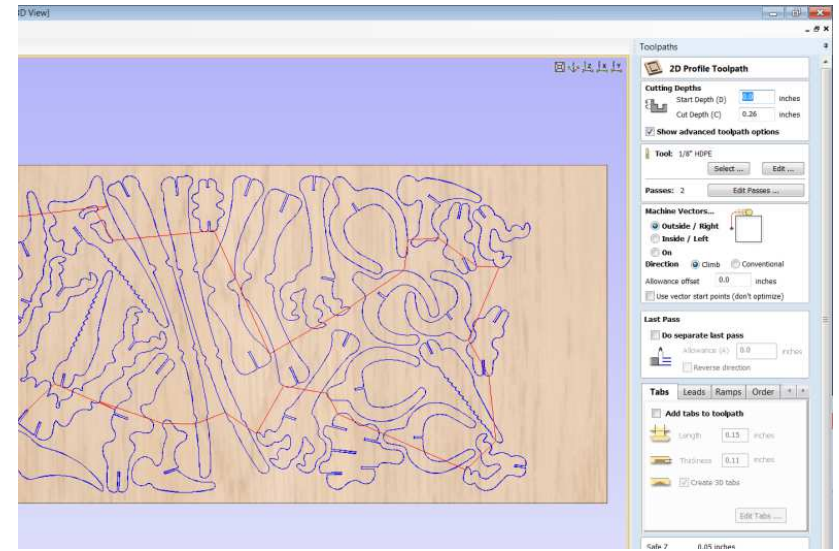
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Then either draw your design in Vcarve or import from an outside source.



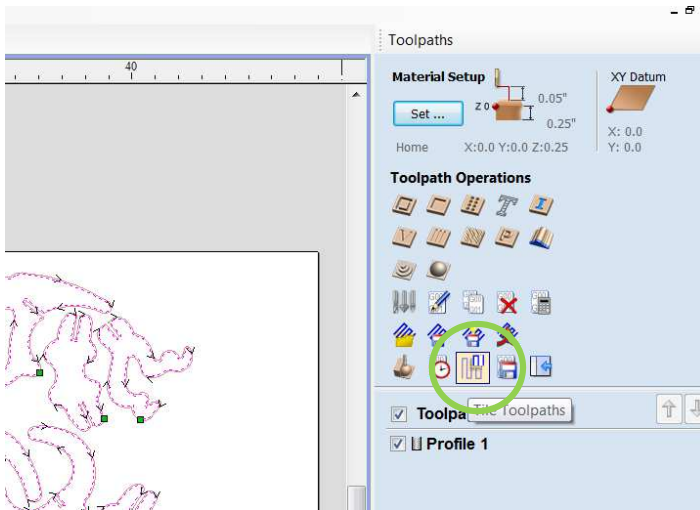
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Define your toolpaths as you normally would—tiling of the toolpath with take place later.



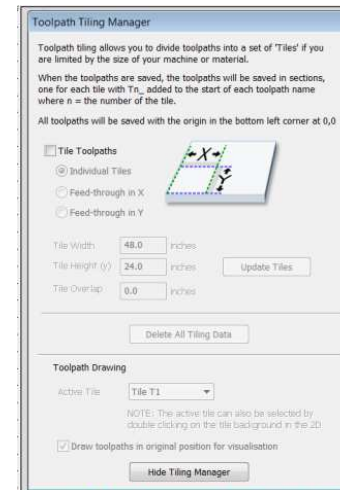
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Once you've finished setting up all of your toolpaths—locate the Tiling manager icon on the Toolpaths side of the work space.



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Pressing this button will open a separate manager window where you will input information about the tool that you'll be using to complete the cut.



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Check the “Tile Toolpaths” box to open the options below...you’ll most often be using “individual tiles”. The tile width and height should be set equal to the cutting area of your tool. For the Handibot Adventure Edition, this is 6” x 8” and for the Large Sheet Tool, this is 6” x 24”. Leave “Tile Overlap” at 0.0

one for each tile with  $T_n$  added to the start of each toolpath name where  $n$  = the number of the tile.

All toolpaths will be saved with the origin in the bottom left corner at 0,0

Tile Toolpaths

Individual Tiles

Feed-through in X

Feed-through in Y

Tile Width  inches

Tile Height (y)  inches

Tile Overlap  inches

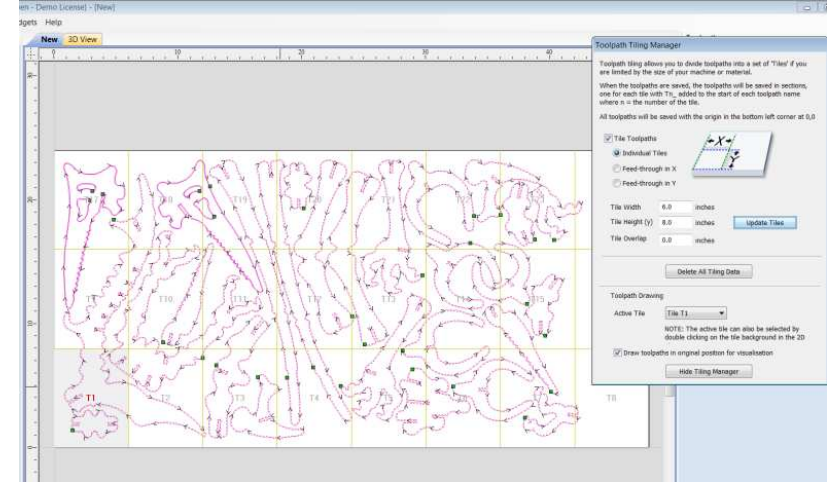
Update Tiles

Delete All Tiling Data



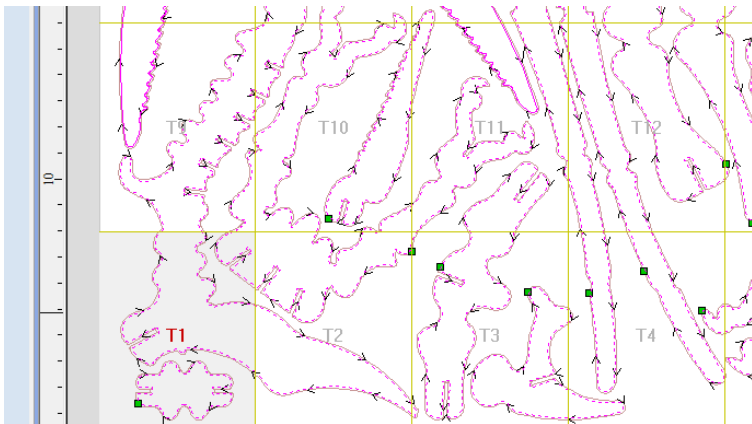
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Press “Update Tiles” to break the cut up according to the parameters that you’ve input.



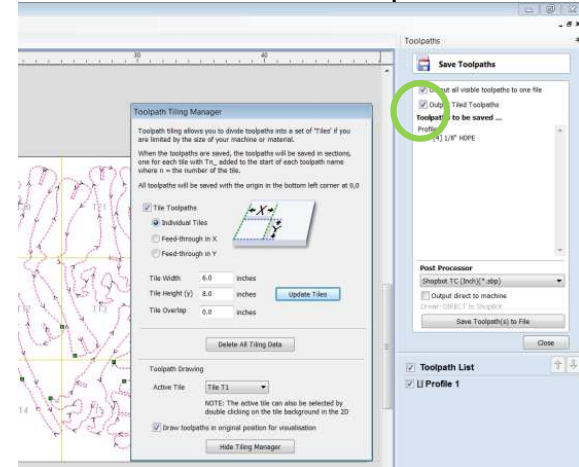
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The sheet will be broken up into numbered tiles. The numbers correspond to what will eventually be the name of the cut file for each tile. You’ll run these in numerical order.



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To save your tiled toolpaths—leave the Tiling Manager window open—go to the toolpaths tab and save the cut file as you normally would. Make sure “Output Tiled Toolpaths” is checked in the Save Toolpaths window.



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Vcarve will save a series of files with suffixes according to the tile number...(example\_T1, example\_T2, example\_T3...)

Once you have them loaded into FabMo—you can click and drag them to rearrange the order if necessary.

