

MAKE A SIMPLE TRAY

Material:

Thickness must be less than length of flutes on cutter

Fasten to table with screws – **NOTE: Use screws only ½” longer than material thickness!!!**

Cutter:

I usually use a ¼” 2-flute spiral upcut bit with a 1 inch cut length:

[https://www.amazon.com/EANOSIC-Cutting-Diameter-Carbide-](https://www.amazon.com/EANOSIC-Cutting-Diameter-Carbide-Trimming/dp/B0BX3D71C5/ref=sr_1_7?keywords=upcut%2Brouter%2Bbit&sr=8-7&th=1)

[Trimming/dp/B0BX3D71C5/ref=sr_1_7?keywords=upcut%2Brouter%2Bbit&sr=8-7&th=1](https://www.amazon.com/EANOSIC-Cutting-Diameter-Carbide-Trimming/dp/B0BX3D71C5/ref=sr_1_7?keywords=upcut%2Brouter%2Bbit&sr=8-7&th=1)

Position in collet so that a little of the solid shank is exposed

Feeds and Speeds:

Conservative numbers for a ¼” bit are:

Feed Rate: 40 in/min

Spindle Speed: 12,000 RPM

Depth of Cut: 0.3 inches per pass

The goal is to make chips, not sawdust.

Desired chip thickness is .0015 to .005

Geometry:

Find a line drawing that you like and import it into Inkscape

If it is only a single line drawing, then you need to copy it to another layer and use Outset to expand one of the copies. (Turn off one layer to do this, then turn it back on.)

Use Path/Object to Path to create nodes

Use Path/Outset or Inset to expand the distance between the inside and outside paths

Set the Height and Width to the desired values (if you use millimeters, then be sure to use ‘Metric’ when bringing into SheetCAM)

Save as a DXF file then import it into SheetCAM (I usually use the center origin and Inch or Metric as appropriate to get the desired size.)(You may need to use ‘Custom’ scaling to get the desired size in SheetCAM.)

In SheetCAM:

Layers: ‘pocket’ and ‘outside’

(Note: Put the inner line on the (New Layer) ‘pocket’ and the outer line on the ‘outside’ layer.)

Tools:

T1: Mill/Router ¼ flat 1” cut length, 0.3 in per pass, 40 in/min

Operations:

Pocket – spiral pocket, ‘pocket’ layer, T1, cut depth .8 in

Contour – ‘outside’ layer, T1, cut depth .92 in (Place Tabs .2 wide X .15 high)

