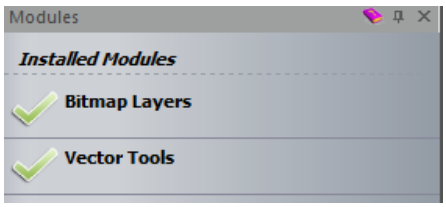
ArtCAM Express 2013

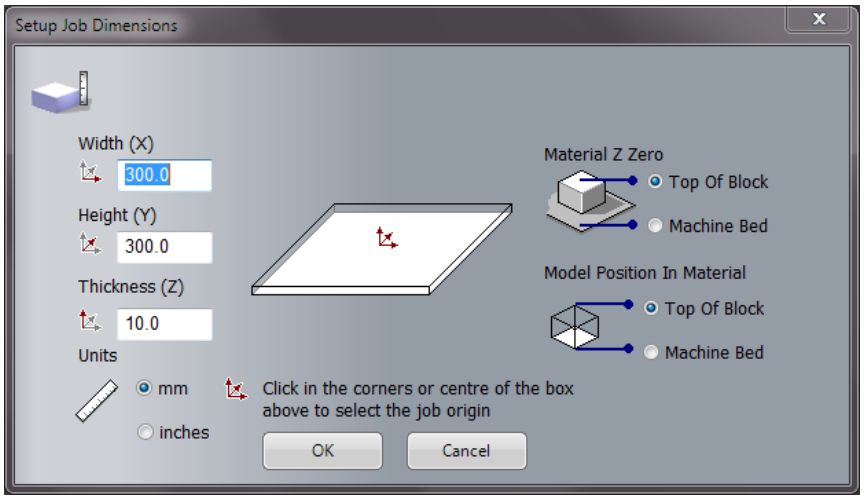
The following is a demonstration using the Bitmap Layers and Vector Tools modules for ArtCAM Express.

V-bit Decoration

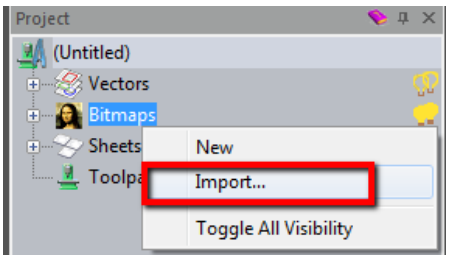
1 Open ArtCAM Express and show the modules that are installed currently



2 Create a new model which is 300mm x 300mm and 10mm in depth, with the origin set to the centre of the model



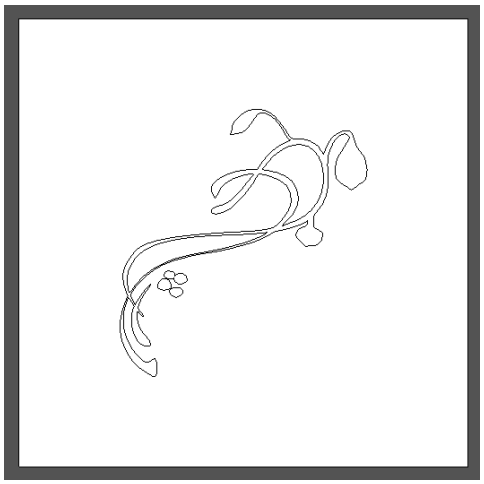
3 Right click Bitmaps under the project tree and select Import



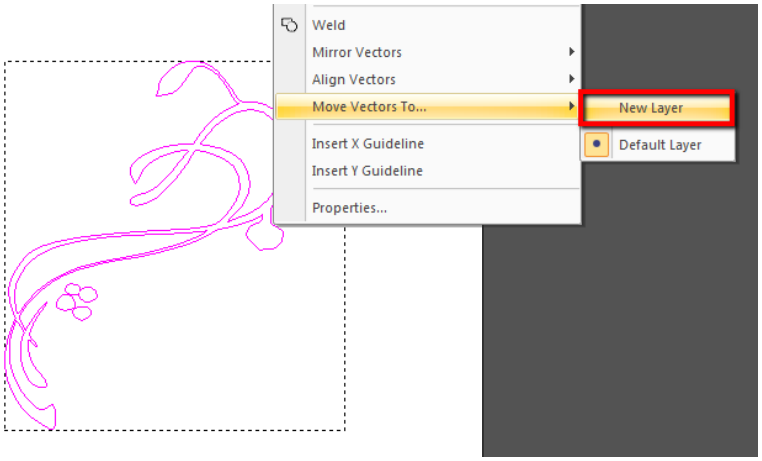
4 Select Vine 1.png and import

5 Select Bitmap to Vector, reduce colours down to 2 and create vectors

6 Switch back to original bitmap layer

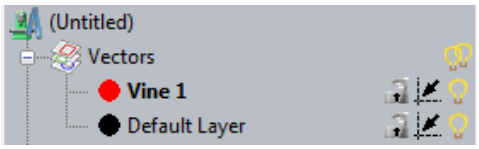


7 Select all of the vectors, right click and move vectors to a new layer



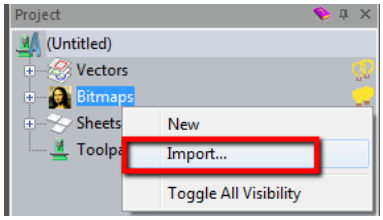
8 Rename this new vector layer as Vine 1

9 Change the colour to Red



10 This can then be turned off by selecting the lightbulb to the right

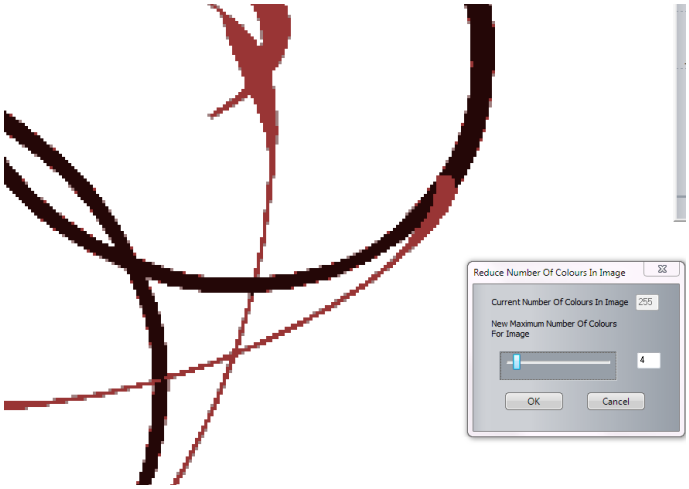
11 Right click Bitmaps under the project tree and select Import



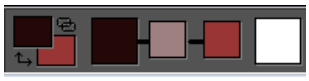
12 Select Vine 2.png this time and import

13 This time this image has colour, but do exactly the same, create a bitmap to vector

14 Although this image can be brought down to 2 colours, bring it down to 4

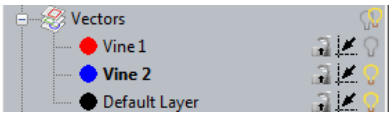


15 Link the darker red with the lighter colours and create vectors

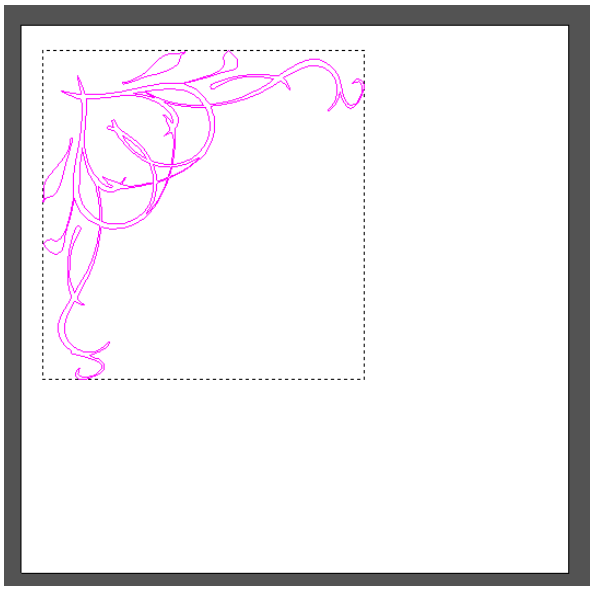


16 Right click on the vectors and move to another new layer

17 Rename the new layer to Vine 2 and change the colour to blue

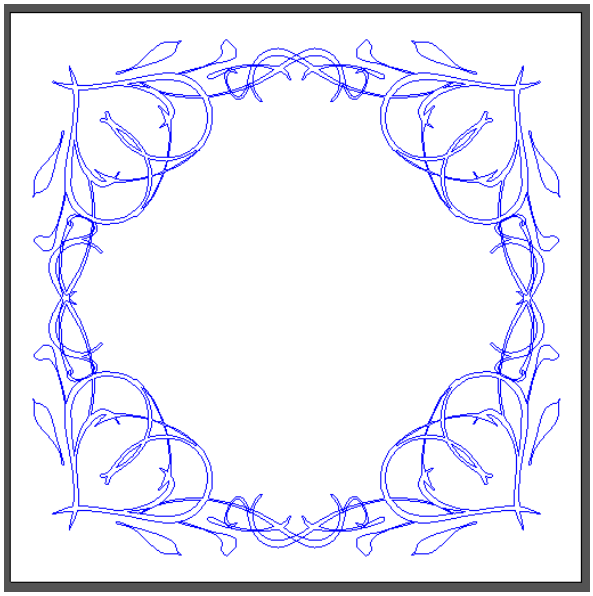


18 Move the Vine 2 to the top left corner, approximately as shown

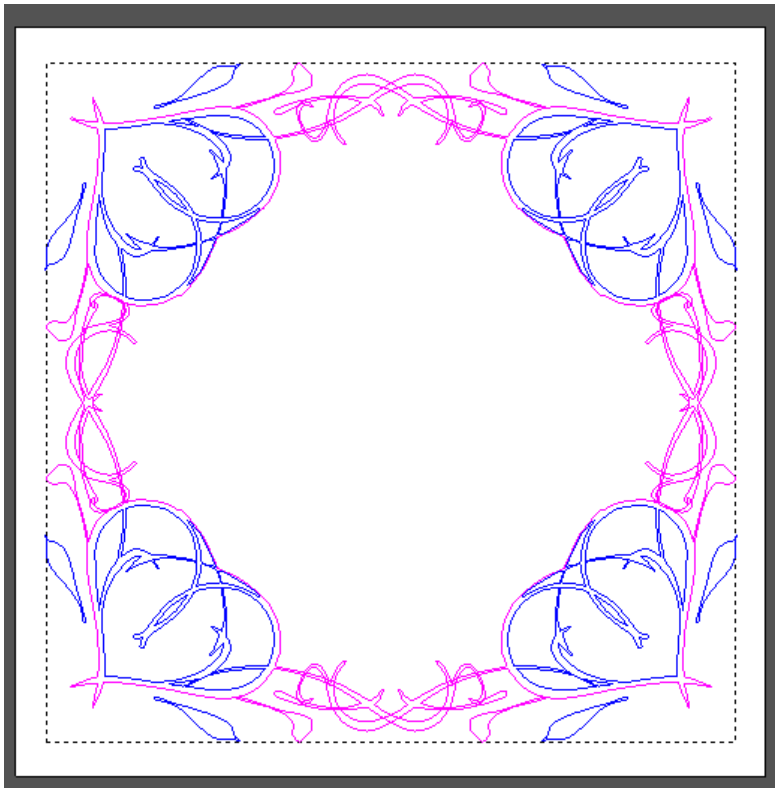


19 Mirror this across model

20 Select all the vectors and mirror over model



21 Select all of the vectors, not including the inside of the "heart" shapes in the corners

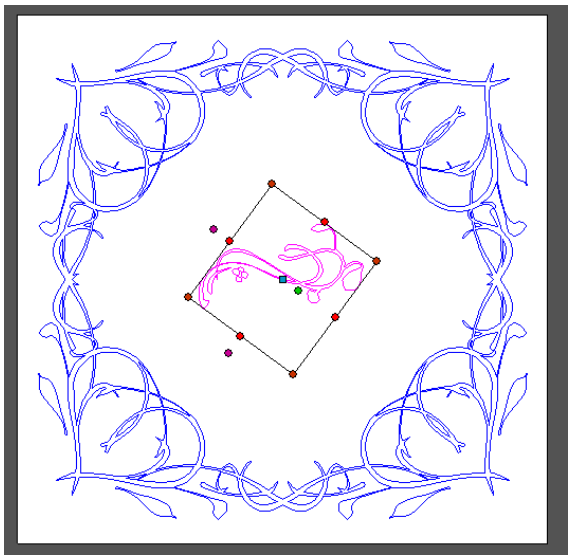


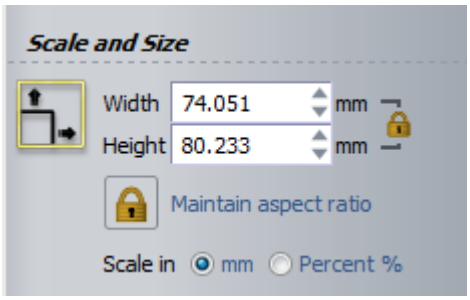
22 Weld the vectors to remove the intersections

23 Turn the Vine 2 layer off

24 Turn Vine 1 layer on

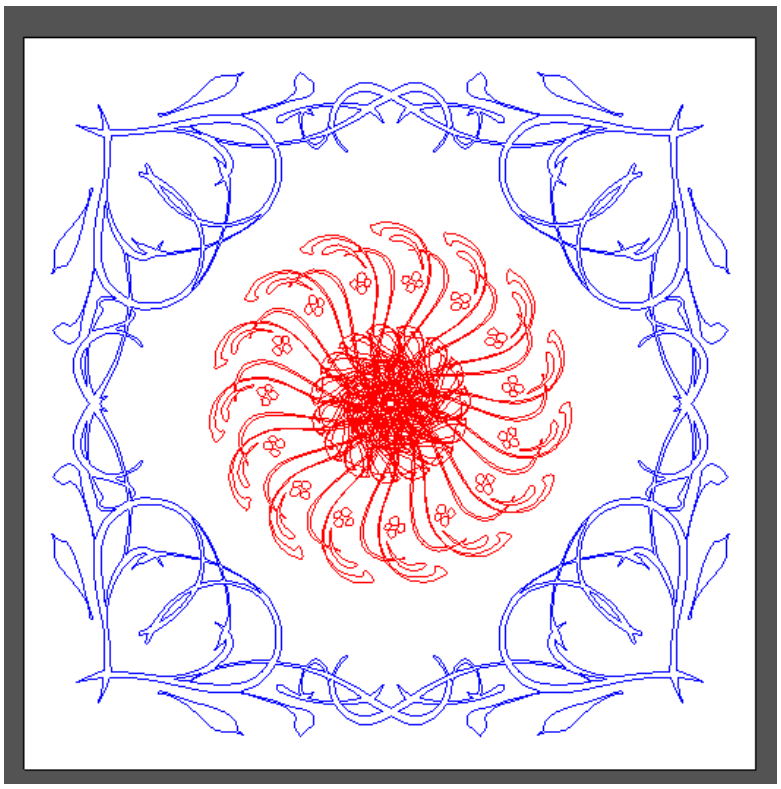
25 Resize the red vectors to aprox 75mm in width and rotate clockwise aprox 35° so it is horizontal





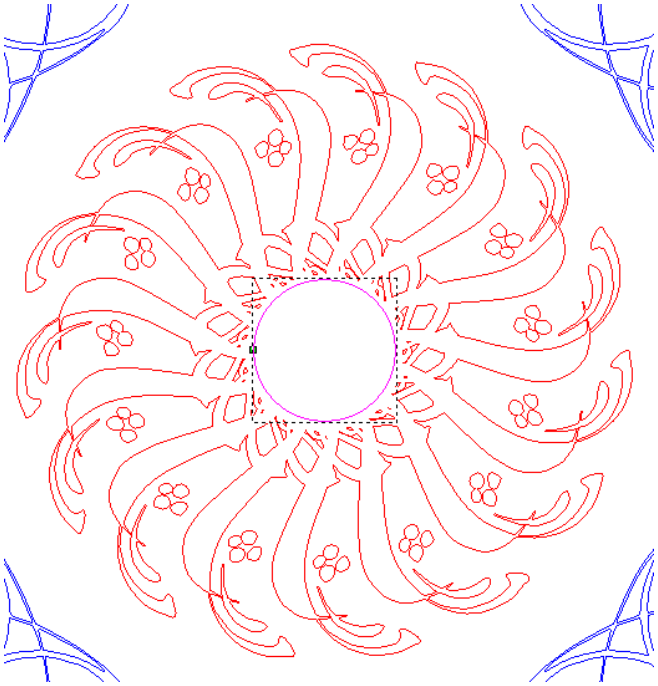
26 Move the vectors to the left so it just sits on the origin

27 Select Block copy/Rotate and rotate the red vectors 15 times



28 Select all of the red vectors and weld them together

29 Create a circle in the centre to stop the v-bit cutting too deep



30 Select Toolpaths and select v-bit carving toolpath

31 Use Vine 1 as the vector association

32 Use a 32mm 90° V-bit tool and select the refresh icon to show the depth of cut

33 Calculate

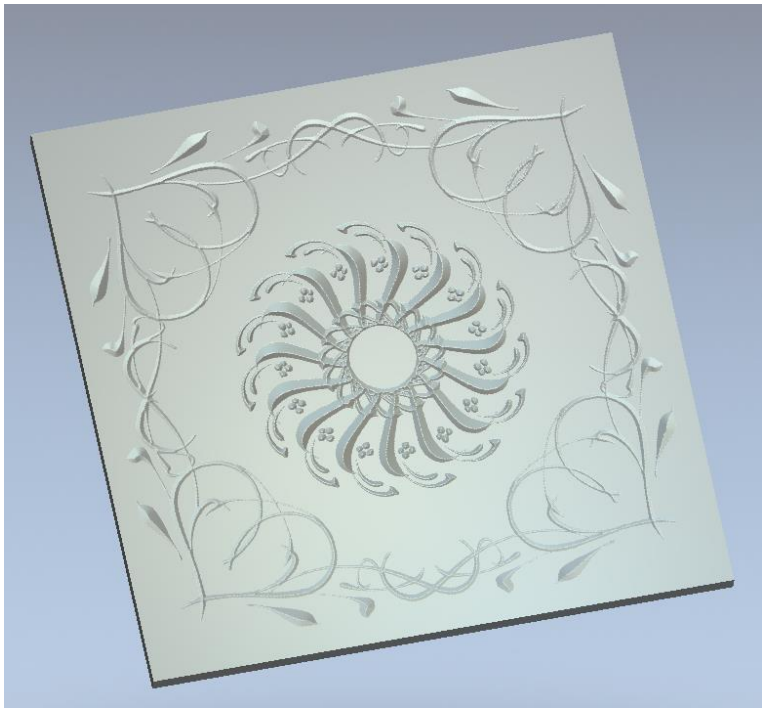
34 Select Toolpaths and select v-bit carving toolpath

35 Use Vine 2 as the vector association

36 Use a 32mm 120° V-bit tool and select the refresh icon to show the depth of cut

37 Calculate

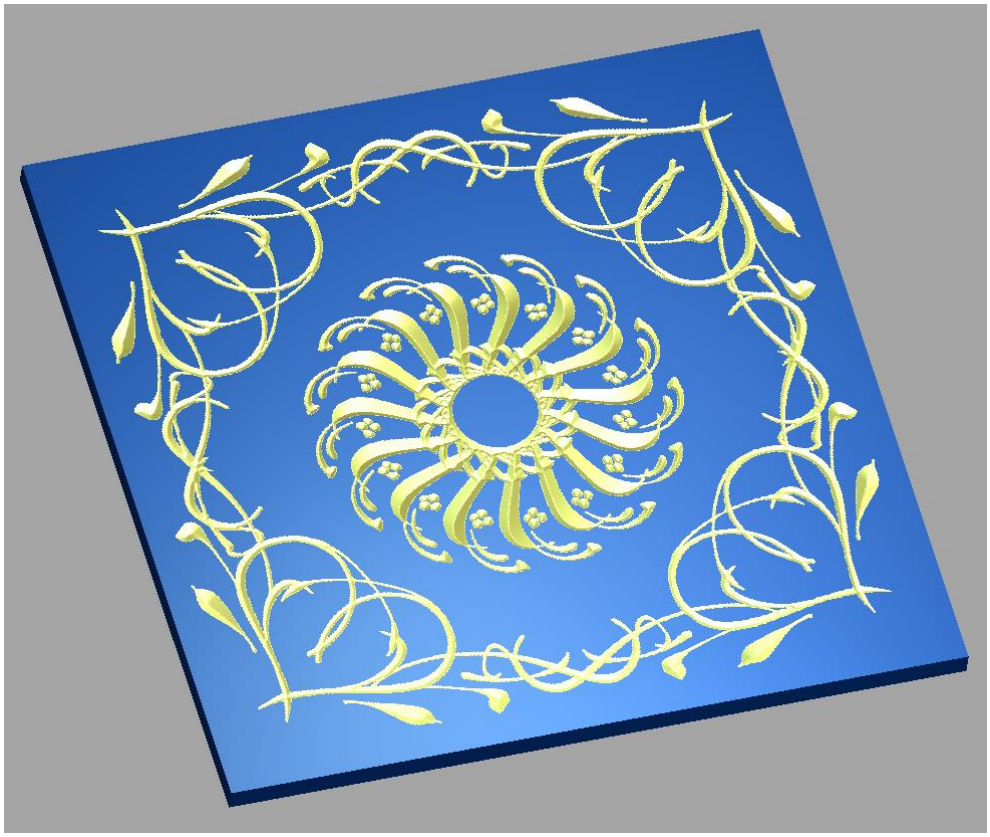
38 Simulate the toolpaths



39 Change the material to blue wax

40 Add a colour to the colour pallete (light yellow)

41 Turn on depth colour



42 Post process all of the toolpaths for sending to a cnc machine