

Using 2D Design (V2) to Vectorise



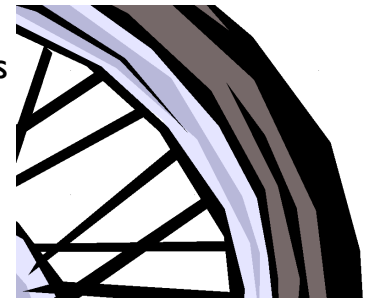
There are 2 main types of image; **Bitmap** and **Vector**



Close up of a bitmap image

Bitmaps are made up of millions of tiny squares of colour (pixels) the more pixels there are the better the resolution and quality.

Vector images are made up of lines, curves and solid colour.



Close up of a Vector

Bitmap images cannot be used to cut on a CNC machine BUT 2D Design V2 can convert from a bitmap to vector image.

You need to start with a good quality bitmap preferably against a plain background.



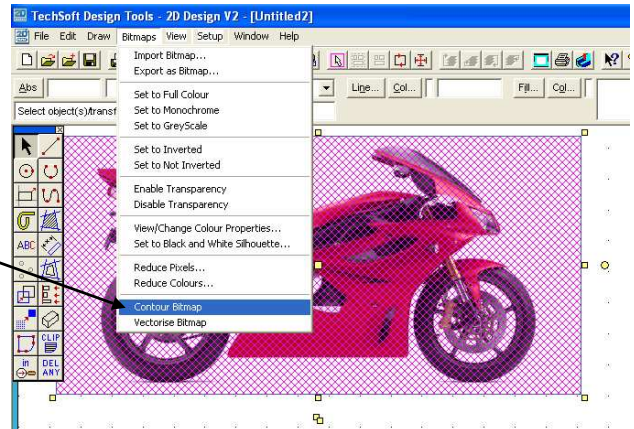
Good example



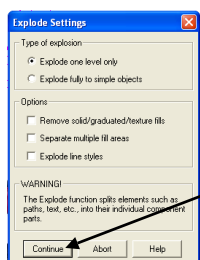
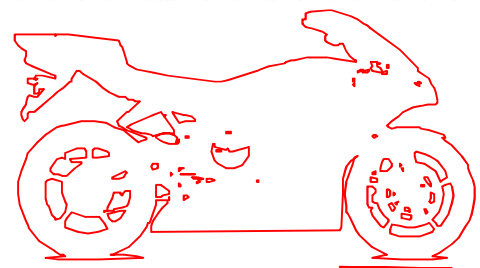
Poor example

Copy and paste into 2D Design
Resize (hold down the **CTRL** key while resizing to keep the aspect ratio correct)

In the Bitmap menu, select **Contour Bitmap**.
Type in **0 Contour spacing** and check **Graphical path**.
Click **OK**

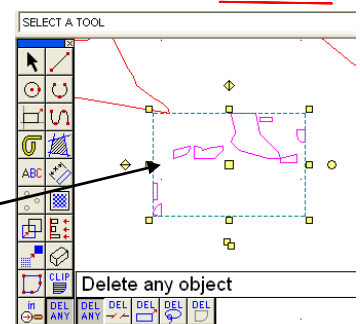


Delete the bitmap and change the line to red (for the laser cutter)



You may need to edit the line to remove extra parts,
In the **Edit** menu, click on **Explode**.
Click on **Continue**

Delete any lines you want to by selecting and deleting.



You may need to edit other lines rather than delete.

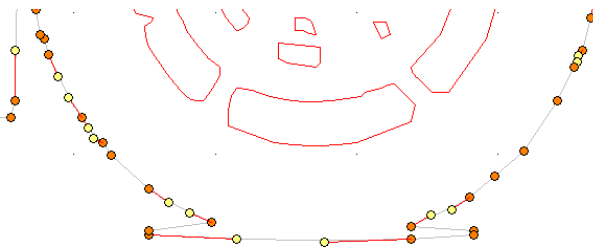
Select the lines you want to edit and click on **Start Edit**



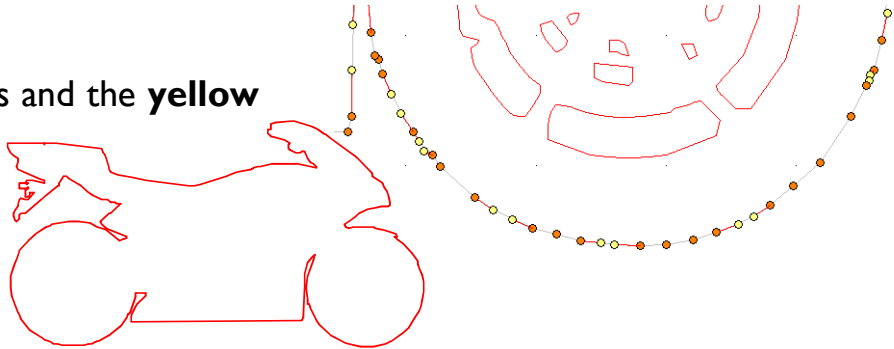
You may find it easier to disable 'step lock' and zoom in.



Select each 'node' and move it to a new position.

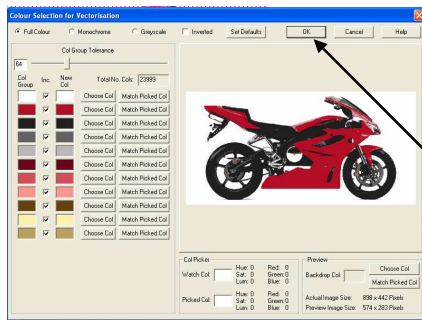
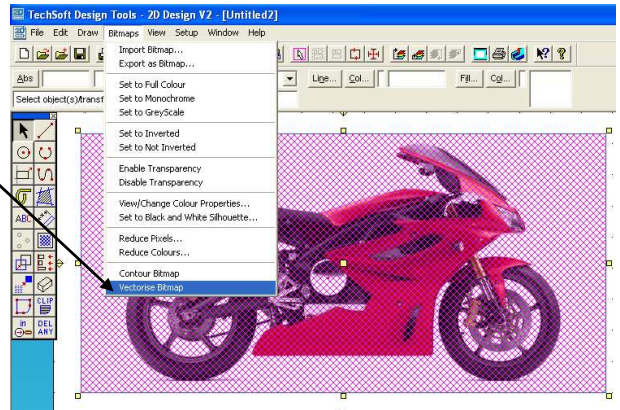


The **orange dots** are nodes and the **yellow dots** change the curvature.

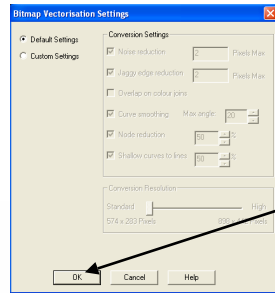


Another method is to vectorise the entire image.

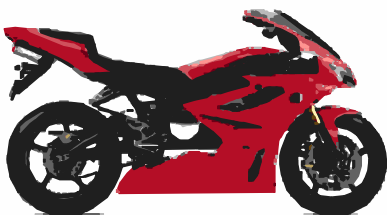
In the Bitmap menu, select **Vectorise Bitmap**.
Click on the image.
In the **Colour Selection for Vectorisation** window, click **OK**



In the **Colour Selection for Vectorisation** window, click **OK**



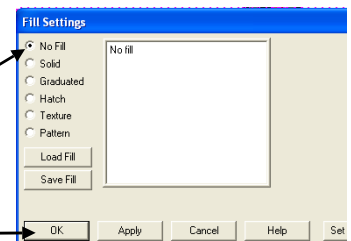
In the **Bitmap Vectorisation Settings** window, click **OK**.



The image is now completely vectorised.
Select the image and click on **Fill...**

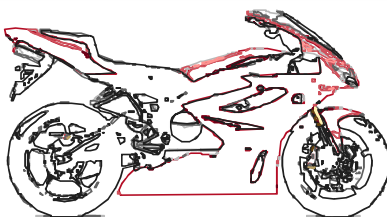


Check the **No Fill** button.



Click **OK**

Change the line colour. (**Red** to cut or **Blue** to engrave)



Ungroup and Explode as before.
Remove unwanted lines.
Edit if necessary as before.

