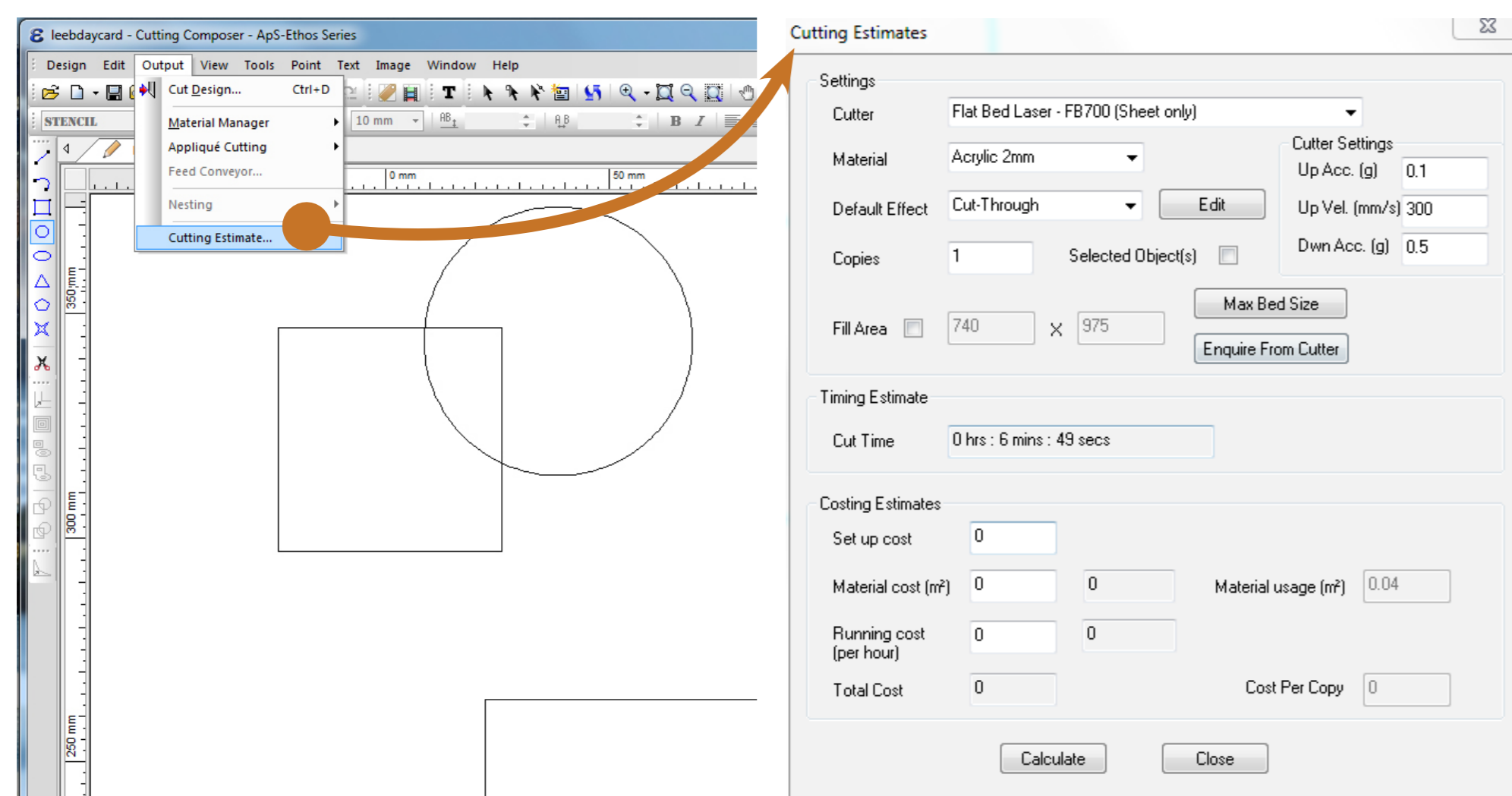# Tips & Troubleshooting for laser cutting
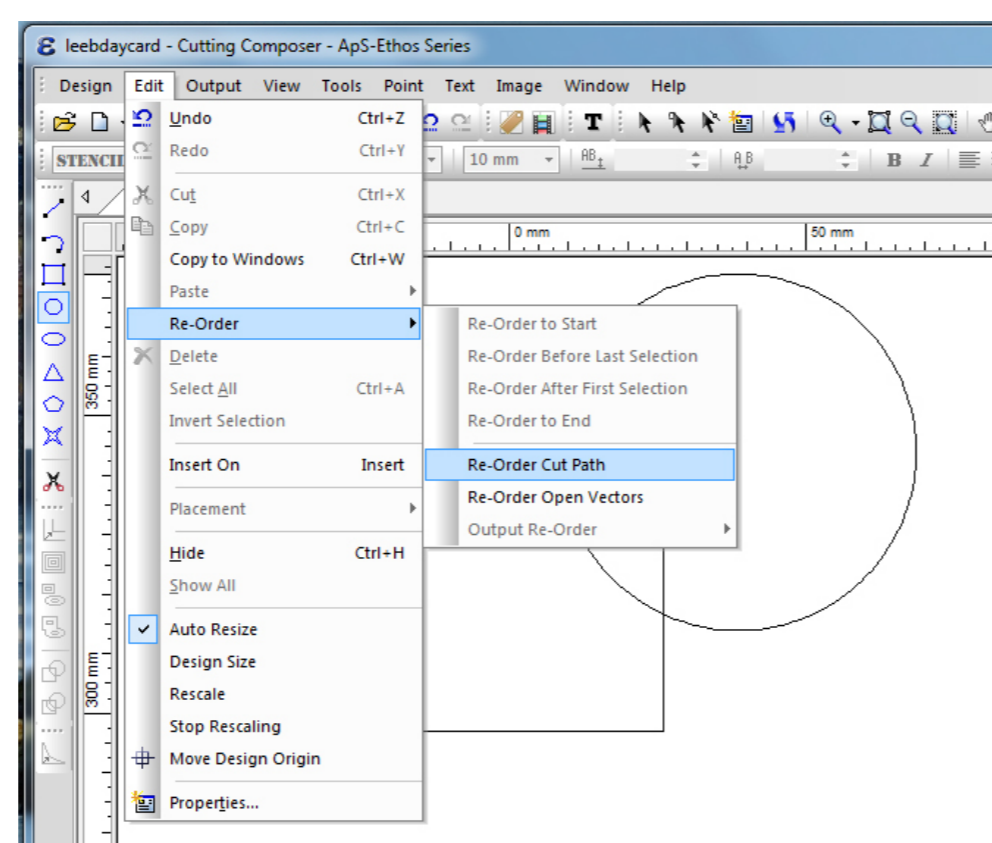
Tips

Cutting estimate:

Ethos can estimate how long you job will take. It's always advisable to do this to make sure you don't overrun you booked time.

Go to **Output>Cutting estimate**, in the dialogue box select your **material** and **Default Effect** then click the **Calculate** button at the bottom.
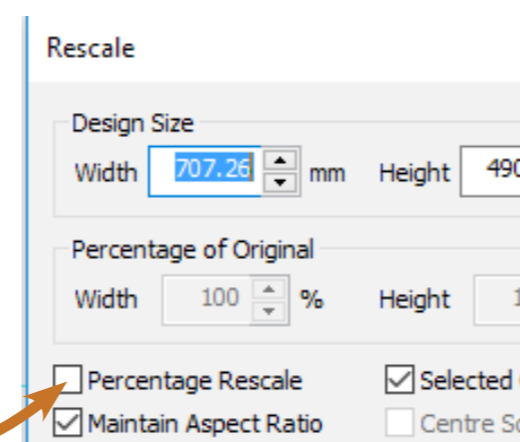
Re-order cut path (reduce cutting time):

Re-order will analyse all the cuts in you job and put them in the most logical order to save time travelling between cuts. Go to **Edit>Re-Order>Re-order Cut Path.** You can check how much time you have saved by doing another Cutting Estimate.
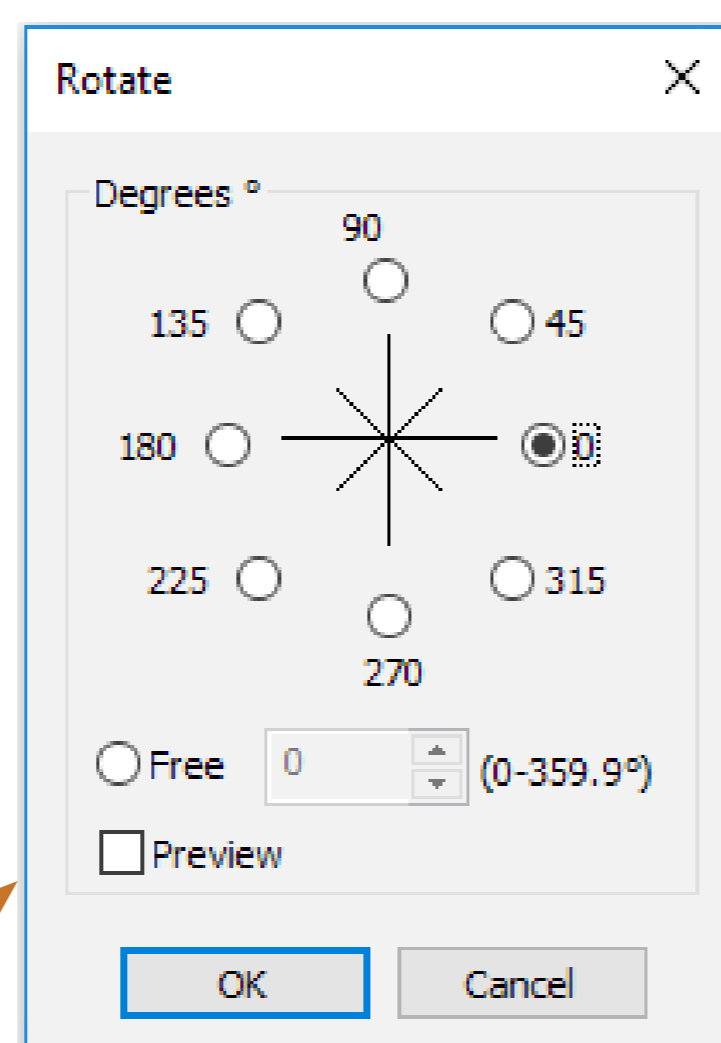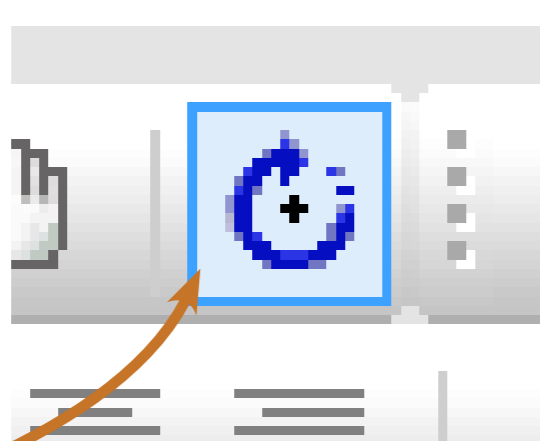
Rescale:

Select the object/s you want to scale then Go to Edit>Rescale and input your desired size. To change to percentage rescale check to box in the bottom left.
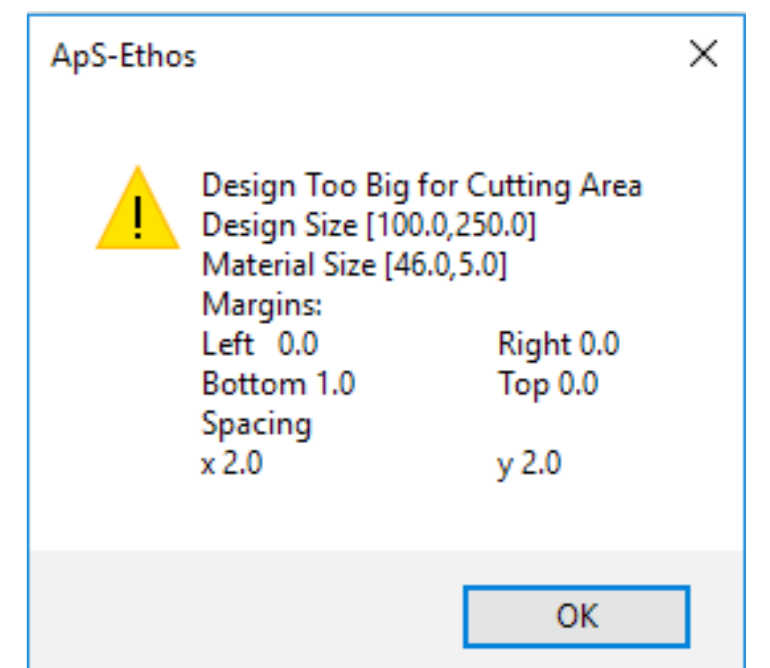
Rotate:

Select the object/s you want to rotate then click on the **Rotate** icon from the ribbon menu at the top and free rotate away. If you want to rotate by a specific angle press 'N' to get this window to the right.
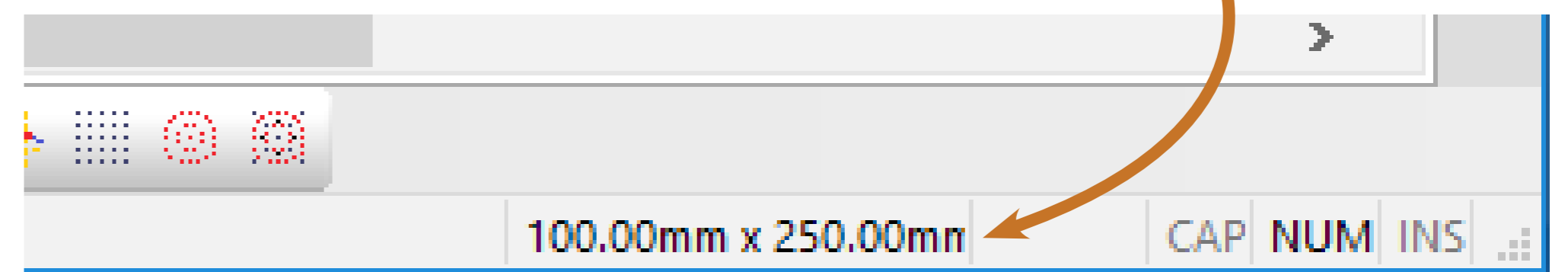
Troubleshooting

Design too big:

If you get this error then your design is too big or your material is too small. You might not have set the origin and media sizes big enough. Your material needs to be at least 2mm bigger than your design.

Sometimes Ethos explodes elements of PDFs from AutoCAD making your design meters bigger, always check your design size at the bottom right .

If your PDF has exploded making your file huge then open it in Adobe Illustrator and save it as an Illustrator file (.ai). This file can be opened in Ethos directly and should have solved any file size issues.

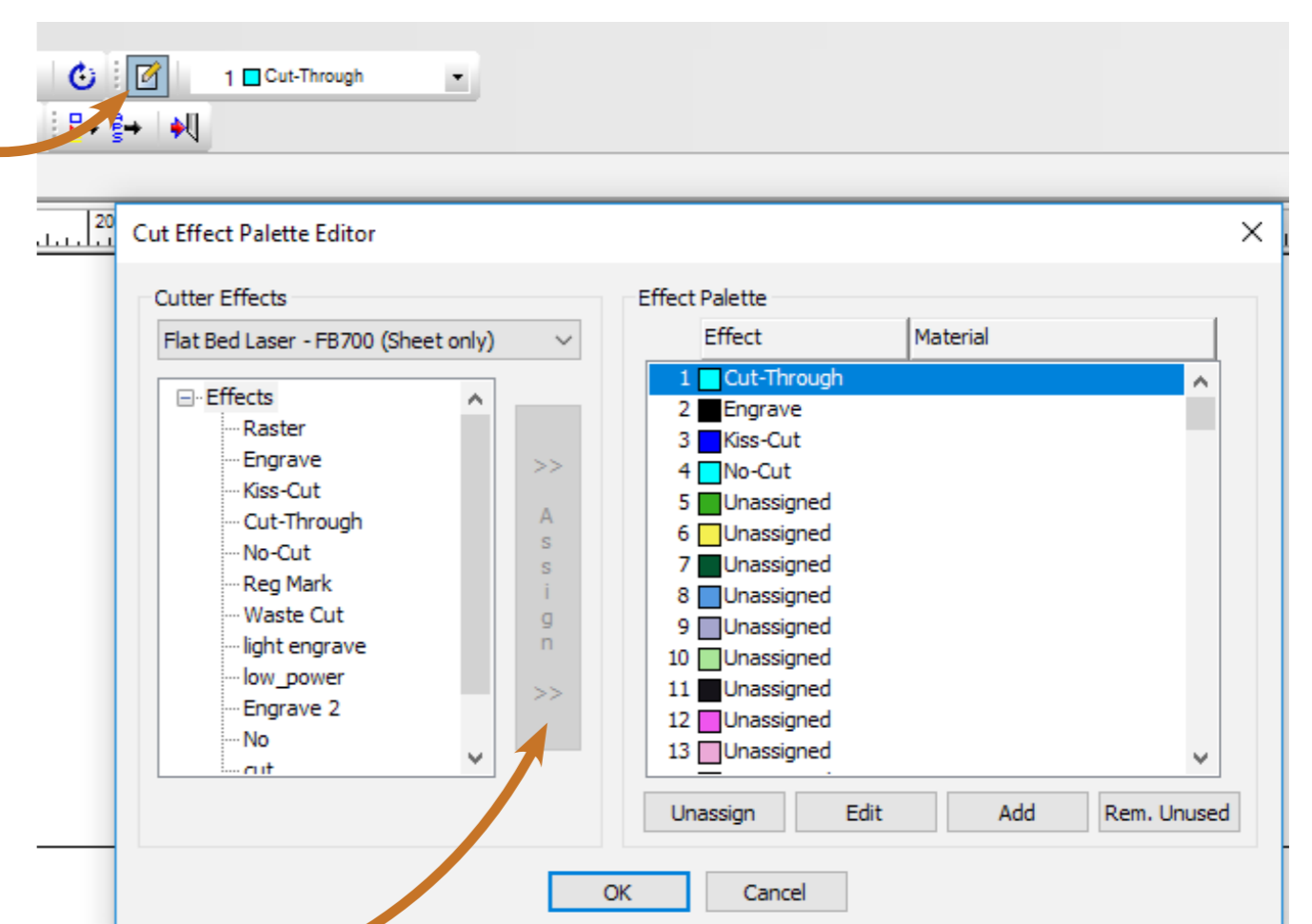### Line colours in Ethos and AutoCAD differ:

Go back to your AutoCAD file and change the DRAWORDER. First select all object then click Home tab Modify panel drop-down list, find DRAWORDER and select Bring to Front from the drop-down. Now re-plot to PDF.

Cannot select individual lines:

Make sure your PDF contains vectors rather that an image - this sometimes happens with files form Digimap.

Cut/Engrave colours are wrong way around:

Open the **Cut Effect Palette Editor**. Select the effect in the **Cutter Effects** column, then the colour you want that effect to be in the **Effect Palette** column. Once you have done that click the **Assign** button in the middle and the effect will be assigned to the new colour.