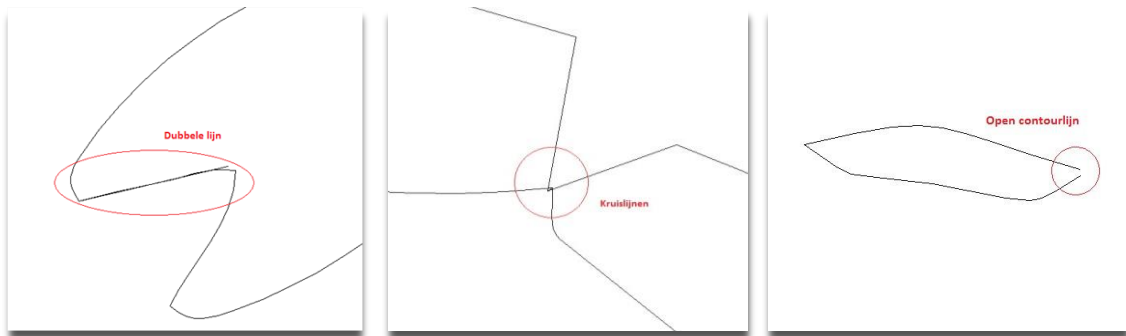




Instruction FreeCAD

IMPORTANT! BEFORE YOU UPLOAD A DRAWING, IT IS ESSENTIAL THAT THERE ARE NO DOUBLE LINES.

IF YOU WANT TO ENGRAVE, IT SHOULD NOT HAVE ANY OPEN CONTOUR LINES AND / OR CROSS LINES. FIRST ADJUST YOUR DRAWING BEFORE CONTINUING TO THE FOLLOWING STEPS.



Step 1: Export

To make a line drawing of your model, you can export it as a .DXF or .DWG file. Select the side of the model you want to export and then click File > Export ... (Ctrl+E).

A new sub-screen will open, give the file the correct name ("**your name - size - material type + thickness**"), select the correct file format and location where the file will be saved. Press **Export**.

Step 2: Choose method

The method of laser cutting/engraving can be indicated by means of colors.

Black lines - Laser cutting

Leave the outer contour of the part to be cut black, so this is not the outer contour or working surface of the entire drawing.

Red lines - Internal cutting lines

Internal cutting lines are the surfaces to be cut that fall within the outer contour, for example, holes.

Make these lines red. The reason why internal cutting lines must be used is as follows.

When an "O" is to be cut, it is important that the hole is cut first and then the outer contour of this letter. When the outer contour is first cut, the part will be slightly skewed, when the hole is cut it will no longer be in the right place.

Line engraving (green)

Instead of engraving a surface, which takes a lot of time, it is also possible to have the laser cut quickly and with low power. The material is then drawn as if it were. Make engraving lines green.

Surface engraving (blue)

The laser moves like a printer, so that a layer is always burned. As a result, the surface to be engraved is slightly sunk into the material. Make surfaces engraving areas blue.



Unfortunately it is not possible to color different parts within the drawings in FreeCAD. You can open the .DXF drawings from FreeCAD in Illustrator. It is then possible to provide the lines with colors in this program.

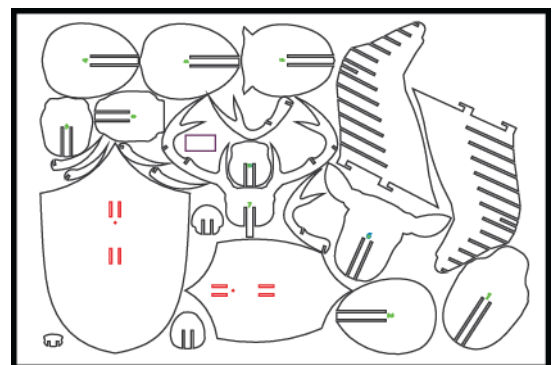
If you do not have Adobe Illustrator to color the lines, you can also indicate in the remark of the upload form how the different lines should be cut.

Step 3: Nesting

Place as many parts as possible that should be cut from the same material on one work surface.

This is most easily done in Adobe Illustrator. This can be done by creating a new file and then pressing **shift + ctrl + p**. You can then select the relevant files and place them in the drawing area.

If you do not have illustrator, it is also possible to import your .DXF or .DWG files via [RDWorks](#) (free laser software) and export them as an Illustrator file or save them as a .rld file. If this does not work, it is also possible to upload all individual parts.



For regular cutting jobs, the maximum size of the working surface is 1200x900 mm, for surface engraving it is 1150 x 1200 mm.

Only the standard sizes 300x200mm, 600x400mm and 900x600mm are in stock. Larger dimensions up to 1200x1200 mm can be supplied after consultation.

Step 5: Upload file

Submitting multiple files is no problem at all, to keep it clear for us, we would like to receive the files with the file name as follows:

“your name – size – material type + thickness ”

Upload your file on <https://www.luxigo.nl/en/upload-bestand/> and you will receive a quotation from us with a price and delivery indication as soon as possible.