



## Laser engraving and cutting for printmaking

### Description

Atelier Circulaire offers the services of laser engraving and laser cutting performed on **Trotec Speedy 300 Flexx**. These services offer advantages in preparation of print matrices or creating finished editions, especially for:

- Relief printing techniques (woodcut)
- Embossing
- Plexiglass engraving (alternative to etching)
- Preparation of stencils for serigraphy and collagraphy
- Image transfer (transferring drawings to the woodblocks, copper or zinc plates coated with the ground)
- Paper engraving and cutting (used Finished editions (Paper engraving))
- Making seals and stamps

Please note that:

- While certain metals can be engraved, neither zinc or copper can be engraved. However the image can be transferred on the plates coated with different kinds of hard ground.
- Linoleum cannot be cut or engraved because of the toxicity of the fumes and the residue harms the equipment

### Price

Laser cutting/engraving: \$1/minute + tx

Consultation: 15 mins is free; then charged by the hour at \$40/hour + tx

Members of the Atelier with a yearly pass get a 15% discount

Members of the Atelier get a free consultation on Fridays

To estimate the cost of the project, please send your file to the coordinator at [laser@ateliercirculaire.org](mailto:laser@ateliercirculaire.org). Due to the nature of the software and the technology, the final price can only be calculated after the job is completed (the estimate tool doesn't show the exact processing time).

### Conditions

The coordinator only advises, gives recommendations on how to prepare the file, what settings to use. The coordinator has the right to refuse to work with the material if the material is not safe.

The clients are responsible for preparing the file. The coordinator doesn't take any creative decisions. The coordinator confirms with the client the final parameters of the job. The coordinator makes the client aware of the potential risks (some natural materials may produce inconsistent results). If all the parameters of the job were verbally agreed upon and were respected, but the client is not satisfied with the result, the job cannot be redone free of charge.

### **Materials**

Clients should bring their own materials. For each project the client is required to bring a sample of the material to perform a quick test (done by the coordinator). Materials containing PVC are [not recommended for processing](#).

The laser engraving can be performed on the following materials:

- Wood
- Plexiglass
- Glass
- Stone
- Paper (including printmaking paper)

Laser cutting:

- Plywood
- Plexiglass
- Paper, cardboard etc.

Important: Some materials may be toxic when exposed to the heat of the laser (they produce fumes that may be poisonous or that may damage the machine). Consult with the coordinator.

### **Technical parameters**

- The size of the bed (max size that can go in the machine): 17\*29 inches (43.2 X 73.7 cm)
- For laser cutting, the thickness of the material can't be more than ¼ inch (6.35mm)
- Vector or raster (bitmap) images

### **Instructions and tips**

For vector files (Illustrator, Affinity, Corel Draw):

- Black (#000000) will be engraved
- Red (#FF0000) will be cut. The outline must be 0.01 pt
- Blue outline (#0000FF) may be used to indicate the position of your image relative to your material
- It's possible to program several settings for the same material, contact the coordinator for the list of options

For raster files (bitmap):

- For best results, the image has to be in bitmap: only black (#000000) and white (#FFFFFF)
- To turn your image into bitmap, first turn your image in grayscale; then into bitmap (such as halftone pattern, diffusion dither or 50% threshold).