



Bookable Resources - Laser Cutter / Engraver

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Why use a laser cutter?

Laser cutters are used to cut and engrave a range of flat sheets of material with a high degree of accuracy. This allows you to very quickly make items such as boxes, jewellery, stamps, stencils, and models.

Workshops

Below you will find a slideshow of some of the workshops we have done over the years that utilize a laser cutter.

[Public workshops](#)

Getting Started

Induction & Booking

To use this equipment you will need an general induction (which brings you up to speed with the overall safety of the Fabrication Lab, and a specific equipment induction. Check out the [Inductions Page](#) for more info.

[Induction Info](#)

After you have completed the inductions you will be able to book in to use the machines. Check out the [Booking Policy](#) page for info and book in via [The Edge](#) page on the SLQ Website.

Our Machines

We currently have two [trotec Speedy 300](#) Laser cutter/engravers. They have a maximum bed size of 730 x 430mm (a little over A2 paper size) and they can cut an array of materials (more info below).

[Trotec Speedy 300](#)

Guides

Laser cutters shoot a concentrated beam of light through material to selectively burn/vaporize it with

extreme precision.

Laser cut files generally start life as a [vector](#) file, which is converted into machine code through special software.

Our [Standard Operating Procedures](#) contain a basic workflow with a focus on safety.

[Standard Operating Procedures](#)

A standard workflow of the current machine can be found on [its page](#)

[Standard Workflow](#)

The instructions for the practical exercise of the laser cutter induction can be found here

[Induction Practical](#)

Software options for making vectors (including tutorials and communities!) can be found here: [Software](#)

Materials

We encourage users to make use of the materials that The Edge has tested and keep in stock for [purchase](#) such as plywood and acrylic.

We also recognize users will want to experiment with new exotic materials. Here at The Edge we love seeing people experiment. But we need to check that new materials are safe to cut. There are many materials which produce extremely harmful (potentially deadly) fumes when cut, and for that reason we are very cautious about the materials that can be used in our laser cutters. Check out the Laser Materials page for more info:

[Laser Materials](#)

More info

We have collected loads of handy guides, interesting techniques, resources, tools etc. If you're looking to dive deeper into the world of lasers and expand your know-how you will find many great resources here.

[Laser Resources](#)

If you are having trouble with the laser cutter we have collected a bunch of resources here

[Laser Troubleshooting](#)