Laser Systems for

→ Digital Fabrication

www.troteclaser.com

Laser Cutting and Engraving at FabLabs, Open Workshops, School and Universities.
Advantages of Laser technology

Today, a laser is part of the equipment in many FabLabs, schools and universities. You can find it in these open workshops together with saws, routers or 3D printers. What is the advantage of laser technology?

Make. All.
Many different materials are used for tinkering, making or rapid prototyping: cardboard, paper, MDF, wood and acrylics might be the most common ones in use. But also textiles, synthetic materials, plastics, polystyrene, foils, films, and many more can be perfectly processed. Additionally it is not necessary to take the tool’s diameter into account. Depending on the lens used the laser beam is approximately 0.1 mm wide. Virtually any geometry can be cut with the laser.

Make. Yours.
Being a flexible tool, lasers are suited for experimental setups and prototypes. Drawings and designs can be sent directly from the CAD or graphics programs to the laser. Your ideas can be tested and realized instantly.

Make. Unbelievable.
At FabLabs or schools, Trotec laser machines are used for model making, industrial design, prototyping or all kinds of DIY applications. The unbelievable and inspiring design possibilities that laser technology offers are also ideal for all kinds of art and design projects.

Laser Cutting MDF

Laser engraving with attention to detail

Within seconds from design to reality

The Ultimate Tool for Tinkering, Prototyping and Digital Fabrication.
Why Trotec?

Attention to detail and passion for precision
With laser technology, you can produce even the finest geometries with maximum precision. This gives you complete freedom when designing your products. And through first-class engraving and cutting, every idea can be made with a Trotec laser. The only limitation is your imagination and creativity.

JobControl® Laser Software
Our innovative JobControl® software is intuitive to use. Work in your usual programs (CorelDraw, Photoshop, AutoCAD, Illustrator, Inkscape, Word, etc.) and send your layout to the laser. Clever features allow you to optimize your workflow.

Safe production environment
Open laser systems (laser safety class 4) may only be operated with special safety measures in place (laser safety officer, shields, goggles). Trotec laser systems, however, fall into laser safety class 2. Additionally, the closed design ensures efficient extraction of fumes. All the makers and visitors are well protected.

Maximum flexibility with Speedy flexx Series
The Speedy flexx series is unique. For the first time a CO2 and a fiber laser source are integrated into a Speedy. This allows makers to perform endless applications. The CO2 laser source is ideally suited for engraving and cutting plastics, wood, rubber, leather and many other materials. The fiber laser is the right tool for marking metals and plastics. Depending on the material, the two laser sources are activated alternately. The patented flexx function ensures maximum flexibility in the applications.

Comparing technologies

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Personal Fabrication of 3D models
Create architectural models, mock-ups and prototypes
Individualization on a wide variety of materials
Important data, facts and figures

Suitable Trotec systems: Rayjet, Speedy 100, Speedy 300, Speedy 400, SP500
Working area: up to 1245 x 710 mm
Laser power level: up to 200 watts
Software: controllable via the printer driver in combination with Trotec JobControl® or via TroCAM CAD/CAM (HPGL)
Camera system i-cut®: Intelligent adjustment of the cutting path, reliable registration mark recognition, intelligent workflow, luminous LED light direct on the camera, simple to operate
File formats: All popular file formats like .AI, .EPS, .PS, .CDR, .DXF, .DWG, .JPG, .PSD
Materials: Cardboard, paper, wood, acrylics, fabrics, plastics and many more

Trotec Lasers – designed and built in Austria.

Selected testimonials: FabLabs and Educational Institutions

- Bauhaus University Weimar - Faculty for architecture (Germany)
- TU Vienna – faculty for architecture and urbanism (Austria)
- TU Dresden - Faculty for architecture (Germany)
- ÉPFL – Faculté Environnement Naturel, Architectural et Construit (Switzerland)
- Fachhochschule Münster – Department design (Germany)
- Universität Innsbruck (Österreich)
- Fachhochschule Salzburg (Austria)
- HTL Hallein (Austria)
- TU Eindhoven (Niederlande)
- Universität Tasmanien (Australian)
- TU Munich (Germany)
- ETH Zürich (Switzerland)
- IaaC Barcelona (Spain)
- TechShop (USA)
- FabCafe Tokyo (Japan)
- Protospace Utrecht
- FabLab Leuven (The Netherlands)
- FabLab Lima (Perú)
- Ultimaker (The Netherlands)
- FabLab Argentina (Argentina)
- FabLab Colombia (Colombia)
- FabLab EL Salvador (El Salvador)
- FabLab Barcelona (Spain)