trotec®
laser. marking cutting engraving

Maxximum Flexxibility

→ Speedy 300 flexx

www.troteclaser.com

One laser system,
endless application possibilities.
CO2 and fiber laser integrated
into a Speedy.

A new level of flexxibility:

Speedy 300 flexx

The new Speedy 300 flexx is a unique laser system. For the first time a CO2 and a fiber laser source are integrated into a Speedy. This leads to multifaceted applications, freedom and flexibility for the costumer. A CO2 laser source is qualified for engraving plastics, wood, rubber, glass, leather and many materials more. For marking metals and for staining plastics a fiber laser is the suitable tool.

Depending on the processed material the two laser sources are alternately activated.

The Highlight: Thanks to the unique Trotec Flexx-Function both laser sources are activated in only one process step.

Standards

CO_2 and fiber laser

Both a CO_2 and fiber laser are integrated into the Speedy 300 flexx. Choose a CO_2 laser with 25, 30, 40, 60, 75 or 80 watts laser power and combine it as you like: with a 10, 20, 30 or 50 watts fiber laser.
Use both laser sources in a single job without the need to manually change laser tubes, lenses or focus. The revolutionary Speedy 300 flexx takes advantage of the patented JobControl laser software: Assign fiber or CO_2 source via color mapping – simple and easy to use.

Flexx Lens

Use the Flexx lens for finest detail engravings and markings with maximum quality. Suited for both wavelengths - fiber and CO_2.

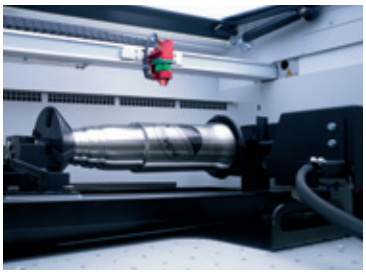
Trotec Flexx-Function

Two materials, one process step: With the Flexx-Function time saving is ensured. For example leather and metal can be processed in one step: With the CO_2 laser source leather is engraved, with the fiber laser metal can be marked. Workpieces with mixxed materials can be marked and engraved easily.

Laser pointer

A red laser pointer indicates the location at which the laser beam will contact the material. You can minimize the risk of faulty engraving by precise positioning of the job before the engraving begins!

Options



Honeycomb table

The solid honeycomb structure minimizes beam back reflection and yields perfect cutting results.

Vacuum table

Fixes various materials to the working table using a light vacuum. This reduces handling effort associated with mechanical mounting (e.g. gluing, magnets) and offers even better engraving and cutting results. Especially well-suited to thin materials such as film, veneers, paper, etc.

Cylindrical engraving device

For engraving cylindrical, conical or spherical objects such as bottles, glasses, balls or mugs up to 485 mm in length and 184 mm in diameter. For maximum flexibility, the tiltable cylindrical engraving device is available with cones or rolls (exchangeable).

Air assist

Prevents combustion of flammable materials, helps to direct debris and fumes towards the exhaust vents and protects the lens. Full control (activate/deactivate) via JobControl™ software.

InPack-Technology™

- Maximum dust protection
- Highest quality components
- Linear guide rails
- Ultra-long lifetime
- Less maintenance

InPack-Technology is a combination of the highest quality components for ultra long lifetime combined with protection of the optics and all sensitive components. Trotec systems are designed for minimal wear-and-tear. Our design and manufacturing quality standards make sure your Speedy 300 flexx will be ready for years of trouble free, heavy-duty production. You can forget the added costs of spare parts that need to be replaced regularly on competitors' systems. It all adds up to a lower total cost of ownership offer the lifetime of each Speedy 300 flexx laser system.

Standards

Electro-optic autofocus
The Speedy 300 flexx offers 3 different variants for optimal focusing on the material: manual focus with focus gauge, electro-optical with photo-electric guards or via Software. Maximum convenience for the operator through correct focusing of the laser beam on the surface of the workpiece.

Working platform (ferromagnetic)
The working platform of the Seedy 300 flexx is ferromagnetically treated. This means that it is easy to mount thin materials like paper or films using magnetic retention.

JobControl™ Expert Software
Supports you perfectly in handling your engraving and cutting jobs. The laser software helps you with many useful and intelligent functions that make your work easier. For example: Job Time Calculator, add marker or bi-directional communication.

Control of the exhaust system
Trotec exhaust system owners can automatically control this system via JobControl™. For example, you can initiate the exhaust power before the start of engraving or after the end of engraving to optimize the removal of dust or fumes. You also get dynamic feedback on turbine activity and filter saturation.

Options

Additional lenses
For perfect engraving and cutting results, lenses with different focal lengths may be used, depending on the application. (available lenses: 1.5 inch, 2.0 inch, 2.5 and 4.0 inch CO2 lens; 3.2 and 5 inch fiber lens)

Temperature sensor
Some materials (e.g. acrylics) can flame-up in laser processing – especially during cutting operations. In case of imminent danger, an acoustic signal is output and consequently ensures the greatest possible safety of laser operation.

i-cut® Vision system
Perfect cutting results when processing printed materials such as acrylic, MDF, polyester, cardboard, paper, and many more. Registration marks are printed along the image. The camera is mounted on the processing head of the Speedy 300 flexx and registers the dimensions of the printed design by "reading " the registration marks prior to the cutting process.

Postscript converter
The unique postscript converter converts .EPS and .PS Postscript files, .PDF, .BMP, .JPG and .TIFF files into a "Trotec spool file" format.

Exhaust systems
An exhaust system is absolutely recommended for optimal operation of the laser. Trotec offers a variety of exhaust systems depending on the application. Special integrated electronics let you control the Trotec exhaust systems remotely via JobControl™ software.

Laserpower upgrade
The Speedy 300 flexx can be economically upgraded at any time to a higher wattage (CO_2 laser up to 80 watts, fiber laser up to 50 watts).

Extended dust protection
For reliable operation of your laser system, it is very important to protect dust-senstive components such as motors and electronics. Unique InPack-Technology handles this. Extended dust protection protects programmable axes from dust, too. It also offers supplemental protection if you usually process dust and debris producing materials such as rubber or wood.

Technical details of Speedy 300 flexx

Overall dimensions (W x D x H):	1090 x 890 x 590 mm
Working area:	726 x 432 x 200 mm
Max. engraving speed:	CO2 laser: 355 cm / second, acceleration 5g Fiber laser: 200 cm / second, acceleration 5g
Accuracy:	Addressable accuracy: 5µm Static repeat accuracy: < ±15µm
Mechanical design:	Fully enclosed chassis with double safety interlock system laser safety class 2, CE compliant maintenance-free, brushless DC servo motors InPack-Technology™
Laser design:	Sealed-off CO_2 laser with 25, 30, 40, 60, 75 or 80 watts Fiber laser with 10, 20, 30 or 50 watts
Weight:	approx. 203 kg (depending on laser power)

Trotec laser – developed and built in Austria

Application examples CO2 laser




Application examples CO_2 and fiber laser


Application examples fiber laser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Trotec Produktions u. Vertriebs GmbH
Linzer Str. 156, A-4600 Wels, trotec@troteclaser.com
Tel. +43 / 72 42 / 239-7002, Fax +43 / 72 42 / 239-7380