

A man with short dark hair and a beard, wearing a maroon long-sleeved sweater, stands behind a Trotec Speedy 400 laser engraving machine. He is leaning his right arm on the machine's control panel. The machine is white with a red base and a black top section. The Trotec logo is visible on the front of the machine. The background is white with faint blue geometric lines.

trotec

Speedy 400 Run on Ruby®

Laser Engraving Systems
Profitability by Design

trotec

/ SETTING NEW STANDARDS

The „Speedy“ has been the fastest laser engraver on the market since its market launch in 1999 and continues to set new standards. Its current engraving speed is 4.3 m/second at 5g acceleration. The patented InPack Technology™ guarantees maximum runtime of the axes for reliable production. Bi-directional communication allows flexibility and control between the laser and software. With a CO₂ and a fiber laser source in one laser machine, the patented Trotec „Speedy Flexx“ innovation offers endless application possibilities.

Ruby® - the most intelligent laser software - and Speedy 400 - the world's fastest laser engraver - become one. Ruby® makes laser users' work simpler, faster and more profitable.

The product line is 100% developed and manufactured in Austria and sold through 18 sales subsidiaries, increasing profitability for customers in more than 90 countries. We advise and support our customers. The Trotec Academy offers training on materials and technology, and we make sure that our service and field team are always up to date on their knowledge. Exhaust systems, laser and engraving material, and service products complete our product portfolio. As a manufacturer of high-tech laser systems, Trotec relies on the systematic expansion of its technological advantage, working closely with our customers to ensure this is possible.



Speedy 100
Compact laser for
demanding entry
level users

Speedy 300
Highly productive
engraving machine

Speedy 400 Run on Ruby®
Maximum productivity
and flexibility



Vision Design&Position

Camera-assisted design and positioning directly on the workpiece.

The powerful lid camera with up to 12 megapixel resolution provides a detailed and sharp live color image of the entire work area in Ruby®, no matter whether the lid is open or closed. In this way, a text can be set, a graphic can be designed or an existing job from the job queue can be aligned directly on the workpiece live in Ruby®. There is no longer any need for cumbersome measuring of workpieces, templates, residual materials or 3D-objects.

Trotec Vision Print&Cut Precise laser cutting of printed materials

Create amazing details and meet tightest tolerances with Trotec Vision Print&Cut. The Vision module uses registration marks to determine the position and rotation of printed sheet material on the working area of the laser. The system detects print distortions and adjusts the cutting path dynamically to match the artwork. No matter if flexible or rigid materials. This speeds up your production and costly miscuts can be avoided. This guarantees a perfectly cut end product.



Touch Panel Run on Ruby®

The touch panel on the Speedy 400 enables the laser to be operated in the network via Ethernet or WiFi without an additional PC. Operate and execute laser jobs directly on the laser. View you the progress of your laser job.

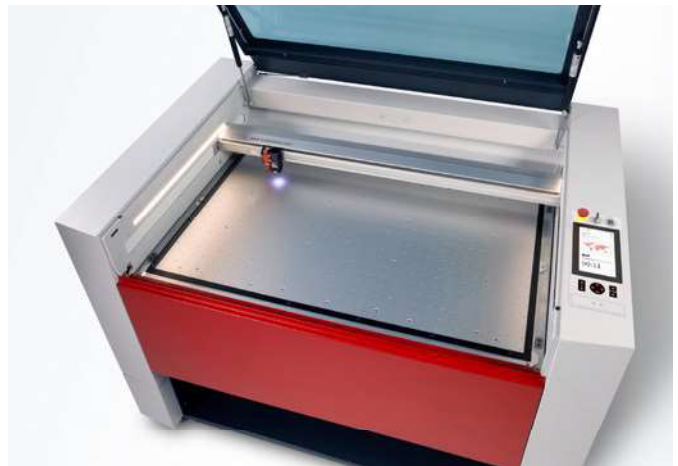


Swift loading and unloading More ergonomics

Unlike some lasers on the market, the Speedy 360 and Speedy 400 were designed without the front bar or struts to provide easy and ergonomic access to the work area. This ergonomic design makes loading and unloading (especially large or heavy parts, or a rotary attachment) much easier. It also minimizes the physical effort required from the operator, because loading and unloading the laser machine is done at hip height, and the front cover can be folded down completely to minimize back strain for operators when they are loading working tables or materials.

Inside view

Trotec laser machines are equipped with a transparent top cover, allowing you to monitor your laser engraving job at any time during processing and no matter where your workpiece is positioned without lifting the lid. The transparent top cover provides a view of the entire cabinet of the laser machine. The design also includes LED lighting, which illuminates the entire working area. This convenient feature improves operator comfort and convenience.



Automatic focusing with Sonar Technology™

Correct adjustment of the focus, i.e. the correct distance between the laser head of the Trotec laser system and the material to be processed, is crucial for a perfect application result. The patented SonarTechnology™ is the simplest method for digital focusing on the workpiece surface of laser engravers. It determines this distance extremely precisely and efficiently at each position on the work table. At the touch of a button, the ultrasonic sensor on the laser head detects the surface of the workpiece. The focus point is thus automatically detected, and the working table then automatically moves into the correct focus position.

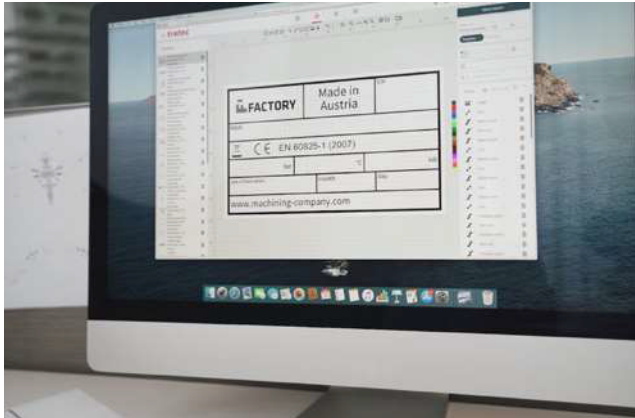


Usability By Design

Ruby®. Laser Software redefined.

Makes working with your laser simpler and faster. Digital to the core.

What does every laser user need today and in the future? A laser software that makes your daily work with the laser run seamlessly. A simple and fast workflow from idea to product. A platform that guarantees profitable order processing. A setup which is connected, web-based and digital to the core. A user interface that delights. This is what Ruby® stands for. Our vision: To re-define working with the laser and offer all laser users unprecedented added value.

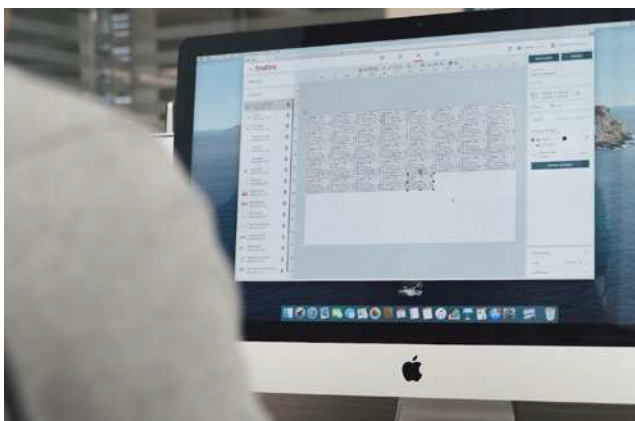


The laser graphic design software. For a seamless workflow.

Create graphic, photo and text elements. Adjustments can be made quickly with the integrated workflow. Switch between the "design" and "prepare" steps at any time in one software that is both, a graphics and laser program. With all graphic tools the laser user needs. Ruby® allows direct file import from pdf, svg, ai and png. These functionalities cut the time from the idea to the finished products to half of it.

Connected working. Multiple lasers, infinite number of users, one web-based platform.

Ruby® connects all your laser machines in a network. Jobs can be distributed to multiple machines from a PC or Mac. Jobs are loaded onto the laser machine's integrated memory and processed without an additional PC. Thanks to the new workflow, jobs can be prepared by one user and produced by another.



A user interface that delights.

The Ruby® laser software accompanies the user from the idea to the finished product. The seamless workflow starts with the design and continues through preparation and production. Self-explanatory. An integrated guide provides additional tips if required. The training effort is minimal. The cloud-based material database guarantees the best laser results. The user selects the material and material effects such as deep engraving, dark engraving or kiss cut right from the start. Ruby® provides the right material parameters.

Speedy Portfolio Overview

This overview of the Speedy portfolio should assist you in identifying the differences between the individual laser systems. You can find exact technical details in the data sheets for the respective products.



Speedy 400 Run on Ruby®

	CO ₂	Flexx
Working area (W x D)	1016 x 610 mm	1016 x 610 mm
Max. height ¹ of workpiece	305 mm	283 mm
Loading area (W x D)	1096 x 698 mm	1096 x 698 mm
Overall dimensions (W x D x H)	1428 x 952 x 1050 mm	1428 x 952 x 1050 mm
Max. processing speed	4.3 m/s	4.3 m/s
Max. acceleration	50 m/s ²	50 m/s ²
Technology motion system	Brushless DC servo motors	Brushless DC servo motors
Laser power CO ₂	60 - 120 W	60 - 120 W
Laser power fiber		20 - 50 W
Laser class	2	2
Weight ²	310 kg	350 kg
Power consumption	1~230V / 50/60Hz / 10.2 A 1~115V / 50/60Hz / 15.3 A	1~230V / 50/60Hz / 10.2 A 1~115V / 50/60Hz / 15.3 A
Software		
Ruby®	●	●
Trotec Vision	○	○
Functions and Options		
InPack Technology™	●	●
Harsh environment protection kit	●	●
OptiMotion™	●	●
Sonar Technology™	●	●
HDLR Technology™	●	●
Touch Panel	●	●
LED lighting	●	●
Rotary attachment	○	○
Pass-through	○	○
Gas kit light	○	○
Air assist incl. integrated pump	●	●
Trolley base	●	●
TroCare	○	○
2 years warranty	●	●
Trotec Vision Design & Position	○	○
Multifunctional table concept		
Ferromagnetic table	○	○
Aluminum cutting grid table	●	●
Acrylic cutting grid table	○	○
Cutting table with aluminum and acrylic slats	○	○
Vacuum table	○	○
Honeycomb cutting tabletop	○	○
Acrylic cutting grid tabletop	○	○
Lenses		
1.5 inch CO ₂	○	○
2.0 inch CO ₂	●	○
2.0 inch CO ₂ clearance lens	○	○
2.5 inch CO ₂	○	○
2.85 inch flexx		●
3.2 inch fiber		○
4.0 inch CO ₂	○	○
4.0 inch CO ₂ clearance lens	○	○
5.0 inch fiber		○
Compatible exhaust systems	Atmos Duo Plus	Atmos Duo Plus

● Standard

○ Optional

¹ Based on standard lens

² Depending on laser power

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