

**trotec**

# Speedy Series

Laser Engraving Systems  
Profitability by Design



/ SETTING NEW STANDARDS

# Profitability By Design

The Speedy series of laser engravers will inspire you with their speed, smart features and innovative technical design. For sign makers, graphic artists, schools and universities, creative or industrial users, our world-class solutions provide a true competitive advantage.

Personalization or customization creates significant added value for products made of wood, plastic or glass. Laser processing achieves crystal clear cut edges with no additional material processing required on acrylics. Serial numbers on metal parts are permanently marked for traceability. Prototypes can be created from cardboard or MDF. Whether you are starting your business or you are wanting to work more efficiently, our laser systems are designed for 24/7 operation and let you work quickly, productively and reliably.



**Speedy 360**  
Highest efficiency  
with the smallest footprint

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 axles for reliable production. Bi-directional communication allows flexibility and control between the laser and software. With a CO<sub>2</sub> 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

## Personalization with laser engraving

### Added value for the customer, more profit for the engraver

Products that include a personal dedication are gaining in popularity. An engraver's field of application is very diverse. Companies and end customers can increase their business by expanding their product range. The offer for end customers is as varied as the materials. Whether you are talking about picture frames, wine glasses or pens – a personal dedication with names, text, logos or photos make these types of items very unique. Personalized signs, stamps, medals and trophies, data plates or various types of contract engraving of components can also be a lucrative business for companies, both as individual pieces or in mass production.



Photo engraving on dogs tags and pendants



Personalized gift



Finest engravings on door sign



Finest geometries with highest precision on paper



Unique designs for wooden jewelry



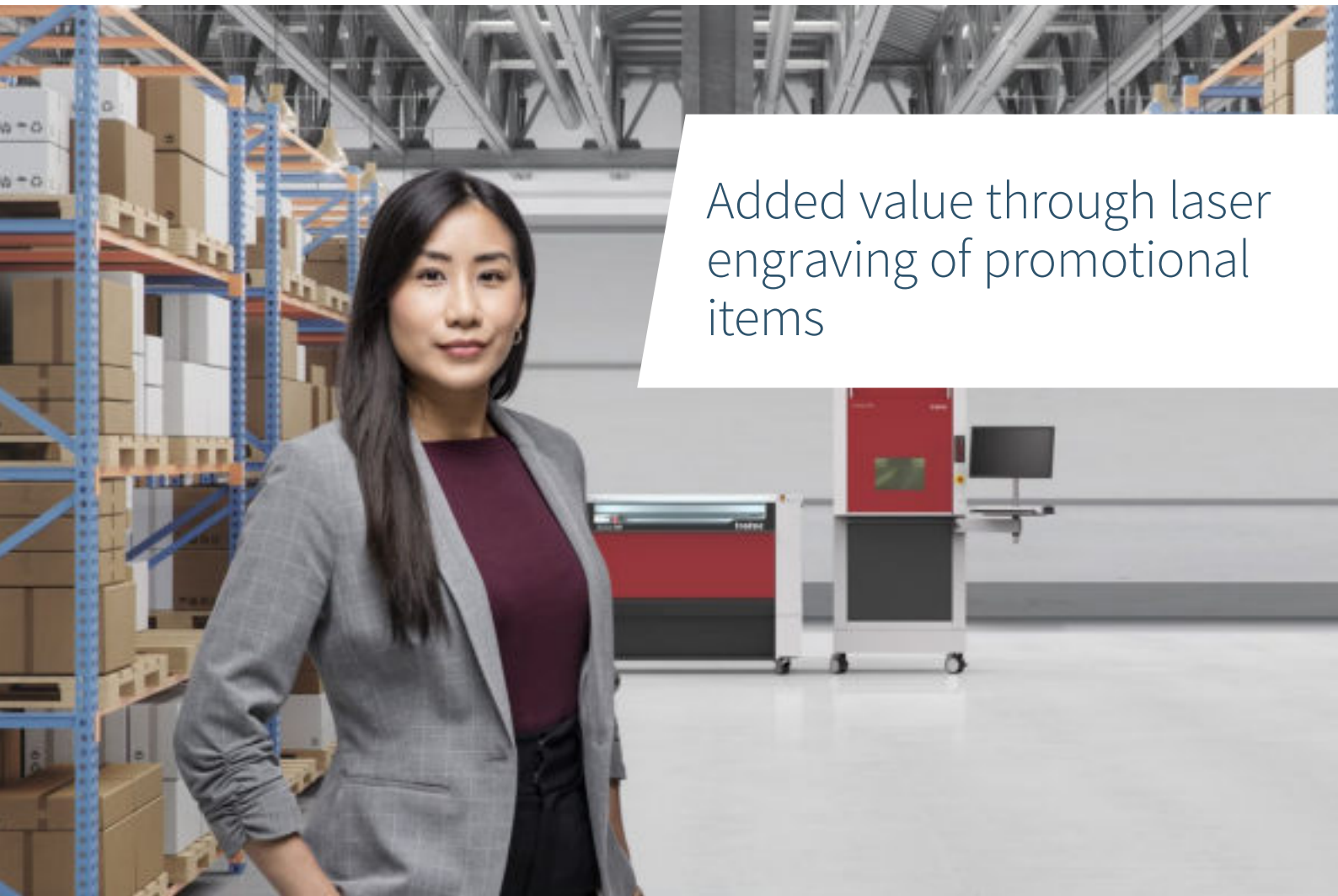
Attention to details on leather

## Unique items for customers, higher profits for the artisan

Unique, individual and personal – people are putting value on the qualitative and quantitative value of handcraft work today and prefer creative individual items. Customized jewelry, gifts with a personal touch or decorative accessories for interior design are some of the most popular customer requests. Practically any design can be implemented with a laser. With individuality and attention to detail, products or artwork can be quickly and easily created and upgraded with a laser. Whether you are working with wood, glass, acrylic, leather or paper, contact-free material processing with a laser also saves time and money.



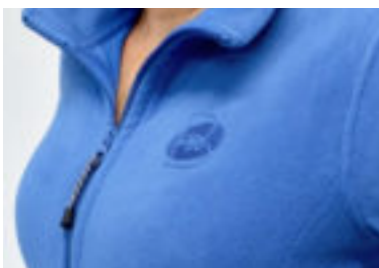
Customization with  
laser engraving



Added value through laser engraving of promotional items

## Economical production and consistent quality

In the promotional merchandise industry, ballpoint pens, USB sticks and bottles are made of various materials such as stainless steel, anodized aluminum or other coated metals. Promotional materials made of wood such as chopping boards, knives or key fobs are also becoming increasingly popular. The goal is always durable, elegant and sustainable lettering. The challenge lies in the fact that the products often differ significantly in material, size and shape. With a laser machine, all parts can be provided with permanent and haptic engraving or marking, with no elaborate preparation. Once the laser settings have been set, the quality of the marking remains absolutely the same and post-production is easy to implement. Since there are no costs for printing plates, printing ink, etc., that must be covered, the costs per marking remain consistently low - no matter whether you are producing 1 or 1000 pieces. This means you can offer unbeatable prices on the market and increase your margins.



Logo engraved on fleece jacket



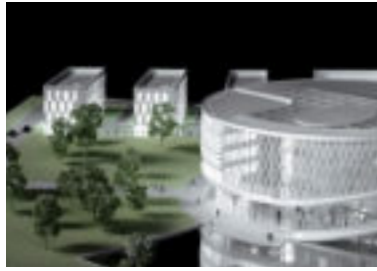
Sustainable and elegant lettering (on pens)



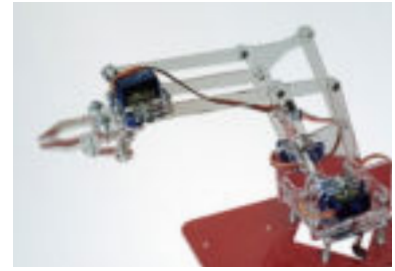
Durable engraving on bottles and cups



Within seconds from idea to reality



Highest precision in model making



The tool for rapid prototyping

## The ideal tool for prototyping and digital fabrication

FabLabs, Maker Spaces, schools and universities use lasers in model making, industrial design, prototyping and also with many other DIY ideas and across many departments. The incredible and inspirational design possibilities offered by laser technology are also ideal for all types of art and design projects. Laser machines are used here to process a variety of different materials such as MDF, cardboard, or polystyrene. Laser technology gives users complete freedom in the development and implementation of all their ideas. By laser engraving and laser cutting, you can create inspiring designs in just a few process steps.

From the idea to the product with laser technology



# Endless Application Possibilities

The Speedy laser engraving and cutting systems are the universal tool for many materials and applications. Expand your range with new product ideas.

Single pieces, small batches and large series can be produced inexpensively with a laser machine. Speedy lasers are used in many different applications.



Relief engraving on wood



Laser engraving of data plates



Laser engraving anodized aluminum



Personalize awards and trophies



Crystal clear cut edges on acrylic signs



Photo engraving on acrylic





Personalize glasses with names and designs



Personalize promotional items



Wooden and acrylic coaster with inlay



Arts & crafts: Jewelry finishing



Personalize stone like marble or slate



Laser engrave stamp text plates

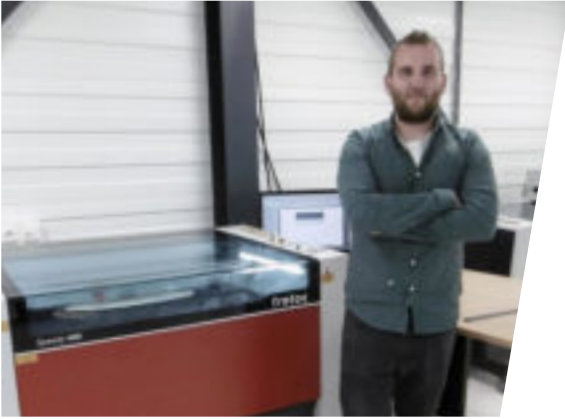


Refine textiles like microfiber



Engraving materials – laser engrave laminates

# Customer Statements



„Investing in new machines, software and personnel is the key to keeping up with customers' requirements. Fortunately, we can usually meet all customer requirements, partly thanks to the two laser machines that we have.“

**Loek Stultiens - Stultiens Group, The Netherlands**

„The Solid Wood is very, very high-quality timber, and it lends itself well to the laser. When you put it in the machine, there is never any warpage – it's just great!“

**John Voegeler - Voegeler Creations, Australia**



„Trotec machines are workhorses. You load them and they work“

**Ria Kraft - Visual Cultivator, Green Grass Design, South Africa**

„Comparing different laser machines for our tasks we understood, that Trotec is one of the best companies, that produces laser equipment of high quality from laser software to accessories.“

**Rinat Akhmetshin - Director, Job shop „Masterskaya Da Vinchi“, Russia**





"The operability of Trotec products is very good. Furthermore, I have been very impressed by the processing speed of the new Speedy 400 that the university has just installed. Its speed in itself really helps us out."

**Assistant Professor Keita Aoshima – School of Architecture,  
Shibaura Institute of Technology, Japan**

„We opted for the Speedy Laser from Trotec because it offered the best price-performance ratio. The TroCare Service Package and the proximity of Trotec Laser also had a strong influence on our purchase decision. Since then, Trotec has proven to be the right choice for PROMOT.“

**Johannes Neubacher - Manager of Electrical Design at PROMOT,  
Austria**



„What do we like about Trotec? Speed, precision, quality and RELIABILITY. We really appreciate the support of the technicians and the regular contact with the sales representative, as we can always get some help or tips in relation to our problem.“

**Anna Rzeszutek – Tadam, Poland**

„We are completely satisfied with Trotec! In addition to the high-quality laser machine, the cooperation and the exchange is very good!“

**Dirk Butterling - Werkpunk, Austria**





# Impressive Material Diversity

With the Speedy series of laser machines, you can engrave, cut or mark the widest possible range of materials. The palette ranges from glass, plastic or wood, rubber, leather and metals to textiles, cardboard and MDF. Discover the possibilities.

Material	Engraving			Cutting			Marking		
	CO <sub>2</sub>	Fiber	Flexx	CO <sub>2</sub>	Fiber	Flexx	CO <sub>2</sub>	Fiber	Flexx
Glass, mirror	●		●				●		●
Rubber (laser rubber)	●		●	●		●			
Stone	●		●						
Ceramics, porcelain	●		●						
Natural fiber (e.g. cotton, linen)	●		●	●		●	●		●
Felt (synthetic, wool)	●		●	●		●			
Microfiber	●		●	●		●			●
Leather	●		●	●		●		● <sup>1</sup>	● <sup>1</sup>
Synthetic leather	●		●	●		●			
Wood	●		●	●		●			
Paper	●		●	●		●			
Cardboard	●		●	●		●			
<b>Metals</b>									
Aluminum		●	●				● <sup>2</sup>		
Aluminum anodized	●	●	●				●	●	●
Brass		●	●						
Copper		●	●						
Precious metals		●	●					●	●
Coated metal (varnished)	●		●						
Stainless steel	● <sup>2</sup>	●	●					●	●
Steel		●	●						
Titanium		●	●					●	
<b>Plastics</b>									
Acrylic (PMMA)	●		●	●		●			
Acrylonitrile butadiene styrene copolymer (ABS)	●		●	●		●			
Engraving materials (laminates)	●		●	●		●			
Polyamide (PA)	●		●	●		●		● <sup>1</sup>	● <sup>1</sup>
Polybutylene terephthalate (PBT)	●		●	●		●			
Polycarbonate (PC)	●		●	●		●		● <sup>1</sup>	● <sup>1</sup>
Polyethylene (PE)	●		●	●		●			
Polyester (PES)	●		●	●		●			
Polyethylene terephthalate (PET)	●		●	●		●			
Polyimide (PI)	●		●	●		●			
Polyoxymethylene (POM) e.g. Delrin®	●		●	●		●			
Polypropylene (PP)	●		●	●		●			
Polyphenylene sulfide (PPS)	●		●	●		●			
Polystyrene (PS)	●		●	●		●			
Polyurethane (PUR) foam	●		●	●		●			

Please note that certain types of material should not be engraved or cut with a laser because of their chemical make-up. These materials contain dangerous substances that are released during processing in the form of gases and dust, jeopardizing both the user and the functioning of the machine. Some of these materials include:

- Inferior leather (Chrome VI)
- Carbon fibers (carbon)
- Polyvinyl chlorides (PVC) including
- PVC based synthetic leather
- Polyvinyl butyral (PVB)
- Polytetrafluorethylenes (PTFE /Teflon®)
- Beryllias
- Materials containing halogens (e.g. fluorine, chlorine, bromine, iodine and astatine), epoxy or phenolic resins.

Important: Be wary of materials specified as “flame retardant”. This property is achieved through bromine, which is then released during processing.

<sup>1</sup> Results may vary; subject to qualification due to high variability of material types

<sup>2</sup> The above metals can also be processed with a CO<sub>2</sub> laser. This requires an additional step and the use of consumables, such as laser marking ink.

# Profitability by Design

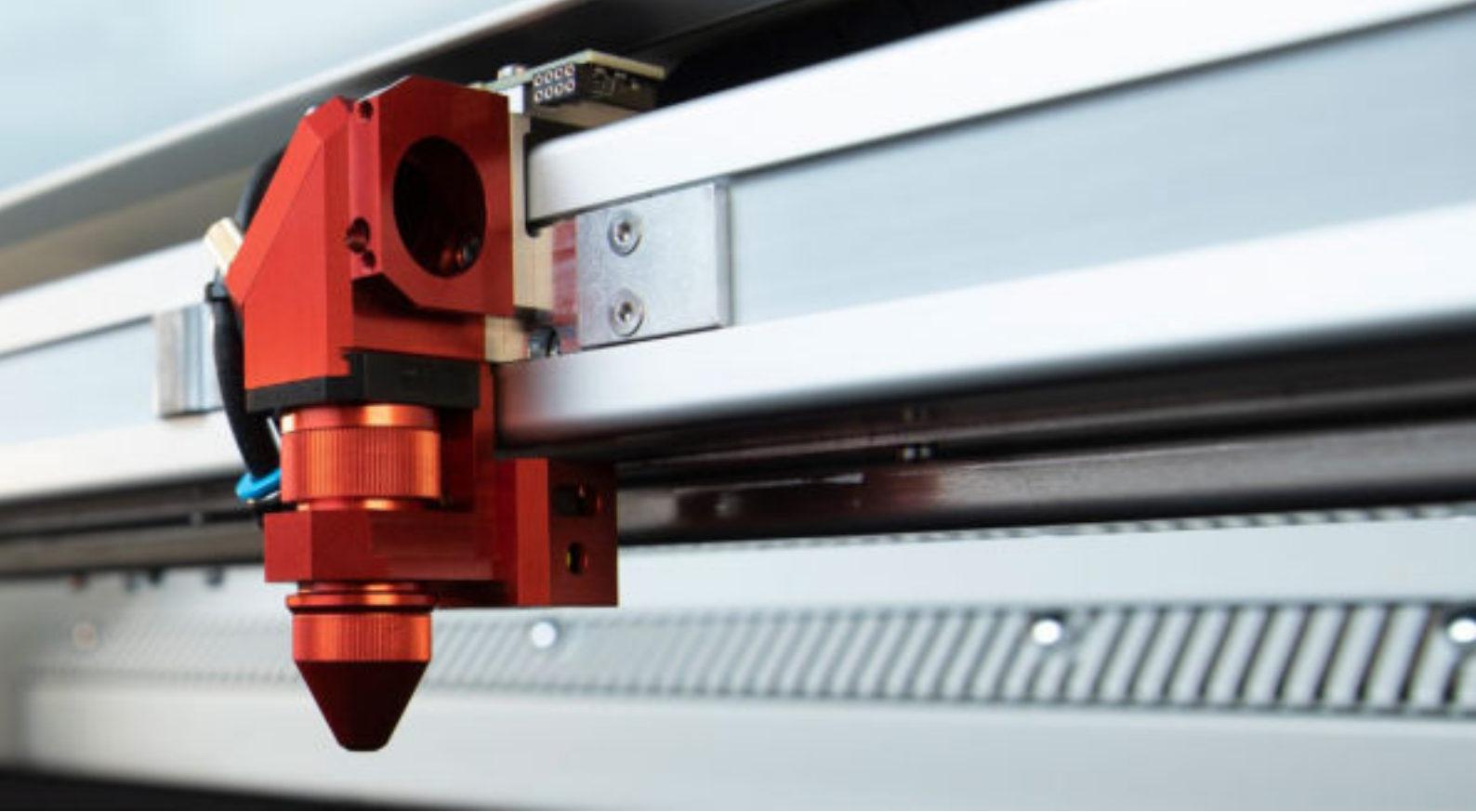
The Speedy laser engraving and cutting systems are the perfect choice both for entry level users as well as professional engravers. The Speedy is developed to increase your profitability. The ultimate goal of Trotec is to help you find the perfect laser machine to make your business more profitable and successful.



## Productivity by Design

Trotec develops the fastest laser engravers on the market. Time is money – the processing time per laser job is crucial for the success of your business. Increase your production capacity with an engraving speed of 4.3 m/s and 5 g and a laser power of up to 120 watts. Thanks to the OptiMotion™ motion control, cutting jobs are up to 8 times faster than comparable laser machines on the market.

The patented CeramiCore® laser source technology convinces with reliability, engraving quality and longevity. Thanks to the InPack Technology™, all sensitive components of the laser engraving machine, such as lenses, mirrors or motors, are protected against dust.



## Flexibility by Design

Every conceivable CO<sub>2</sub> laser application, as well as an annealing or a metal engraving, can be achieved in no time. The fiber laser offers even more possibilities for laser marking metals and plastics. The special feature of the patented Flexx Technology™: Depending on the material, the two laser sources are activated alternately – in one job, without manual changing of the laser tube, lens or focus.

The multi-functional table concept allows the ideal table to be selected and easily switched depending on your application. This ensures the highest processing quality and productivity. Use the modular concept and choose different lenses or other options such as the pass-through or rotary engraving attachment.

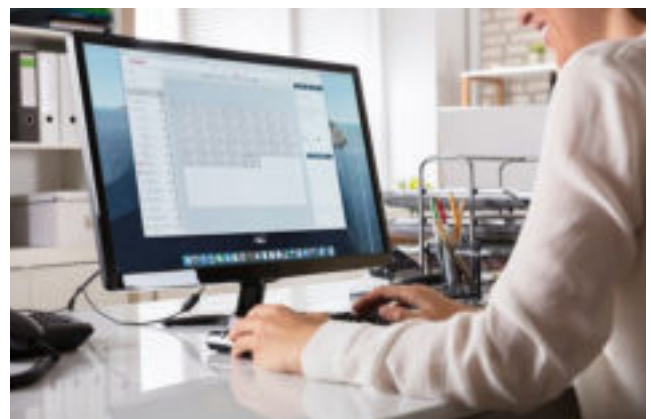


## Usability by Design

Speedy laser engravers are equipped with the laser software Ruby®. One software that is both, a graphics and laser program. Ruby® accompanies the user from the idea to the finished product. The smooth workflow starts with the design and continues from preparation to production. Self-explanatory.

Trotec Vision Design&Position enables a camera-assisted designing and positioning directly on the workpiece. Thus makes working with the laser easy, fast and reliable.

Focusing is automated at the touch of a button thanks to the patentend SonarTechnology™.



Productivity  
By Design

A close-up, blurred photograph of a laptop keyboard. The focus is on the palm rest area, which is a dark grey or black color. A prominent red sticker with the word 'trotec' in white, lowercase, sans-serif font is affixed to the palm rest. The sticker has a thin white border. The background shows the keyboard keys, which are out of focus. The overall lighting is soft, and the image has a professional, high-tech feel.

**trotec**



## Fastest laser machine on the market

Optimized to achieve the highest quality results at even higher speeds, the Speedy 400 is the fastest and most productive mid-size laser engraver in the industry. This model produces high-quality results even at its maximum engraving speed of 4.3 meters per second.

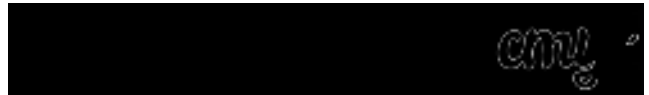
Maximum cutting speed at highest cutting quality – this is what OptiMotion™ motion control - the new innovative Trotec path planning system- stands for. The Speedy 400 is up to eight times faster when cutting than comparable laser machines on the market. Using OptiMotion™ the cutting speed and acceleration are calculated and optimized in real time based on the geometry. OptiMotion™ delivers high quality in curves and maximum throughput.



**Trotec Speedy** 100% finished



**Competitor 1** 44% finished



**Competitor 2** 15% finished

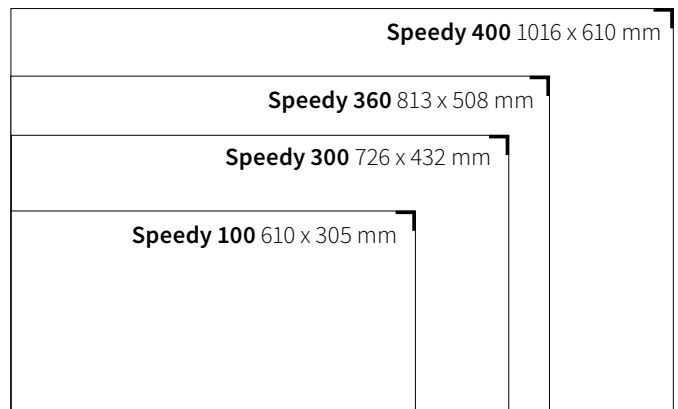


## Laser-sharp details at full speed.

The perfect interaction of Ruby® and the Speedy 400 makes it possible to increase the engraving performance even further. Thanks to HDLR - High Dynamic Laser Range - Technology™, smallest details and letters are laser-sharp at full speed.

## Optimized Working Area

All platforms are optimized for standardized material sizes. Save time and money on cutting, use more standard blanks per table, and use the entire working area.

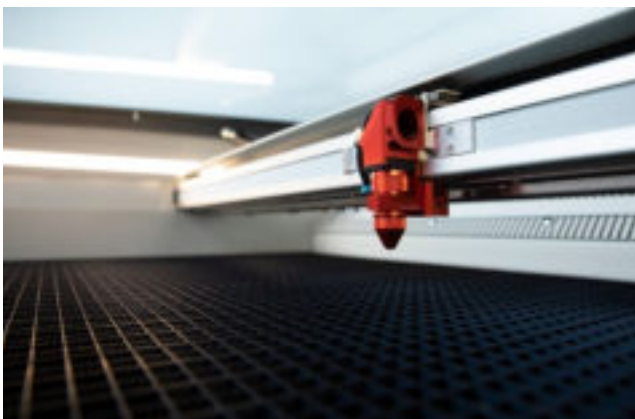




## Reliability, the highest engraving quality and longevity

Trotec laser systems are equipped with laser sources from the American OEM manufacturer Iradion. The patented CeramiCore® laser source technology impresses with its reliability, engraving quality and longevity. Highlights: The resonator of the laser source, i.e. the point at which the laser radiation is generated, is 100% ceramic.

Ceramics lasers can be operated at much higher pressure, resulting in better and faster pulsability, which in turn is crucial for high speed engraving and marking. Laser users will therefore benefit from the highest engraving quality.



## Longer service life, lower maintenance requirements

With InPack Technology™, we were the first manufacturer in the world to design a self-contained axes design and put it into practice. It perfectly protects both lens and mirrors, electronics, motors and axes from dust and other disruptive factors. The advantages:

- Ensures trouble-free work over an extremely long period of time
- Exceptionally low maintenance and cleaning costs, thus low operating costs even with very intensive use
- Even higher productivity



## More laser power – double productivity

However, productivity is not only a question of low operating costs, but also of high laser power. The equation is: More power equals more quality, efficiency and thus more profit. This formula applies to virtually all laser engraving and cutting applications. Compare for yourself! Therefore our advice is: When buying your Speedy, better opt for a more powerful laser from the beginning. Or replace the old laser with a stronger model. It pays off!



Cutting: acrylic letters, cut with 80 watts or 120 watts

Laser power: 80 watts  
Process: 65 % completed  
Time per piece: 29 seconds

Laser power: 120 watts  
Process: 100 % completed  
Time per piece: 29 seconds



Engraving: anodized aluminum typeplate, engraved with 30 watts or 80 watts

Laser power: 30 watts  
Process: 48 % completed  
Time per piece: 55 seconds



Laser power: 80 watts  
Process: 100 % completed  
Time per piece: 55 seconds



# Flexibility By Design

Revenue-generating options and features

## Endless application options

The patented Flexx Technology™ integrates two laser sources – CO<sub>2</sub> and fiber – in one machine, allowing a variety of different materials to be processed in one operation. The CO<sub>2</sub> laser source is ideal for engraving and cutting plastic, wood, rubber, leather and many other materials. The fiber laser is the right tool for marking metals and achieving color change on plastics.

The characteristic feature of the patented flexx function: Depending on the material, the two laser sources are activated alternately – in one job, without manual changing of the laser tube, lens or focus. The laser sources are easily assigned at the touch of button in the software. Every conceivable CO<sub>2</sub> laser application, as well as an annealing marking or a metal engraving, can be realized in no time. Time savings and flexibility in everyday work are thus guaranteed. The business sector can be quickly and easily expanded.

Every laser engraving machine in the Speedy series is “ready for flexx”. This means that every Speedy can be retrofitted with an additional laser source. This ensures that you are prepared for the future. Retrofit whenever you are ready.

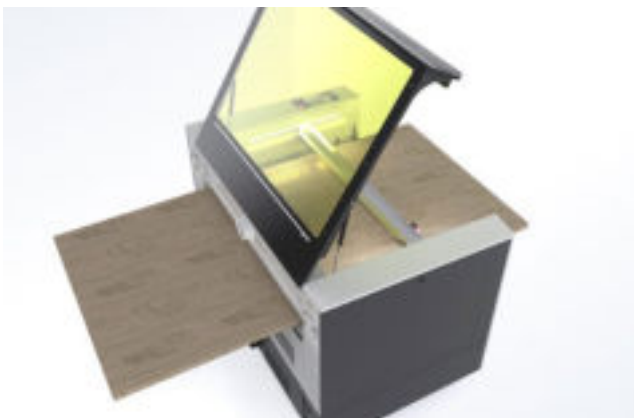


## Rotary engraving made easy

With the rotary attachment, you can engrave conical, cylindrical and spherical objects such as glasses, cups, vases and bottles in various sizes and diameters. When a rotary attachment is used, a rotating movement replaces the axis movement in Y direction. A special roller attachment allows machining of objects with large or small openings that do not fit into the cones of the standard configuration.

## Eight focus lenses for perfect results

As a rule of thumb, the following applies to the focus lenses: The more detailed the graphics, the shorter the focal length in laser engraving. The thicker the material to be laser-cut, the greater the focal length should be. For this reason, Trotec offers you eight different lenses for perfect results.



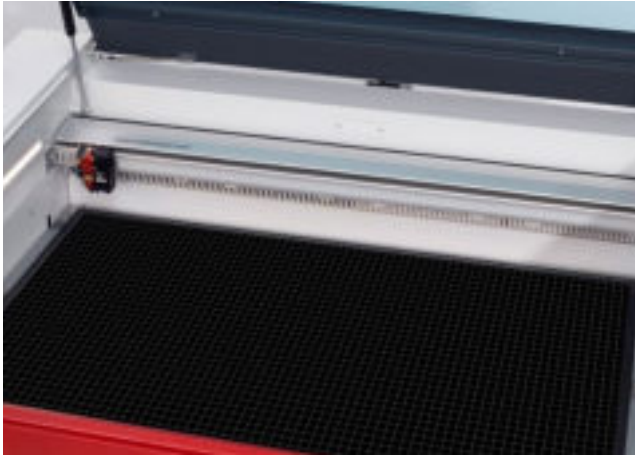
## Engraving bulky parts

Full flexibility also means being able to work on workpieces that are larger than the machine. With its pass-through hatch option, the Speedy laser can do this with ease. The pass-through option allows you to process very long and bulky workpieces such as doors, wall panels made of wood or large plates. (Please note that the hatch makes the Speedy a laser safety class 4 device.)

# Flexibility By Design

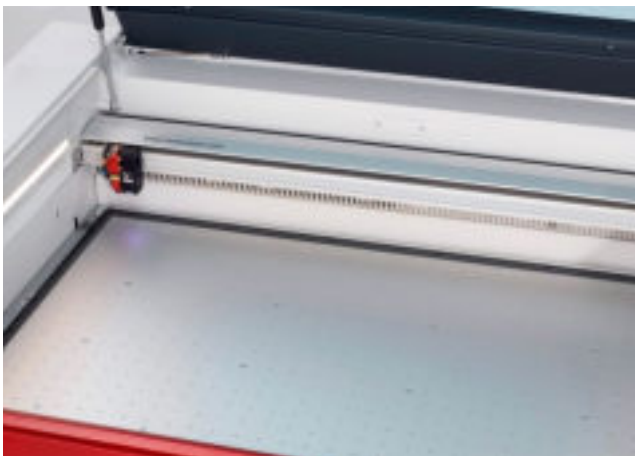
## Multifunctional table concept

The multifunctional table concept allows optimal configuration for all engraving and cutting applications. Depending on the application, the ideal table can be selected and changed easily and quickly for the highest processing quality and productivity.



### Aluminum grid table

The robust universal cutting table offers high stability and is particularly suitable for cutting tasks. It is especially for parts that are smaller than 100 mm, because they remain flat in position after the cutting.



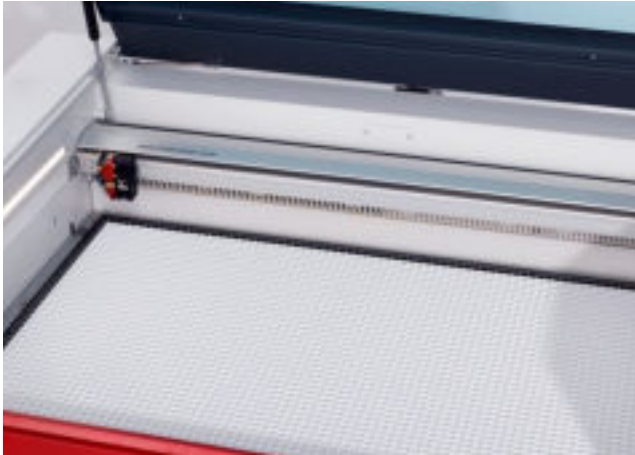
### Vacuum table

The vacuum table fixes the material on the working area by means of a negative pressure. The advantages: precise focusing over the entire area, even better engraving results and very efficient handling, since no manual fixing is necessary. The vacuum table is the ideal choice for thin and lightweight materials (paper, foils, ...) that can be challenging to place in a flat position against the surface.



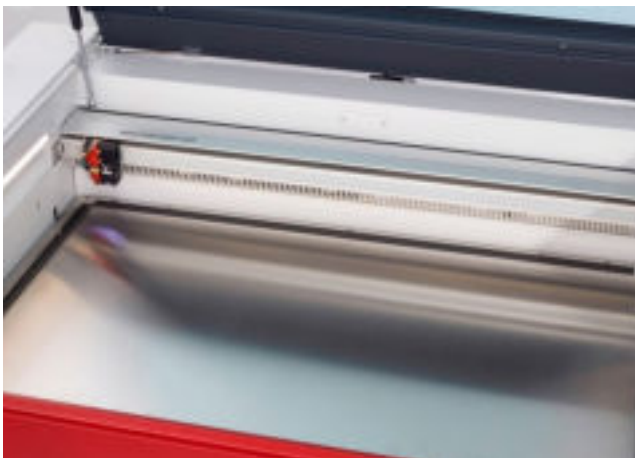
### Cutting table with aluminum- and acrylic slats

The cutting table with aluminum and acrylic slats is mainly used for cutting thicker materials (8 mm thickness) and for parts wider than 100 mm. The number of supporting points can be reduced by removing some of them individually, depending on the job.



### Acrylic grid table

The acrylic grid table prevents back reflections during cutting, making it the best choice for working on acrylic, laminates, plastic films and parts smaller than 100 mm. Each processed piece remains flat in position after cutting.



### Ferromagnetic engraving table

Thanks to the ferromagnetic construction, you can easily fix thin materials such as paper or foils with magnets. In addition, an absolutely flat working area ensures optimum results in laser engraving and laser marking.



### Honeycomb cutting support

The honeycomb cutting support is perfectly suited for applications that do not require back reflections and best flatness. As it is the case, for example, when cutting paper and foils. Please note we recommend using the honeycomb cutting support in combination with the vacuum table.



Usability  
By Design

**trotec**





## 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 the progress of your laser job.

# Usability By Design



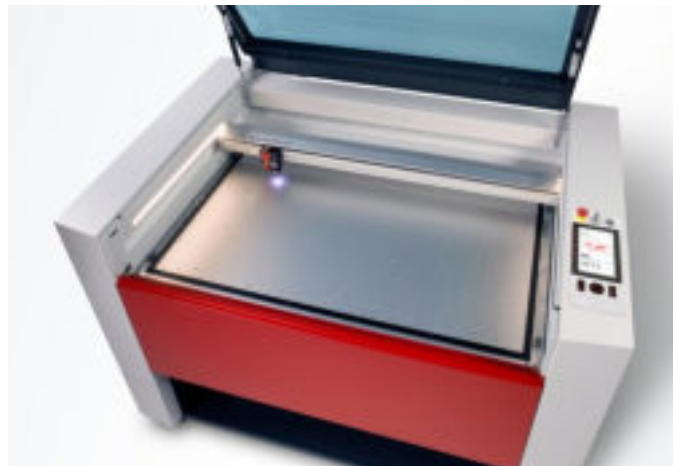


## Swift loading and unloading More ergonomics

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.

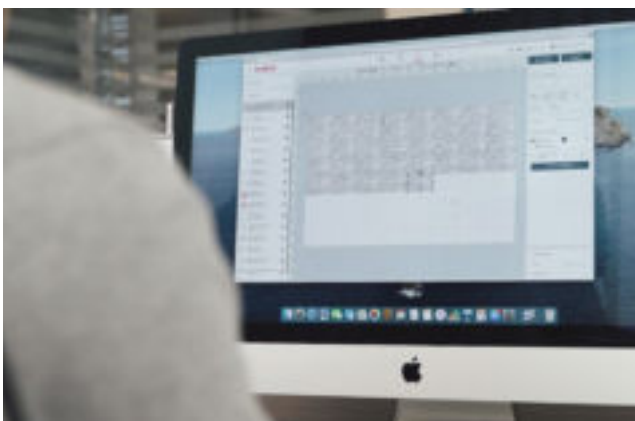


The laser graphic design software. For a seamless workflow.

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.

A man with short dark hair and a beard, wearing a maroon sweater and dark blue trousers, stands in a modern industrial or showroom environment. He is holding a stack of five material samples: a red sheet, a blue sheet, a light-colored wood-grain sheet, a white sheet, and a dark grey sheet. In the background, there is a large piece of machinery with a red and grey finish, and the ceiling features exposed ductwork and lighting fixtures.

# Trotec Laser & Engraving Materials

## The ideal material for each application!

Trotec offers solutions for almost all requirements in the field of engraving, cutting and marking. High-quality, innovative laser system solutions as well as high the highest standard of consumables form this outstanding portfolio. We aim to assist our customers improve profitability and productivity by supplying Trotec materials which offer superior results first time, offering additional services such as our in house 'cut to size' service and providing a one stop shop solution, allowing our clients to purchase all their products via one call or email.

We are proud to be the manufacturers of a full range of Trotec laminates that are completed by additional high-quality products of selected suppliers. We want to make you more profitable by benefiting from these advantages:

- Engrave efficiently with fewer passes
- Little residue exposed while engraving
- No sticky edges after laser cutting
- Minimal cleaning required
- Consistency in quality and colours
- Highly durable materials

“While we use a number of suppliers for sheet materials, the most consistent in terms of quality and stock availability is Trotec. Stock is delivered next-day according to our specifications which includes cutting sheets to size, meaning there are no production delays.”

**Origin Designed Ltd – Toby Fletcher, United Kingdom**



Better environments  
with Atmos exhaust  
systems





## Clean

The efficient and thorough filtration of dust, gas and odors extends the service life of your laser system and guarantees a clean and healthy working environment for every user.

## Intelligent

For many years, Trotec has been working on optimal coordination of laser and extraction systems. The result is a host of intelligent features. For example, operation via membrane keyboard, the FlowControl Technology, a control function via the laser software and the Trotec iOS app.

## Economical

A good extraction solution improves the engraving and cutting results. Low maintenance costs are guaranteed thanks to sophisticated filter solutions. Due to the bi-directional laser communication, the extraction is only activated when it is necessary. Thus, the laser optics are optimally protected and the filter service life maximized. Your advantage: Thanks to Trotec Service from a single source, the Atmos exhaust system is maintained together with your laser.



Trotec is also setting new standards with regard to exhaust systems with the Atmos model series. As the only laser manufacturer, we produce models that are optimally adapted to the respective laser machine. A suitable exhaust system ensures the safe and clean operation of your laser machine. It reliably removes dust and gases from the processing area and, with its activated carbon filters, it filters out odors that may be generated during laser processing. The Atmos exhaust system helps to deliver the best possible engraving and cutting quality.

## Atmos Cube

Forms a single unit with the laser machine and simultaneously functions as a support frame, for applications with low levels of dust

## Atmos Mono

Stand-alone version with a turbine for applications with medium levels of dust generation. The Atmos Mono Plus version is available for particularly odor-intensive applications

## Atmos Duo Plus

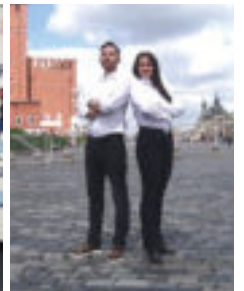
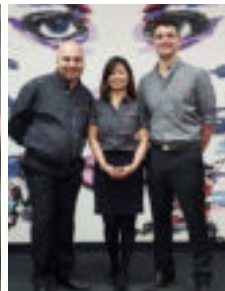
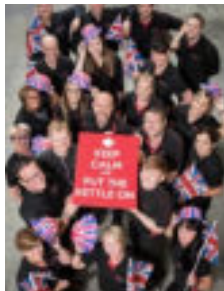
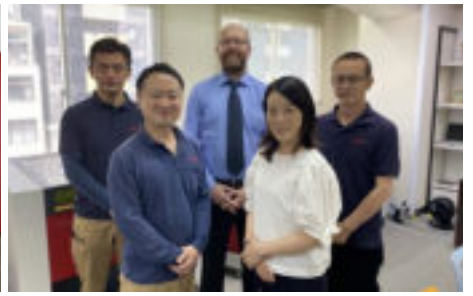
Stand-alone version with two turbines for double the performance in demanding applications.

## Atmos Nano

Particularly compact and easy to transport, ideal for fiber laser applications with particularly small dust particles and minimal odor.

## Atmos Pre-Filter

The use of an automatically cleaned pre-filter system is recommended if there is a large quantity of dust to be filtered. This is positioned between the laser machine and the exhaust system. If particularly tenacious particles are produced (e.g. when processing acrylic), the pre-filter can also be equipped with an optional additive dosage unit.



# Trotec Worldwide!

Trotec is a leading international manufacturer of laser machines. The company's extensive line of first-class laser engravers, cutters and markers, its vast portfolio of engraving materials coupled with its unrivaled service, have made Trotec the technology leader in the industry.



Trotec was formed in 1997 from a research branch of Trodat – the world's largest manufacturer of rubber stamps – and since then, Trotec has been setting new standards in the field of laser technology. With a clear focus on the needs of its customers Trotec strictly aligns itself to make the laser users' work simpler, faster and more profitable.

The field staff is qualified and continuously trained within the in-house Academy. Trotec has 17 sales subsidiaries worldwide. In 2021, the turnover of the Upper Austrian laser manufacturer exceeded EUR 154 million. Trotec's machines are currently in use in over 90 countries around the globe.

# 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 <sub>2</sub>	Flexx
Working area (W x D)	1016 x 610 mm	1016 x 610 mm
Max. height <sup>1</sup> 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 <sup>2</sup>	50 m/s <sup>2</sup>
Technology motion system	Brushless DC servo motors	Brushless DC servo motors
Laser power CO <sub>2</sub>	60 - 120 W	60 - 120 W
Laser power fiber		20 - 50 W
Laser class	2	2
Weight <sup>2</sup>	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
<b>Software</b>		
Ruby®	●	●
Trotec Vision	○	○
<b>Functions and Options</b>		
InPack Technology™	●	●
Harsh environment protection kit	●	●
OptiMotion™	●	●
Sonar Technology™	●	●
HDLR Technology™	●	●
Touch Panel	●	●
LED lighting	●	●
Rotary attachment	○	○
Pass-through conversion kit	○	○
Gas kit light	○	○
Air assist incl. integrated pump	●	●
Trolley base	●	●
TroCare	○	○
2 years warranty	●	●
Trotec Vision Design & Position	○	○
<b>Multifunctional table concept</b>		
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	○	○
<b>Lenses</b>		
1.5 inch CO <sub>2</sub>	○	○
2.0 inch CO <sub>2</sub>	●	○
2.0 inch CO <sub>2</sub> clearance lens	○	○
2.5 inch CO <sub>2</sub>	○	○
2.85 inch flexx		●
3.2 inch fiber		○
4.0 inch CO <sub>2</sub>	○	○
4.0 inch CO <sub>2</sub> clearance lens	○	○
5.0 inch fiber		○
<b>Compatible exhaust systems</b>	Atmos Duo Plus	Atmos Duo Plus

● Standard

○ Optional

<sup>1</sup> Based on standard lens

<sup>2</sup> Depending on laser power



## Speedy 360 Run on Ruby®

CO <sub>2</sub>	Flexx	
813 x 508 mm	813 x 508 mm	Working area (W x D)
210 mm	188 mm	Max. height <sup>1</sup> of workpiece
890 x 600 mm	890 x 600 mm	Loading area (W x D)
1221 x 830 x 1055 mm	1221 x 830 x 1055 mm	Overall dimensions (W x D x H)
3.55 m/s	3.55 m/s	Max. processing speed
50 m/s <sup>2</sup>	50 m/s <sup>2</sup>	Max. acceleration
Brushless DC servo motors	Brushless DC servo motors	Technology motion system
60 - 120 W	60 - 120 W	Laser power CO <sub>2</sub>
	20 - 50 W	Laser power fiber
2	2	Laser class
250 kg	285 kg	Weight <sup>2</sup>
1~230V / 50/60 Hz / 9.6 A	1~230V / 50/60 Hz / 9.6 A	Power consumption
1~115V / 50/60 Hz / 14.2 A	1~115V / 50/60 Hz / 14.2 A	
		<b>Software</b>
●	●	Ruby®
○	○	Trotec Vision
		<b>Functions and Options</b>
●	●	InPack Technology™
●	●	Harsh environment protection kit
●	●	OptiMotion™
●	●	Sonar Technology™
●	●	HDLR Technology™
●	●	Touch Panel
●	●	LED lighting
○	○	Rotary attachment
		Pass-through conversion kit
○	○	Gas kit light
●	●	Air assist incl. integrated pump
●	●	Trolley base
○	○	TroCare
●	●	2 years warranty
○	○	Trotec Vision Design & Position
		<b>Multifunctional table concept</b>
○	○	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
		<b>Lenses</b>
○	○	1.5 inch CO <sub>2</sub>
●	○	2.0 inch CO <sub>2</sub>
○	○	2.0 inch CO <sub>2</sub> clearance lens
○	○	2.5 inch CO <sub>2</sub>
	●	2.85 inch flexx
	○	3.2 inch fiber
○	○	4.0 inch CO <sub>2</sub>
○	○	4.0 inch CO <sub>2</sub> clearance lens
	○	5.0 inch fiber
Atmos Duo Plus	Atmos Duo Plus	<b>Compatible exhaust systems</b>

# Speedy Portfolio Overview



## Speedy 300 CO<sub>2</sub>

## Flexx

Working area (W x D)	726 x 432 mm	726 x 432 mm
Max. height <sup>1</sup> of workpiece	200 mm	200 mm
Loading area (W x D)	795 x 440 mm	795 x 440 mm
Overall dimensions (W x D x H)	1130 x 943 x 1054 mm	1130 x 943 x 1054 mm
Max. processing speed	3.55 m/s	3.55 m/s
Max. acceleration	50 m/s <sup>2</sup>	50 m/s <sup>2</sup>
Technology motion system	Brushless DC servo motors	Brushless DC servo motors
Laser power CO <sub>2</sub>	30 - 120 W	60 - 120 W
Laser power fiber		20 - 50 W
Laser class	2	2
Weight <sup>2</sup>	150 kg	215 kg
Power consumption	1 ~ AC 110-230V 50/60Hz, 0.94 kW - 1.8 kW	1 ~ AC 110-230V 50/60Hz, max. 1.4 kW 1 ~ AC 230V 50/60Hz, max. 1.8 kW (100 - 120 W)
<b>Software</b>		
Ruby*	●	●
Trotec Vision	○	○
<b>Functions and Options</b>		
InPack Technology™	●	●
Harsh environment protection kit	●	●
OptiMotion™	●	●
Sonar Technology™		
HDLR Technology™		
Touch Panel		
LED lighting	●	●
Rotary attachment	○	○
Pass-through conversion kit		
Gas kit light		
Air assist incl. integrated pump	●	●
Trolley base	●	●
TroCare	○	○
2 years warranty	●	●
<b>Multifunctional table concept</b>		
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	○	○
<b>Lenses</b>		
1.5 inch CO <sub>2</sub>	○	○
2.0 inch CO <sub>2</sub>	●	○
2.0 inch CO <sub>2</sub> clearance lens		
2.5 inch CO <sub>2</sub>	○	○
2.85 inch flexx		●
3.2 inch fiber		○
4.0 inch CO <sub>2</sub>	○	○
4.0 inch CO <sub>2</sub> clearance lens	○	○
5.0 inch fiber		○
<b>Compatible exhaust systems</b>	Atmos Mono Atmos Mono Plus Atmos Duo Plus	Atmos Mono Atmos Mono Plus Atmos Duo Plus

● Standard

○ Optional

1 Based on standard lens

2 Depending on laser power



## Speedy 100

CO <sub>2</sub>	Flexx	
610 x 305 mm	610 x 305 mm	Working area (W x D)
170 mm	170 mm	Max. height <sup>1</sup> of workpiece
690 x 346 mm	690 x 346 mm	Loading area (W x D)
1018 x 784 x 467 mm	1018 x 784 x 1004 mm	Overall dimensions (W x D x H)
2.8 m/s	2.8 m/s	Max. processing speed
40 m/s <sup>2</sup>	40 m/s <sup>2</sup>	Max. acceleration
Brushless DC servo motors	Brushless DC servo motors	Technology motion system
30 – 60 W	60 W	Laser power CO <sub>2</sub>
	20 - 30 W	Laser power fiber
2	2	Laser class
95 kg	150 kg	Weight <sup>2</sup>
1 ~ AC 110-230V 50/60Hz, 0.83 kW - 1.3 kW	1 ~ AC 110-230V 50/60Hz, 1.3 kW (60 watts)	Power consumption
		<b>Software</b>
●	●	Ruby®
		Trotec Vision
		<b>Functions and Options</b>
●	●	InPack Technology™
●	●	Harsh environment protection kit
		OptiMotion™
		Sonar Technology™
		HDLR Technology™
		Touch Panel
●	●	LED lighting
○	○	Rotary attachment
		Pass-through conversion kit
		Gas kit light
●	●	Air assist incl. integrated pump
○	○	Trolley base
○	○	TroCare
●	●	2 years warranty
		<b>Multifunctional table concept</b>
●	●	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
		<b>Lenses</b>
○	○	1.5 inch CO <sub>2</sub>
●	○	2.0 inch CO <sub>2</sub>
		2.0 inch CO <sub>2</sub> clearance lens
○	○	2.5 inch CO <sub>2</sub>
	●	2.85 inch flexx
	○	3.2 inch fiber
		4.0 inch CO <sub>2</sub>
		4.0 inch CO <sub>2</sub> clearance lens
	○	5.0 inch fiber
Atmos Cube Atmos Mono Atmos Mono Plus	Atmos Cube Atmos Mono Atmos Mono Plus	<b>Compatible exhaust systems</b>

TROTECLASER.COM

Trotec Laser GmbH  
Freilingner Strasse 99, A-4614 Marchtrenk  
trotec@troteclaser.com  
T +43 / 72 42 / 239-7777

 /TrotecLaserEngraving

 /TrotecLaserInc

**trotec**



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