

**trotec**

# Speedy Series.

Laser Engraving Systems  
Profitability by Design



/ SETTING NEW STANDARDS

# Why Speedy?

Speedy is the ultimate in laser cutting technology, designed by experts to meet the demands of professionals.

With a range of working area sizes, from 457 x 305 mm (16 x 12 in) to 1245 x 710 mm (49 x 28 in), Speedy is suitable for both intricate one-of-a-kind projects and large-scale production runs. What sets it apart is its unmatched engraving speed, making it ideal for industries such as personalization, education, and industrial applications.

## Why choose Speedy from Trotec?

When you invest in a Trotec Speedy, you're choosing an Austrian-engineered laser system known for productivity, adaptability, and ease of use. The Speedy series comes with comprehensive local support, ensuring your success at a competitive price point.



### A comprehensive business solution

Trotec provides a complete package, including the laser system, software, exhaust, materials, and service, so you can focus on growing your business.

### Precision and durability

Speedy lasers are built for long-lasting, precise cutting and engraving, ensuring continuous operation over many years without compromise.

### Enhanced productivity

Experience rapid engraving speeds that deliver clear, legible results in record time—ideal for high-volume production with exceptional quality.

### Cutting-edge laser software

Ruby® laser software ensures seamless compatibility with various design programs, enabling fast and efficient transmission of designs from any device.

## Unlock efficiency with a connected solution

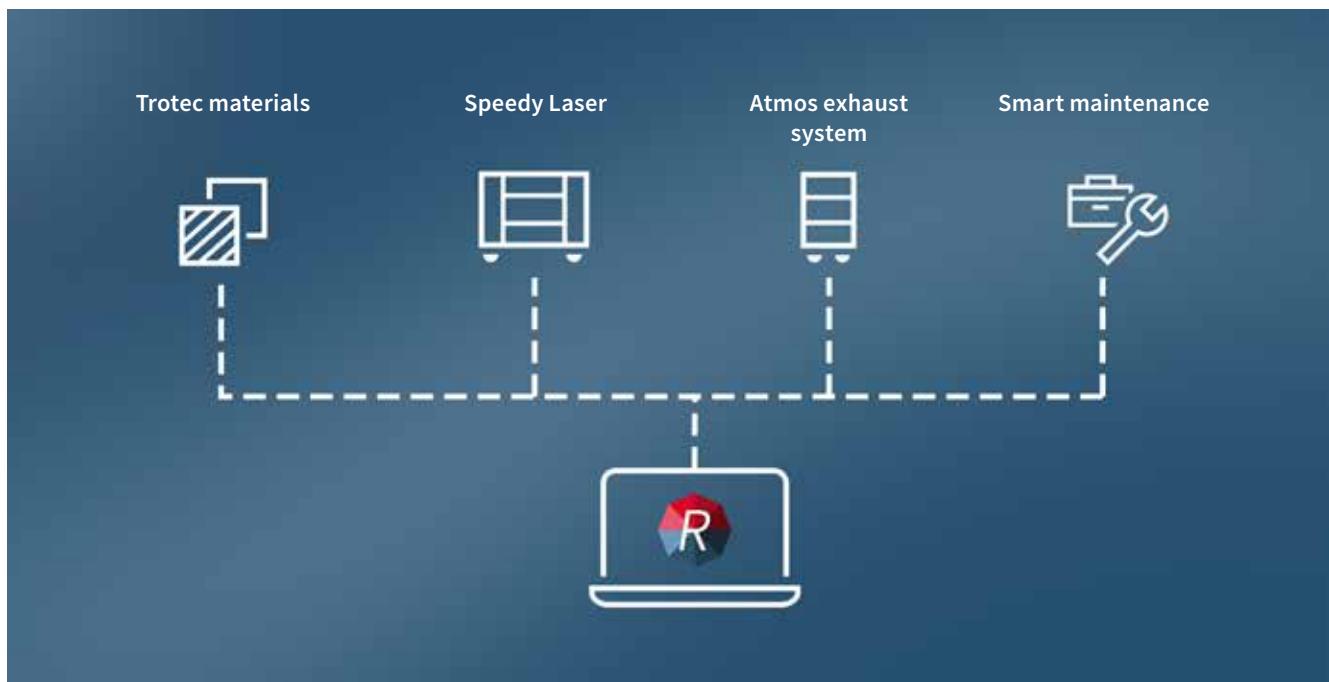
Speedy is the fastest laser machine on the market. Beyond engraving speed, Ruby® integrates Speedy lasers, exhaust systems (Atmos), and Trotec materials into one intelligent system, enabling smart monitoring and optimized production.

### Features of the connected solution:

**Smart Production:** Optimize workflows with real-time data and job management.

**Smart Monitoring:** Receive notifications about filter saturation, machine errors, and more.

**Smart Maintenance:** Prolong machine life with automatic adjustments for exhaust power and easy filter replacement.



## Key benefits of Speedy lasers:

### Connected Solution

Ruby® integrates your laser system, exhaust units, materials, and maintenance services for enhanced productivity.

### Endless possibilities

Flexx Technology™ integrates CO<sub>2</sub> and fiber lasers for versatile material processing, while the Speedy 100 cross diode laser offers a cost-effective solution for metals and various other materials.

### 8x faster cutting

OptiMotion™ adjusts cutting speeds to ensure precision and high productivity, ideal for thin materials.

### More engraving, less time

With engraving speeds of 4.3 m/s and 5 g, Speedy is the fastest laser engraver, perfect for intricate details.

### Durability meets quality

The CeramiCore laser source ensures stable power for precise engraving with long-term durability.

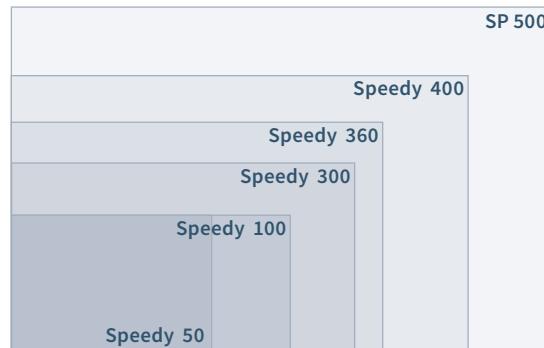
### Efficient laser software

Ruby® ensures seamless connectivity and compatibility with nearly any program, accessible anywhere, anytime.

# Speedy Series.

All machines in the Speedy series come equipped with InPack-Technology™ and our advanced laser software, Ruby®.

The machines of Speedy series feature InPack-Technology™ and are powered by our cutting-edge laser software, Ruby®. The Speedy systems are offered with either a CO2 RF laser or as the Speedy flexx model, which includes an additional fiber laser. The only exceptions are the Speedy 50, which is available exclusively with the CO2 laser option, and the Speedy 100 cross, which is equipped with a diode laser.



[products.troteclaser.com/speedy-laser](http://products.troteclaser.com/speedy-laser)



	Speedy 400	Speedy 360	Speedy 300	Speedy 100	Speedy 50	SP500
<b>Working area (W x D)</b>	1016 x 610 mm 40 x 24 in	813 x 508 mm 32 x 20 in	726 x 432 mm 29 x 17 in	610 x 305 mm 24 x 12 inch	457 x 305 mm 18 x 12 in	1245 x 710 mm 49 x 28 in
<b>Laser power CO<sub>2</sub></b>	80 – 120 W	80 – 120 W	50 – 120 W	30 – 80 W	30 W	120 – 200 W
<b>Laser Power Flexx</b>	80 - 120 W CO <sub>2</sub> 30 - 50 W Fiber	80 - 120 W CO <sub>2</sub> 30 - 50 W Fiber	80 - 120 W CO <sub>2</sub> 30 W Fiber	-	-	-
<b>Laser Power Diode</b>	-	-	-	40 W	-	-
<b>Max. engraving speed</b>	4,32 m/s 170 ips	3,55 m/s 140 ips	3,55 m/s 140 ips	2,8 m/s 110 ips	1,5 m/s 59 ips	2,54 m/s 100 ips

# Speedy 100 cross.

The first industrial grade diode laser plotter for marking and cutting.

The Speedy 100 cross provides a versatile and cost-effective solution for businesses needing flexibility and precision in marking, engraving, and cutting various materials, particularly in small to medium production quantities.



[products.troteclaser.com/speedy-100-cross](http://products.troteclaser.com/speedy-100-cross)

## Benefit from

- Versatility and wide range of applications:** Engrave or cut a variety of materials with ease. The Speedy 100 cross is perfect for a range of industries and applications, including industrial marking, product personalization, and education.
- High precision and clarity:** With the ability to deliver pin-sharp results, the Speedy 100 cross excels in marking QR codes, serial numbers, and intricate graphics, ensuring high-quality outcomes that meet the strictest standards..
- Large working area for bigger projects:** Featuring a generous working area of up to 610 x 305 mm (24 x 12 in), the Speedy 100 cross can handle larger parts and surfaces compared to galvo systems, making it ideal for companies dealing with oversized components or materials.
- Efficient for small to medium production quantities:** Designed for optimal performance in small and medium production runs, the Speedy 100 cross streamlines workflows and reduces costs without requiring high-output, expensive systems.
- Cost-effective solution:** Offering an excellent balance between cost and performance, the Speedy 100 cross provides a solid return on investment without the high price tag of alternative laser marking systems, making it the perfect choice for businesses with budget constraints.
- Low maintenance and simple operation:** With its straightforward design and low maintenance needs, the Speedy 100 cross offers reliable, user-friendly operation, saving you both time and money in the long run.



Produce typeplates by directly marking metals



Engrave pin-sharp logos, codes and text on tools



Put perfectly readable QR-codes on PCB boards



Realize realistic photo engravings on anodized aluminum



Produce any kind of personalized items out of paper or cardboard



Engrave or cut solid wood, plywood, MDF, veneer and many more.

# Laser Efficiency with Ruby® Software.

Ruby® laser software is your ultimate tool for efficient laser operation. No need to open customers' layouts separately.

Drag and drop designs into Ruby, regardless of your graphic program's version. Separate design and preparation from production. While the laser works on current jobs, prep the next ones. Accessible from PC, Mac, tablet, or mobile, whether you're right by the machine or anywhere within your network.



## Compatibility and connectivity

Ruby ensures digital accessibility at all times, seamlessly connecting various devices, such as lasers or exhaust systems, and is compatible with nearly every program through file importing.

### Your benefit:

- Efficient working with seamless connectivity: All users can work simultaneously anytime and anywhere.
- Increased productivity and streamlined workflows: Files from programs like Illustrator can be uploaded even if you don't own the program.
- Saves time, money, and relieves worries.
- Seamless automation of processes: Importing CSV files for automatic template filling speeds up production and standardizes results.
- Open API: Integrates with ERP and MES for automated job creation and tracking, reducing downtime by optimizing scheduling and job queueing. Ruby® enables mass customization and variable data engraving with industrial databases.

## Anybody can use the laser

Simple laser access, seamless collaboration, file uploads without program ownership, Ruby® saves time and money, with automated processes boosting production speed and standardizing results.

### Your benefit:

- User-friendly interface: Simple and intuitive, reducing training needs for accessibility by anyone.
- Streamlined operations: One program, one efficient process, eliminating the need for printer drivers and enabling direct graphic operations.
- Simplified workflow for all users: No expertise required from file preparation to production for both laser owners and their customers.
- Enhanced security: User activity tracking and prevention of unauthorized alterations.



[products.troteclaser.com/ruby](http://products.troteclaser.com/ruby)

# Full package from machine to service.

Choose Trotec, and you're selecting more than a laser machine.

We offer a full solution, encompassing laser software, exhaust systems, materials, training, service, and support – all aimed at ensuring your immediate profitability.



## Ruby® Laser Software

Efficiency is at your fingertips with Ruby® laser software. Accessible from PC, Mac, tablet, or mobile, whether beside the machine or anywhere on your network. Ruby® simplifies laser job management.



## Quality Materials

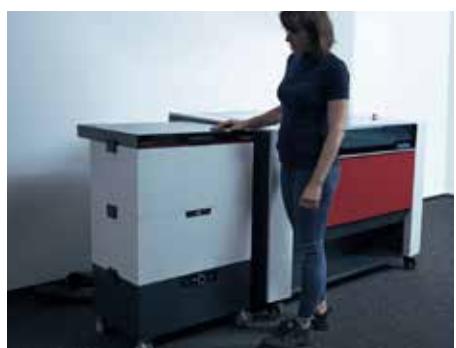
Explore our extensive range of laserable materials, gifts, and accessories, all rigorously tested to guarantee superior laser processing outcomes. We handle material testing – you concentrate on your business and customers.



[products.troteclaser.com/ruby](http://products.troteclaser.com/ruby)



[products.troteclaser.com/laser-materials](http://products.troteclaser.com/laser-materials)



## Efficient Exhaust Systems

For premium engraving and cutting results, dust and fumes must be effectively removed. Our specially designed exhaust systems perfectly complement Speedy lasers, delivering optimal performance.



## Efficient Delivery and Installation

When you purchase a Speedy from Trotec, we ensure cost-effective delivery from the nearest supplying plant, often located in your country. Installation is conducted by our local specialists, allowing you to get up and running swiftly.



## TroCare Service

TroCare offers comprehensive coverage for your laser. A single monthly or annual payment includes preventative maintenance, parts, and labor for repairs, ensuring your laser's longevity.



[products.troteclaser.com/atmos-exhaust](http://products.troteclaser.com/atmos-exhaust)



[products.troteclaser.com/installation](http://products.troteclaser.com/installation)



[products.troteclaser.com/tocare](http://products.troteclaser.com/tocare)

# What can you make with a Speedy?

Trotec Speedy customers, spanning diverse industries, manufacture a broad spectrum of products.

With our innovative Flexx Technology™, you can work with materials that typically require two separate machines. This empowers you with unparalleled flexibility and a wide range of application possibilities.



Engrave glasses or bottles with logos, names, icons, and many other designs



Produce interior signage from printed acrylic



Add value to paper books with fine detail engraving and cutting



Finish leather items with a personal message or branding



Manufacture typeplates using anodized aluminum or other materials



Make more money with creative badges or signs



Directly engrave bottles or mugs without pastes or spray



Benefit from high processing speeds on promotional items.



Mark codes, logos or serial numbers on tools or machine parts

# What materials can you engrave or cut?

The system can process cutting and engraving of acrylics, woods, textiles, paper and so much more. Scan or follow the link to get the full list of materials.



[products.troteclaser.com/material-list](http://products.troteclaser.com/material-list)

	Engrave/Mark			Cut		
	CO <sub>2</sub>	Fiber	Diode	CO <sub>2</sub>	Fiber	Diode
Metal		✓	✓			
Aluminum anodized	✓	✓	✓			
Acrylics transparent	✓				✓	
Acrylics colored	✓	✓	✓		✓	✓
Glass transparent	✓					
Glass colored	✓		✓			
Mirror		✓	✓			
Ceramics		✓	✓			
Plastic sheets	✓	✓	✓		✓	✓
Leather	✓		✓		✓	✓
Paper white	✓		✓		✓	✓
Paper colored	✓		✓		✓	✓
Cardboard	✓		✓		✓	✓
Plastics	✓	✓	✓		✓	✓
Stone	✓	✓	✓			
Fabric	✓	✓	✓		✓	✓
Wood	✓		✓		✓	✓
Cork	✓		✓		✓	✓
Food	✓		✓		✓	



# More features, options and accessories of Speedy.

 **Exhaust systems:** Trotec's Atmos exhaust systems efficiently remove dust and fumes, making them the ideal companion for Speedy lasers.

 **Vision Design & Position:** For precise positioning on irregularly shaped objects or utilizing residual materials, trust Vision Design & Position.

 **Vision Print&Cut:** A camera with the ability to detect registration marks ensures the precise and efficient cutting of materials adorned with printed graphics or designs.

**flexx Flexx technology :** Our patented Flexx Technology™ combines CO<sub>2</sub> and fiber lasers in one machine, enabling the processing of diverse materials in a single operation.

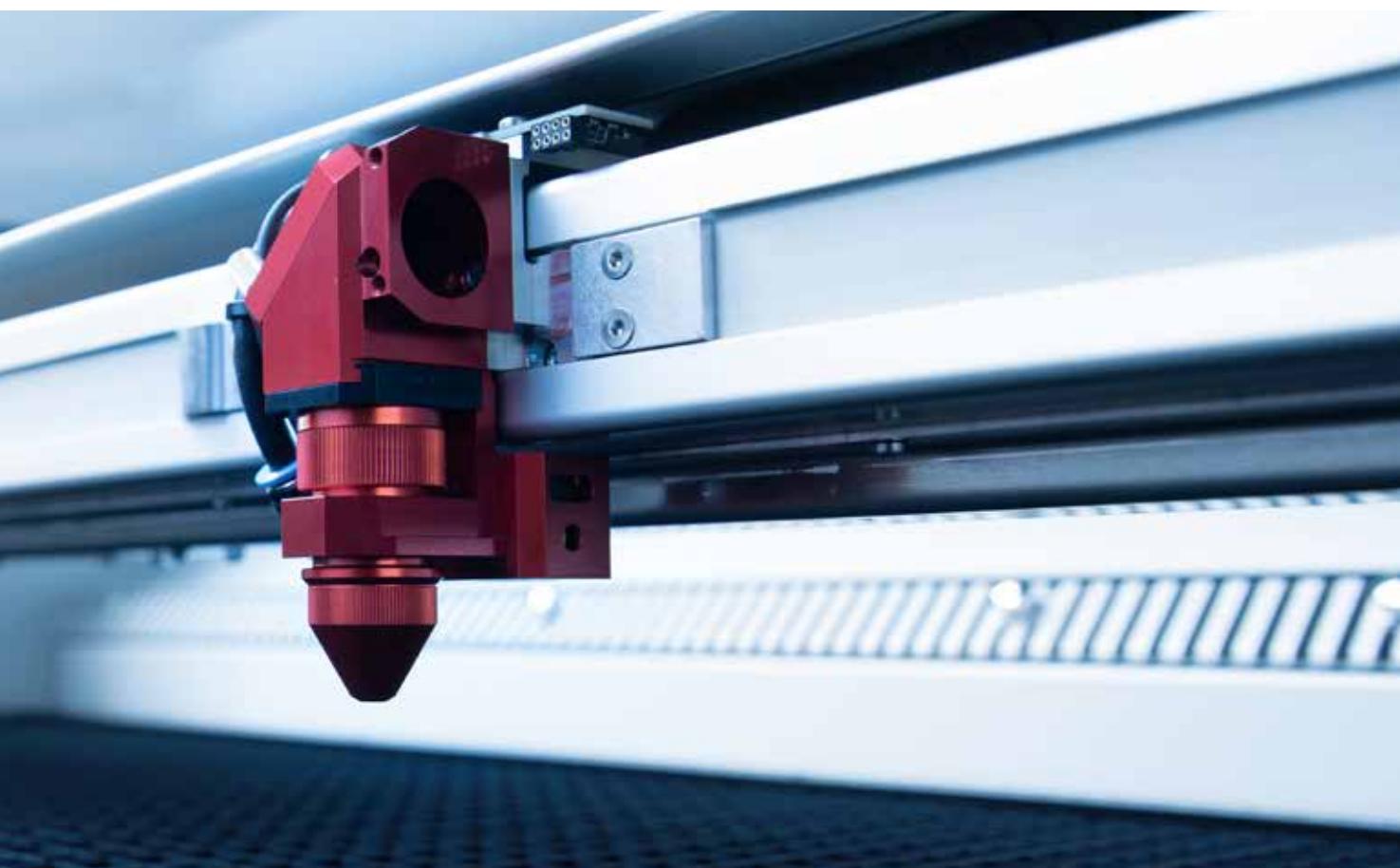
 **Multifunctional table concept:** Speedy comes with various tables to ensure optimal engraving and cutting results.

 **InPack-Technology:** Developed to safeguard sensitive machine components (axis, laser head, optics, lenses) from dirt and dust, ensuring years of trouble-free operation even under heavy use.

 **Different focus lenses:** Choose from a variety of focus lenses based on your application needs.

 **Rotary engraving equipment:** Achieve precision on cylindrical, round, or conical objects with our rotary engraving attachment.

 **CeramiCore laser source:** Our patented laser source concept ensures reliability, high engraving quality, and longevity with a resonator body made of 100% ceramic.



 **Pass-through:** Effortlessly engrave or cut long and bulky parts and boards.

 **Laser power upgrade:** Upgrade any Trotec flatbed laser machine to a higher laser power at any time.

 **Laser pointer:** The laser pointer indicates the exact impact point of the laser beam on the material with a red dot.

 **Automatic focusing:** With a simple button press, the ultrasonic sensor on the laser head detects the workpiece's surface.

 **Temperature sensor:** In case the engraving compartment's temperature exceeds a critical level, the laser signals the operator with a warning sound.

 **Gas kit:** Enhance cutting results on materials like wood by adding compressed air.

 **Air assist:** The integrated pump protects the lens by preventing dust from adhering to it.

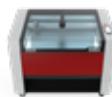
 **Optimum footprint:** A perfect balance between machine size and work area, delivering more flexibility while requiring less space.

 **CE certificate:** Our machines meet all official requirements, ensuring safe operation.

 **HDLR technology:** Thanks to HDLR - High Dynamic Laser Range - Technology™, the smallest details and letters remain laser-sharp even at full speed.

 **Touch panel:** Use the computer for job preparation; the touch panel is dedicated to working through the job list.

# Overview.



## Speedy 400

### CO<sub>2</sub>

### Flexx

Working area (W x D)		1016 x 610 mm   40 x 24 in
Max. height <sup>1</sup> of workpiece		305 mm   12 in
Loading area (W x D)		1096 x 698 mm   43 x 27 in
Overall dimensions (W x D x H) with trolley		1428 x 952 x 1073 mm   56 x 39 x 42 in
Max. processing speed		4.32 m/s   170 ips
Max. acceleration		50 m/s <sup>2</sup>   1969 ips <sup>2</sup>
Technology motion system		Brushless DC servo motors
Laser power CO <sub>2</sub>	80 - 120 W	80 - 120 W
Laser power fiber		30 - 50 W
Laser class	2	
Weight <sup>2</sup>	Approx. 295 - 310 kg   650 - 684 lbs	Approx. 335 - 350 kg / 739 - 772 lbs
Power consumption		1~230V / 50/60Hz / 10.2 A 1~115V / 50/60Hz / 15.3 A
Ruby® laser software	●	●
<b>Functions and Options</b>		
InPack Technology™	●	●
Smart electronics	●	●
OptiMotion™	●	●
Sonar Technology™	●	●
HDLR Technology™	●	●
Touch Panel	●	●
LED lighting	●	●
Harsh environment protection kit	●	●
Air assist incl. integrated pump	●	●
2 years warranty	●	●
Vision Print&Cut	○	○
Vision Design & Position	○	○
Rotary attachment	○	○
Pass-through conversion kit	○	○
Gas kit light	○	○
TroCare	○	○
Trolley base	●	●
<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 Pure 600	Atmos Pure 600

● Standard

○ Optional

1 Depending on lens

2 Depending on laser power

For further details, please refer to the technical data sheet





**Speedy 100  
CO<sub>2</sub>**

Working area (W x D)	610 x 305 mm   24 x 12 in
Max. height <sup>1</sup> of workpiece	170 mm   6.7 in
Loading area (W x D)	690 x 305 mm   27 x 12 in
Overall dimensions (W x D x H)	1018 x 784 x 465 mm   40 x 31 x 18 in
Max. processing speed	2.8 m/s   110 ips
Max. acceleration	40 m/s <sup>2</sup>   1575 ips <sup>2</sup>
Technology motion system	Brushless DC servo motors
Laser power CO <sub>2</sub>	30 - 80 W
Laser power Diode	
Laser class	2
Weight <sup>2</sup>	Approx. 95 kg / 209 lbs



**Speedy 100 cross  
Diode**

Working area (W x D)	610 x 305 mm   24 x 12 in
Max. height <sup>1</sup> of workpiece	157 mm   6.2 in
Loading area (W x D)	690 x 305 mm   27 x 12 in
Overall dimensions (W x D x H)	1018 x 779 x 457 mm   40 x 31 x 18 in
Max. processing speed	2.8 m/s   110 ips
Max. acceleration	40 m/s <sup>2</sup>   1575 ips <sup>2</sup>
Technology motion system	Brushless DC servo motors
Laser power CO <sub>2</sub>	
Laser power Diode	40 W
Laser class	2
Weight <sup>2</sup>	Approx. 91 kg / 201 lbs

Power consumption 1 ~ AC 110-230V 50/60Hz, 0.9 kW - 1.3 kW 1 ~ AC 110-230V 50/60Hz, 800 W

**Ruby® laser software**

●	●
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**Functions and Options**

InPack Technology™	●	●
Smart electronics	●	●
OptiMotion™	●	●
Sonar Technology™		
HDLR Technology™		
Touch Panel	●	●
LED lighting	●	●
Harsh environment protection kit		
Air assist incl. integrated pump	●	●
2 years warranty	●	●
Vision Print&Cut		
Trotec Vision Design & Position	○	
Rotary attachment	○	○
Pass-through conversion kit		
Gas kit light		
TroCare	○	○
Trolley base	○	○

**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**

50 mm		●
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>	○	
2.5 inch CO <sub>2</sub> clearance lens		
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 CO <sub>2</sub>		
5.0 inch fiber		

**Compatible exhaust systems**

Atmos Cube  
Atmos Pure 300

Atmos Cube  
Atmos Pure 300

● Standard

○ Optional

1 Depending on lens

2 Depending on laser power



**Speedy 50**  
**CO<sub>2</sub>**



**SP 500**  
**CO<sub>2</sub>**

457 x 305 mm   18 x 12 in	1245 x 710 mm   49 x 28 in	Working area (W x D)
141 mm   5.5 in	95 mm   3.7 in	Max. height <sup>1</sup> of workpiece
510 x 380 mm   20 x 15 in	1420 x 820 mm   56 x 32 in	Loading area (W x D)
726 x 675 x 447 mm   29 x 27 x 18 in	1920 x 1240 x 1140 mm   75 x 48 x 45 in	Overall dimensions (W x D x H)
1.5 m/s   60 ips	2.54 m/s   100 ips <sup>2</sup>	Max. processing speed
35 m/s <sup>2</sup>   1378 ips <sup>2</sup>	19 m/s <sup>2</sup>   748 ips <sup>2</sup>	Max. acceleration
Brushless DC servo motors (X axis)	Brushless DC servo motors	Technology motion system
	120 – 200 W	Laser power CO <sub>2</sub>
30 W		Laser power Diode
2	2	Laser class
approx. 53 kg / 117 lbs	Approx. 500 kg   1102 lbs	Weight <sup>2</sup>
1 ~ AC 110-240V 50/60Hz, 800 W	208 - 230 V, 50/60 Hz, 16 A 380-400 V 3 Ph., 50/60 Hz, 3x16 A 380-400 V 3 Ph., 50/60 Hz, 3x20 A	Power consumption
●	●	Ruby® laser software
●	●	<b>Functions and Options</b>
●	●	InPack Technology™
●	●	Smart electronics
●	●	OptiMotion™
	●	Sonar Technology™
	●	HDLR Technology™
●	●	Touch Panel
●	●	LED lighting
	●	Harsh environment protection kit
●	●	Air assist incl. integrated pump
●	●	2 years warranty
	○	Vision Print&Cut
○	○	Vision Design & Position
	○	Rotary attachment
	○	Pass-through conversion kit
	●	Gas kit light
○	○	TroCare
○		Trolley base
●		<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>
		50 mm
○		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>
		2.5 inch CO <sub>2</sub> clearance lens
		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 CO <sub>2</sub>
		5.0 inch fiber
Atmos Cube Atmos Pure 300	Atmos Pure 600 Vent Set 500 Atmos PowerJet	<b>Compatible exhaust systems</b>

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