New: Speedy 500
Business Growth by Design

- High Efficiency Cutting and Engraving
- Multifunctional Table Concept (patents pending)
- 1245 mm x 710 mm Working Area (49" x 28")
- Pass-through Capability
The Trotec Speedy 500 is the ultimate laser cutting and engraving system for those who require fast processing of large volumes and/or large surface materials, where smaller laser models are often insufficient. The Speedy 500 is the most productive system in its class.

The Speedy 500 works productively right from the start. It produces high quality engraving and cutting results on a wide variety of materials—at very high processing speeds and acceleration rates. For example, large-format engravings can be output up to twice as fast on the Speedy 500 when compared to our competitors’ systems. The revolutionary shuttle table provides almost seamless production with minimal feed and discharge times. Investment costs are amortized very quickly.

Increase productivity:
- More jobs in the same amount of time

Greater revenue by greater versatility:
- On its 1245 mm x 710 mm in working area (49 x 28 inches), the Speedy 500 provides enough space for most standard material formats in use today. Despite the large working area, every corner of the interior is easy to access.
- The machine’s pass-through capability enables processing of very long and bulky parts. The unique multifunctional table concept (patents pending) facilitates optimal configuration for a large range of cutting and engraving applications—depending on specific job requirements users can select between a cutting table, honeycomb table or vacuum table.
Speedy 500
Flexibility for every application

Typical Materials
- Acrylic
- Paper
- Leather
- Wood
- Textiles
- ... and many more

Typical areas of use
- Acrylic and display production
- Wood processing industry
- Architectural model making
- Membrane keyboard production
- Engraving and sign making
- ... and many more

... and what is your application?
Ideally equipped for every application

- **Laser pointer**: The laser pointer enables precise positioning of the specific engraving or cutting job.
- **Lenses**: Different applications require different lenses to achieve optimal results. The Speedy 500 is by default supplied with a 2" lens.
- **Extended dust protection**: Offers additional protection for motors and electronics in dust-intensive applications.
- **Air-flushed optics**: All optics are air-flushed, providing for maintenance-free operation and long life.
- **Extraction on working head**: An extraction hose is mounted directly on the working head and removes dust and smoke from the material surface during processing.
- **Software**: The intuitive Trotec JobControl Expert software allows the user to perform engraving and cutting jobs quickly and precisely.
- **Gas kit**: Reduces flame-up, improves dust dispersal and also protects the lens. Activation and deactivation are controlled by the JobControl software.
- **Auxiliary lenses**: Use of a 2.5" or 5" lens significantly improves output quality when cutting thick materials.
- **Pass-through**: Enables processing of very long and bulky parts. The feed-through feature makes the Speedy 500 a laser safety class 4 device.
- **CCD camera**: The camera system and I-Cut software ideally equip you for cutting printed films and other thin materials.
- **Rotary attachment**: For engraving cylindrical, conical or spherical objects such as glasses, balls or bottles. The rotary attachment is mounted in the processing space instead of the table, thereby maximizing the processing diameter.
- **Software**: Utilize troCAM software for cutting jobs. A basic and an advanced version of troCAM are available.
- **Auto-focus with photoelectric guard**: Electro-optical auto-focus with photoelectric guard. Offers the extra convenience of accurate, automatic focusing of the laser beam on the workpiece surface.
Multifunctional table concept

For the **Speedy 500**, Trotec has developed a table concept that is unique in today’s market. The best table for the desired application can be selected and easily changed. This provides very high quality results.

**Standard table**

The standard table is ideal for engraving heavy workpieces (*marble, granite, wood, acrylic*). It lies on the base frame and is supported by cross members.

**Vacuum table**

Thin and light materials that tend to lie unevenly on the base can be engraved, cut or marked in combination with the vacuum table (*e.g. films, plastic laminates, veneers, paper, etc.*). The well-designed adapter system provides for maximal vacuum effect.

Large processing space

If necessary the system can be operated without a table insert. The workpieces are put onto the base frame which can be moved up and down electronically. This enables processing of workpieces with a height of up to 300 mm (12").

**Cutting table**

With the cutting table you are optimally equipped for cutting heavy materials. The nozzle bar integral to the machine frame generates an ideal cross-flow of air, which blows away dust particles and vapors beneath the process materials. The specially shaped air guides prevent cut parts that fall down through the screen from being burned or damaged. Anodized aluminum bars lock in place independently. They can be replaced by acrylic bars to assure reflection-free cutting.

More tables – more possibilities

**Vacuum table**

- veneer, 0.5 mm (0.02")

**Cutting table**

- wood, 4 mm (0.16")
Productivity over the entire production line

| **Dimensions (Width/depth/height):** | 1920/1240/1140 mm (780 mm without trolley)  
|                                            | or 75.5/48.8/45.0” (30.7” without trolley) |
| **Weight:**                              | 520 – 580 kgs / 1100 – 1300 lbs (depending on laser power) |
| **Working area:**                        | 1245 x 710 mm (49 x 28")  
|                                            | or optional with pass-through: 1245 mm x ∞ (49" x ∞) |
| **Loading area:**                        | 1420 x 820 mm (56 x 32")  
|                                            | or optional with pass-through: 1420 mm x ∞ (56" x ∞) |
| **Max. speed:**                          | 254 cm/sec (100'/sec); Acceleration 2 G |
| **Workpiece table:**                     | Servo-controlled z-axis table  
|                                            | Computer controlled and programmable  
|                                            | 25 kgs (55 lbs) area load over the whole working area |
| **Max. height of workpiece:**            | With table: 150 mm (6")  
|                                            | At removed table: 300 mm (12") at an area of  
|                                            | 1245 x 610 mm (49 x 24") |
| **Accuracy:**                            | +/- 0,1 mm (0.004") on the whole area (depending on the material) |
| **Repeatability:**                       | <= 15 μm |
| **Mechanical Design:**                   | Fully enclosed chassis with double safety interlock system  
|                                            | Laser class 2 (Laser class 4 with pass-through opening)  
|                                            | CE tested  
|                                            | Permanent magnet synchronous servomotor (brushless)  
|                                            | InPack-Technology™ |
| **Laser Design:**                        | Sealed-off CO2 laser, maintenance-free;  
|                                            | Lens 2,0" (standard); 2,5" and 5,0" (optional)  
|                                            | Lens and all mirrors air-flushed |
| **Laser Power:**                         | 45 – 200 Watt |
Global presence —now and in the future

Trotec lasers are used all over the world. Our experience in the field with thousands of systems installed is evidence of our know-how and customer trust. Our Trotec service and sales partners in more than 80 countries undergo continuous training programmes. Trotec lasers can therefore be professionally serviced on site.

In addition, our trotec Software JobControl offers the unique opportunity to evaluate the status of your laser installation via remote maintenance and diagnostics in real time, so that we can provide maximum reliability and availability.

For your business success—now and in the future.

A commitment to your satisfaction

At Trotec the customer is our top priority. We want you to be even more successful with Trotec. In order to always be able to offer the right solution to our customers, our aim is innovation. Our innovations assure you minimal overall costs for your laser system, quality, flexibility, efficiency and consequently productivity. Trotec offers standard and individualized solutions. Trotec is the only laser company to provide the full range of innovative flatbed and galvo systems with CO₂, Nd:YVO₄ and fiber laser as well as excimer laser technology.

With smart devices, a motivated team of experts, and our global service network we can constantly provide you with top-quality, leading-edge laser solutions at a competitive price.
Checklist for your laser purchase:

• Can the laser be implemented easily and universally?
The Speedy 500 provides full flexibility. That is because with a working area of 1245 mm x 710 mm (49" x 28") and pass-through capability, the Speedy 500 is also well-suited to the production of very large format work pieces. Regardless of whether they are one-off pieces or standard production parts.

• Is the laser system adequate for the productivity and quality standards of your customers? Compare the production times and qualities of identical jobs. Quality and productivity differences are more noticeable in larger jobs. Especially check small characters and fine details.

• Can you satisfy the widely varying requirements of your customers?
With its unique table concept (patents pending), the Speedy 500 enables optimal machine configurations for all engraving and cutting applications—depending on your job requirements you can choose between a cutting table, honeycomb table or vacuum table.

• Does the laser system have mature, practice-proven software?
Trotec JobControl software gives you full control of all laser functions. JobControl also monitors external systems such as the exhaust system. The specially developed troCAM software ideally equips you for cutting jobs. And I-Cut delivers excellent results in cutting pre-printed foils and other thin materials.

• How much experience does the laser system supplier have?
Trotec offers proven, hands-on experience from thousands of installations. Laser systems and installations prove their true quality during intense operation. Trotec’s systems stand up to the most extracting tests. For you, this means peace of mind—especially with our extensive warranties and customer care options.

• What happens when something goes wrong? Is a service partner available immediately? Trotec offers immediate response service for any concern. For you, this means fast support—whether it is through our remote maintenance capabilities or delivered directly from our network of 80 service bases around the world.