

Trotec Competitive Edge

- **Speed ratings:**

The Trotec head design and X-Motor quality (3 phase AC servo instead of DC Stepper or DC Brush) allows for the **best feedrate** in the industry. Competitors are either spec'd less than Trotec, or they do not spec their table speeds.

 - Trotec 100R is 70 in/sec Acceleration 3G
 - Trotec 100 is 110 in/sec Acceleration 4G
 - Trotec 300 is 140 in/sec Acceleration 5G
- **Enclosed motion system:**

The drive belt fully protects the movement mechanism internally. The belt itself is steel re-inforced for strength and durability. Other manufacturers are using kevlar, which leads to more stretching.
- **Linear Bearing System:**

Trotec uses THK linear bearing system throughout, as opposed to V-groove bearings. This increases the speed and reduces the maintenance.
- **Ease of Maintenance:**

With modular construction and field replaceable units, many maintenance jobs can be done by the system owner. All bearings are self-lubricating. In general the only maintenance is keeping the optics clean and doing general cleanup on the table
- **Stability and Rigidity:**

There are three table lead screws instead of the usual two of most competitors. This gives more stability and table flatness. Also, special aluminum re-inforcement panels add stiffness to the frame. Even at the highest speeds, there is no rocking of the frame due to the head movement.
- **Table Anchoring:**

The table is Ferro-magnetic so that magnets can be used to stabilize target materials.
- **Table Lighting:**

Trotec machines come with a Front Halogen lighting system
- **Extended Warranty Period**

Trotec Warranty periods are the best in the business. There are no hidden exclusions for "wear and tear" parts such as belts, bearings, and motors. All are included in the factory warranty.

 - 100R - 1 year system warranty
 - 100 - 2 year system warranty
 - 300 - 3 year system warranty
- **Parts and Service**

Parts and Service are available within Canada at all times. There is no need to wait for parts from offshore.
- **No Buffer Limit**

Trotec systems have no buffer limit issue. The job spooling is controlled by software driven from the computer.
- **On-screen job positioning ease-of-use**

Trotec systems have easy job positioning via a dot positioning marker on the job control screen.

 - first position the laser head at the desired start position
 - next - go to the Job Control screen and snap the job profile to the position on the screen. The screen position is taken directly from the laser head position. Snapping can be done to any of the four corners of the job.
- **Red-Dot Laser Safety**

The Red Dot laser category for Trotec machines is 2M. Most competitors are 3A.

- **Accuracy on Power and Speed Settings**
Trotec systems have two decimal place accuracy on power/speed settings.
- **Automatic generation of Bridging lines (Sprues) on Rubber Stamping**
With Trotec machines during cutting of rubber stamps, material bridging (sprues) can be automatically created to keep the dies on the sheet for easy removal.
- **Beam Expander (high-res settings)**
On Trotec machines, a Beam Expander is standard on all 60W and higher machines - other companies charge for this option. (also known as High Precision Focusing Optics or High Density Precision Optics)
- **Z-movement within the same job**
Within one job, the Z positioning can be changed. This is unique to Trotec.
- **Materials and Settings Database**
Within the Trotec Job Control program there is a materials and settings database which can be edited for customized entries. It is also pre-populated with common materials and the corresponding cutting and engraving parameters.