

High-Speed Laser Marking for Industrial Applications

→ SpeedMarker Series



www.troteclaser.com

setting
new
standards



Modular product portfolio
Reliability in demanding environments
Intelligent laser software
for optimized work processes

→ The most complete tool for industrial laser marking

Developed for efficient laser marking of metals and plastics along the industrial production chain, the SpeedMarker Series offers you the perfect combination of intelligent software with highest quality hardware. The included software package SpeedMark is able to communicate with external systems and without any special knowledge the user can program complete marking processes within shortest time. The laser marking systems are available in 4 different sizes and various configurations to meet your individual requirements. Additionally, a broad range of options can be combined for special tasks.



SpeedMarker 100

- Open laser class 4 system
- No housing for ultimate flexibility in part size
- Electrical Z-axis for precise focussing

SpeedMarker 300

- Compact high – speed desktop workstation
- Industrial laser marking on minimal footprint
- Safe laser class 2 system

Maintenance-free fiber laser

The high-speed SpeedMarker fiber laser is air cooled and maintenance free. Mark metals and a broad range of plastics without chemicals or other consumables.

Focus finder (optional)

A second laser pointer enables precise focusing directly on the workpiece without the need for additional equipment.

Pilot laser for border marking

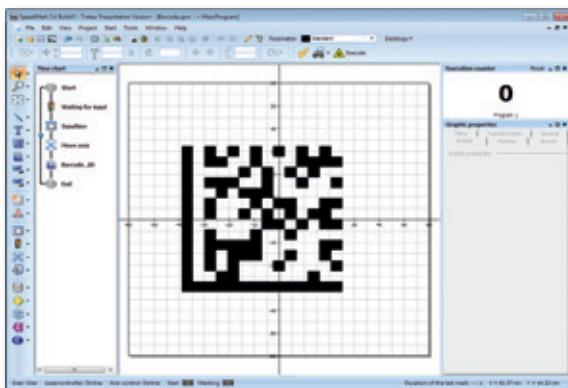
All SpeedMarker systems have a laser pointer for setting up the workpiece fast and easily. It displays the edges of the marking and helps you in adapting the size of the mark in order to optimize the set up before the laser job.

Axis concept for ultimate flexibility

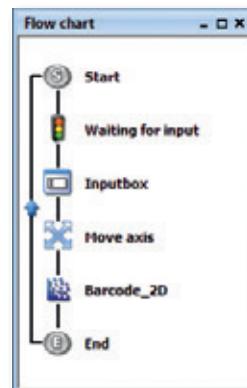
The optimum setup for your application: When purchasing the machine, select either a mechanical (adjustable using a hand wheel), electrical or software-controlled Z-axis (controlled via the software or the keyboard on the machine itself). X- and Y-axes are available for several products. These are software-controlled and enable you to mark big fields and parts.

Autostart function

You can automatically start a laser job by closing the hood. This saves time and therefore money on everyday tasks.



SpeedMark user interface



Individual marking programs easily designed

→ One software package for all your needs: SpeedMark

Developed for automated marking processes, the SpeedMark provides program modules for typical marking tasks (e.g. producing serial numbers or codes). These are easy to adjust and allow the creation of tailor-made marking programmes using graphical flow control. From simple direct input to fully automated marking, everything is possible – with no need for any special programming knowledge.

- Automatic, consecutive barcode generation
- Customizable user interfaces
- Material database for managing marking parameters
- Management of various user rights
- Interfaces to external systems such as databases
- Deep engraving function and processing of dynamic data



SpeedMarker 700

- Medium sized all-round laser marking workstation
- Automatic door for efficient part handling
- Software-controlled axes, rotary table, ...



SpeedMarker 1300

- Large format galvo laser workstation
- Marking of large and heavy parts or high volume parts in trays
- Highest flexibility due to software controlled X- and Y-axis

Additional lenses

Lenses of focal length F 100, F 254, F 330 and F 420 are available in addition to the standard F 160 lens. This enables you to vary the size of the marking field at any time. You are therefore optimally equipped for all needs.

Automatic and programmable door

For faster and even more ergonomic part handling the SpeedMarker 700 and 1300 are equipped with an automatic door. The electrical door can also be programmed via the SpeedMark software in order to further optimize the production process.

MOPA laser

Select different pulse durations (pre-defined pulse shapes from 4 - 200 ns) and increase the possibilities for marking metals and plastics.

Modular concept

Choose the system size that fits best to your application. In addition, the housing of a SpeedMarker system can be fitted with a pass-through hatch and removable side covers on request making it possible to mark larger and bulkier workpieces (the system is then classified as laser class 4). A SpeedMarker system can also be extended by using handling options such as conveyor belts or rotary tables.

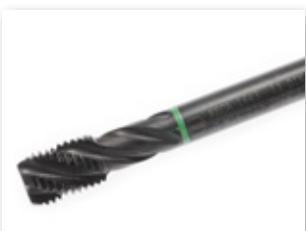
Rotary unit

An optional rotary unit with a selection of chucks is available for engraving circular or conical objects such as rings or tubes. It is also controlled using the laser software.

→ The SpeedMarker Series

	SpeedMarker 100	SpeedMarker 300	SpeedMarker 700	SpeedMarker 1300
Exterior dimensions (W x H x D) in mm	375 x 666 x 800	572 x 653 x 851	780 x 1802 (1662) x 960	1300 x 1790 x 960
Maximum marking area (depends on lens) in mm	up to 240 x 240	up to 190 x 190	up to 310 x 310	up to 310 x 310
Available axis	Z	Z	Z, X, Y	Z, X, Y
Maximum working area in mm (Segmentation via axis system)	–	–	up to 580 x 495	up to 1000 x 450
Maximum component height in mm	399	250	570	557
Laser source	Pulsed, maintenance free fiber laser or MOPA laser, air cooled	Pulsed, maintenance free fiber laser or MOPA laser, air cooled	Pulsed, maintenance free fiber laser or MOPA laser, air cooled CO_2 laser, air cooled	Pulsed, maintenance free fiber laser or MOPA laser, air cooled
Laser power	10 – 50 Watt fiber laser 20 Watt MOPA laser	10 – 50 Watt fiber laser 20 Watt MOPA laser	10 – 50 Watt fiber laser 20, 100 Watt MOPA laser 30 and 45 Watt CO_2 laser	10 – 50 Watt fiber laser 20, 100 Watt MOPA laser
Door	–	Manual	Automatic	Automatic
Laser safety class	4	2	2	2
Maximum marking speed	12.000 mm/s (800 cps) – optional 15.000 mm/s (900 cps)			
Software	SpeedMark			

→ Trotec laser – developed and built in Austria and Germany



Clearly legible marks even in smallest sizes



Company logos and informative content



Flexibility concerning shapes and sizes



Mark a broad range of plastics



Automotive applications



Durable marks a part's lifetime long



Dataplates and industrial tags for machines and parts



Annealing: mark without changing the part's surface structure