trotec

SpeedMarker Series.

Laser marking systems
Created for automation

SpeedMarker Series: Precision Meets Automation

Industrial laser marking redefined—fast, flexible, and built for seamless integration.

Enhanced productivity

SpeedMarker systems deliver ultra-fast galvo laser marking speeds up to 12 m/s, enabling high-throughput production with minimal manual effort. This ensures clear, legible results in record time—ideal for industrial environments where efficiency is key.

Intelligent automation

SpeedMark® software supports visual programming, scripting, and standardized industrial interfaces, allowing seamless automation from semi- to fully automated workflows. Dynamic data like serial numbers and timestamps can be generated directly in the software, reducing errors and setup time.

Reliable and repeatable results

Industrial-grade components and a material database ensure consistent marking quality across batches and operators. Built-in features like SmartAdjust and camera-assisted positioning help maintain precision and reduce scrap.

User-friendly operation

SpeedMarker is designed for intuitive use, even by non-experts. Visual programming, user role management, and ergonomic workstation design simplify setup and operation. Features like border marking and focus finder enhance usability and simple setup.

Advanced marking capabilities

Tools like Virtual Rotary and Focus Shifter enable distortion-free marking on curved and multi-level surfaces without mechanical adjustments. This makes SpeedMarker ideal for complex geometries and 3D marking tasks.

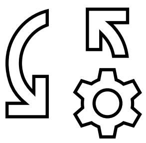
End-to-end support

Trotec offers a complete solution—from laser systems and software to materials and service. With global presence and expert consulting, customers benefit from tailored configurations, validated materials and applications, as well as reliable long-term support.

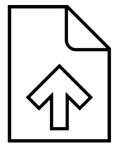
Streamlined Efficiency.

Maximize productivity with SpeedMarker's automation capabilities and galvo speed.

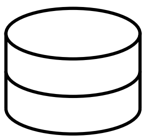
SpeedMarker systems are built to keep your production line running smoothly and efficiently. High-speed galvo marking up to 12 m/sec. works in perfect harmony with the automation capabilities of SpeedMark software, creating a seamless workflow that minimizes manual effort and keeps productivity high.



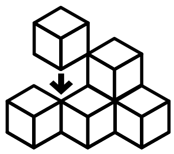
Automated workflow



File Import



Material database



Industrial configuration

ERP integration

Fast marking
Galvo technology enables ultra-fast and precise laser marking.

Individually configurable workflows
Individually adaptable automated workflows can be created using visual programming and scripting, enabling seamless integration from semi- to fully automated processes.

Flexible data handling
Import various file formats, generate dynamic data (serial numbers, timestamps, codes) directly in SpeedMark.

Batch processing
Mark single items or large batches with ease, including continuous serial numbers.

Material database
Ensures consistent quality with stored parameters.

ERP integration
Standardized interfaces enable seamless data flow from your ERP system to the laser.

Advanced options
Use Focus Shifter or Virtual Rotary to save time and costs on complex geometries.

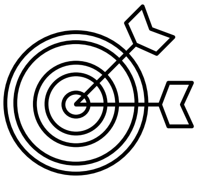
SpeedMark® Vision
Camera-assisted positioning and SmartAdjust reduce errors and improve precision.

Your benefit: Efficient production cycles, reduced errors, lower costs, and higher throughput

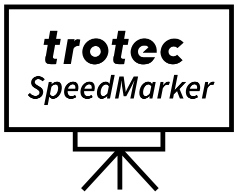
Reliable Marking.

Ensure consistent quality and reduce variability with SpeedMarker.

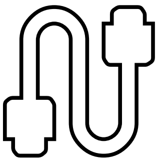
In industrial production, reliability and process stability is key. Faulty markings, rework, and downtime are costly and disruptive. SpeedMarker systems are built to deliver reproducible results, minimize scrap, and maintain high quality standards—job after job, shift after shift.



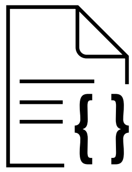
Consistent results



Industrial grade components



Standardized interfaces



Dynamic data handling

Industrial-grade components

High-quality optics and robust laser heads ensure precision and durability—even in 24/7 production environments.

Consistent results

Repeatable marking quality regardless of operator or batch size, batch size, etc.

Flexible data handling

Import various file formats, generate dynamic data (serial numbers, timestamps, codes) all in one software, reducing manual input and helping prevent errors for a smoother, more reliable workflow.

Quality-enhancing functions

Material database: Automatically applies correct parameters, reducing trial & error and human mistakes.

Dynamic data handling: Serial numbers, timestamps, and codes generated directly in SpeedMark.

Standardized interfaces: Seamless integration with ERP systems and databases for accurate data transfer.

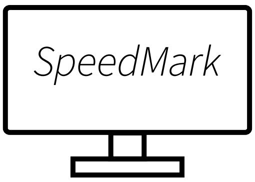
Automation: Reduces manual input and ensures process stability.

Your benefit: Reliable outcomes, minimal waste and higher customer satisfaction through traceable, high-quality markings.

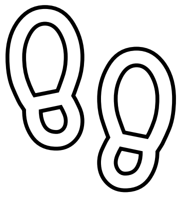
Simple to Use.

Operate with confidence – no expert skills required.

Modern production environments face increasing challenges: rising labor costs, high employee turnover, and a shortage of skilled workers. The SpeedMarker Series is designed to be intuitive and user-friendly, supporting all key roles involved in the marking process—from order management and production planning to the process expert and machine operator.

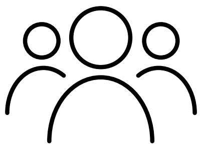


Intuitive software

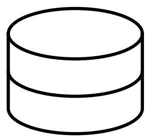


Compact footprint

Ergonomic workstation



User roles & access rights



Material database

Simple setup & operation

SpeedMark software offers a visual programming interface that's powerful yet easy to use. Programs can be created and saved by a process expert and accessed by operators with limited permissions.

Material database & parameter matrix

Quickly find the right laser settings for different materials without trial and error. Presets ensure consistent results and reduce scrap—even for new or rotating staff.

Ergonomic workstation design

An easily accessible work area, optimized working height, and clear visibility ensure comfortable and safe operation.

Laser safety & CE compliance

The SpeedMarker Series meets CE standards and includes protective housings, safety interlocks, and optional fume extraction for safe operation. Depending on the configuration, it can function as a fully enclosed class 2 laser system, ensuring clean and secure marking in industrial environments.

Operator-friendly features

Focus finder: Visually check laser focus, even on complex shapes.

Border marking: Preview marking position before execution.

User roles & access rights: Customize screens and permissions for different users—e.g., a simple "Start/Stop" interface for operators.

Your benefit: Faster onboarding, safer operation, and reduced dependency on expert staff.

SpeedMark® Laser Software .

Visual programming & 3D engraving for high-speed, high-quality laser marking

Smart marking workflows & productivity tools

SpeedMark® enables fast and flexible laser marking—no coding required. Its visual programming interface lets users build marking sequences using drag & drop flowchart elements, combining logic and layout in one view.

Key features:

Dynamic data: Automatically generate serial numbers, barcodes, timestamps, and more.

Versatile content: Mark text (linear/circular), 1D/2D codes, graphics, photos, and layered PDFs.

File import: Supports JPG, BMP, DXF, and layered PDFs.

Array function: Mark multiple items in one pass using templates or carriers.

Deep engraving: Multiple passes with adjustable focal distance for high-quality depth.

Material database: Predefined and custom settings for various materials and laser powers.

Cleaning function: Enhances contrast on metal surfaces for improved code readability.

Smart automation

In industrial production, time is money. Traditional galvo systems require manual Z-axis adjustments, clamping, and repositioning—slowing down workflows and increasing costs. SpeedMark software eliminates these steps with intelligent automation. SpeedMark® supports advanced scripting and precise 3D marking, making it ideal for high-volume production environments.

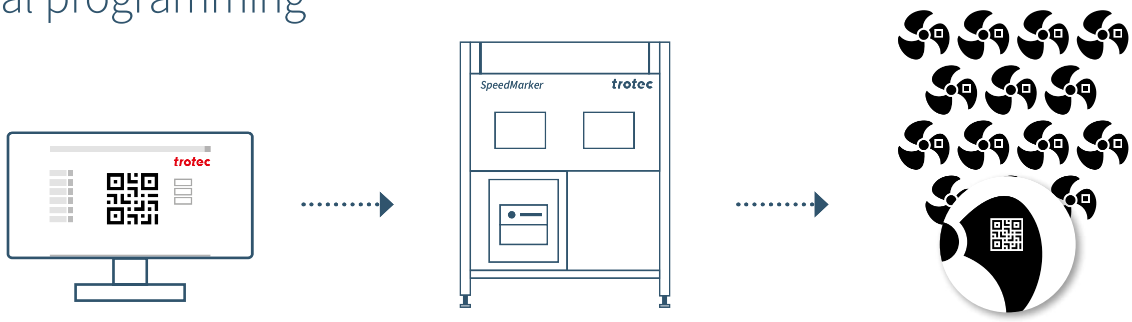
Advanced scripting: Visual Basic-based scripting linked to workflow elements.

Custom user screens: Operator-friendly interfaces with password protection.

Connectivity: Seamlessly integrates digital I/O, RS232, and TCP/IP into your production workflow.

products.troteclaser.com/speedmark

Visual programming



1. Define process steps for series production 2. Display lot size 3. Create layout 4. Get dynamic data from ERP system	Run laser marking	Get perfect results

Marking in 3D .

Virtual Rotary & Focus Shifter

Flat surfaces are the exception. SpeedMark's 3D tools make marking on curved, tilted, and multi-level parts fast, accurate, and repeatable.

Virtual Rotary

Distortion-free marking on spheres, bowls, cylinders, and tilted planes—without rotary attachments or clamping devices.

How it works:

- Easy geometry definition using reference points (manual or with a laser pointer)
- Software automatically calculates marking path and focus
- Built-in preview and border marking ensure precise results

Supported shapes:

- Tilted planes (up to 60°)
- Cylinders and tubes
- Bowls and spheres

Focus shifter

Marking across multiple height levels? The Focus Shifter adapts the optical axis automatically—no mechanical Z-axis movement required.

Benefits:

- ±50 mm focus shift (depending on lens)
- Fast setup via software
- Consistent results across varying levels
- Ideal for series production

Your Process, Your Machine: Customization Options

Laser class 2 and CE certificate
Certified for safety and compliance, making it suitable for use in any industrial setting without additional protective measures.

Focus shifter
Automatically adjusts the laser focus for different object heights, enabling efficient processing of complex shapes and multi-level components.

Virtual rotary
Allows marking on curved surfaces without a physical rotary device, saving setup time and increasing flexibility.

MOPA laser
Offers adjustable pulse durations for high-contrast markings on metals and plastics, ideal for color marking and delicate surfaces.

Rotary attachment
Enables precise laser marking on cylindrical items like rings, tubes, and bottles with consistent results.

Focus finder
Assists users in quickly finding the correct focal distance, ensuring optimal marking quality and reducing setup time.

Options for tables and handling
Includes flexible solutions like shuttle tables and rotary tables to streamline workflows and support automated processing.

Border marking
Projects the outline of the marking area onto the workpiece, helping with accurate positioning before the job starts.

Vision system
Integrates cameras for automatic part detection and alignment, ensuring precision even with variable part placement.

User management & individualized screens
Supports multiple user profiles with customized interfaces, enhancing usability and maintaining secure access control.

SpeedMark visual programming
Simplifies job setup with drag-and-drop logic and graphical workflows, making complex tasks easy to configure.

High quality components
Built with premium materials and components for long-term reliability, minimal maintenance, and consistent performance.

End-to-End Partnership – Expertise & Custom Solutions

Validated for production

Our team combines deep industry expertise with hands-on experience through our dedicated Competence Center. We support customers with tailored solutions and run material tests in advance to ensure every marking process performs exactly as expected in final production. This proactive approach guarantees reliable results and smooth integration—right from the initial consultation to long-term after-sales service.

products.troteclaser.com/galvo-competence-center

Global presence

Trotec operates with dedicated sales and service teams in 15 countries worldwide, supported by service partners in 68 additional countries. This extensive network allows us to offer expert consulting, professional installation, and reliable service in most regions across the globe. For companies with multiple production sites, this global reach ensures fast and dependable machine setup—making international projects smoother and more efficient.

products.troteclaser.com/about-trotec

Customized solutions

The SpeedMarker series from Trotec is designed for flexibility, The SpeedMarker series offers flexible, high-performance solutions for industrial marking. When standard configurations aren't enough, our team develops custom setups, automation, and software scriptingsto fit your production needs.

products.troteclaser.com/industrial-solutions

Quality materials

Even the best laser machine can't deliver optimal results without the right materials. For applications like tags, signs, and labels, choosing high-quality substrates is essential. Trotec offers tested options like anodized aluminum, coated metals, and plastics—ensuring consistent marking results and productivity. Available globally for easy sourcing.

products.troteclaser.com/laser-materials

Service

SpeedMarker systems are known for their robust and reliable performance. In rare cases of downtime, TroCare ensures protection, cost control, and uninterrupted productivity. Choose annual health checks or full coverage. We also offer spare parts storage tips and team training for in-house repairs. For details, contact your local Trotec representative — we'll help you find the best package.

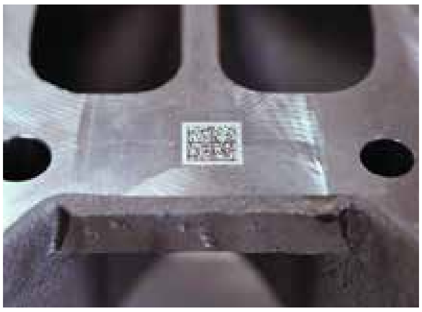
products.troteclaser.com/trocare

Endless Application Possibilities.

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

SpeedMarker laser systems are built to meet a wide range of manufacturing requirements—from direct part marking and asset tracking to unique product identification. Whether marking metals and plastics with a fiber laser or organic materials with a CO_2 laser, SpeedMark® enables automatic code and serial number generation, seamless data integration from systems like SAP, and intelligent automation across applications.

Metals and plastics



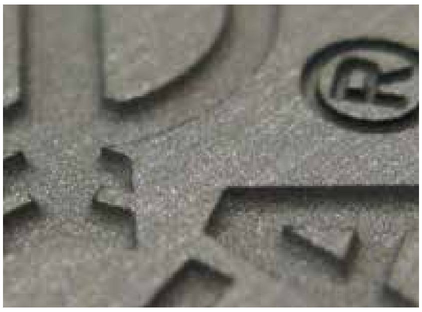
One hundred percent identification

Smallest font sizes on PCB boards

Pin sharp marking on different levels

Engraving type plates

High-contrast plastic marking with MOPA laser



Deep engraving in metal

Organic materials

High-speed marking and cutting of labels of 2-ply material

Branding on wodden items

Personalizatrion of promotonal items

Ideal for Almost All Materials.

Trotec's SpeedMarkers meet a wide range of demanding and unique requirements for industrial marking on various surfaces. It works with many different metals and plastics, resulting in superior application results. Scan or follow the link to get the full list of materials.

products.troteclaser.com/material-list

	Mark		Cut	
	CO_2	Fiber	CO_2	Fiber
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	✓		✓	

Note: While galvo lasers are primarily used for marking, they can technically cut thin materials. However, for thicker materials, the beam delivery method may result in angled cuts rather than perfectly vertical edges.

Overview.

	SpeedMarker 1600	SpeedMarker 1350
Maximum working area[1]	1300 x 450 mm | 51.18 x 17.72 in	1300 x 450 mm | 51.18 x 17.72 in
Max. workpiece height[1]	137 - 485 mm | 5.39 - 19.09 in	397 - 745 mm | 15.63 - 29.33 in
Overall dimensions (W x D x H)	1600 x 2118 x 1179 mm | 63.00 x 83.39 x 46.42 in	1300 x 2032 x 1324 mm | 51.18 x 80.00 x 52.13 in
Max. marking speed[1]	12 m/s	
Weight	500 kg | 1102 lbs	580 kg | 1279 lbs
Max. loading	50 kg | 110.23 lbs	
Laser power		
Laser power fiber	20, 30, 50 W	
Laser power MOPA	20, 100 W	
Laser power CO_2		
Laser safety	CDRH Lasersafety; Laserclass 2; CE [EN 60825-1]	
Available axes	z, x, y	
Software		
SpeedMark®	●	●
SpeedMark® Vision - Smart Adjust	○	○
Functions and Options		
Dynamic Shifter	○	○
Rotary attachment	○	○
Lift door	automatic	
Extended linear table[3]		○
Shuttle table[3]		○
Pass-through[2]		
TroCare	○	○
External interfaces		
Interfaces	Ethernet, RS232, Laser-Interlock, Marking-Start (24 VDC), Marking-Stop (24 VDC),E-Stop, Error-Reset, Laser-Busy, assignable digital I/O's (4/4;24 VDC), USB, Ethernet, RS232	
Lenses	F = 100, F = 160, F = 210, F = 254, F = 330, F = 420	
Compatible exhaust systems	Atmos Nano Atmos Pure 300 Atmos Pure 600	

● Standard ○ Optional

1 Depending on lens and configuration
2 Laser class 4 with pass-through
3 Reduces the maximum marking area

 SpeedMarker 1300	 SpeedMarker 700 Fiber	 SpeedMarker 700RT (Rotary Table)
1000 x 500 mm | 39.37 x 19.69 in	580 x 310 mm | 22.83 x 12.20 in	310 x 310 mm | 12.20 x 12.20 in
397 - 745 mm | 15.63 x 29.33 in	203 - 551 mm | 7.99–21.70 in	195 mm | 7.68 in
1300 x 2032 x 1324 mm | 51.18 x 80.00 x 52.13 in	784 x 2134 x 1031 mm | 30.87 x 84.00 x 40.59 in	784 x 1801 x 1211 mm | 30.87 x 70.87 x 47.67 in
12 m/s	12 m/s	12 m/s
580 kg | 1279 lbs	260 kg | 573 lbs	300 kg | 661 lbs
50 kg | 110.23 lbs	30 kg | 66.14 lbs	20 kg | 44.09 lbs
20, 30, 50 W		
20, 100 W		
CDRH Lasersafety; Laserclass 2; CE [EN 60825-1]		
z, x, y		z
●	●	●
○	○	○
○	○	
○	○	
automatic		
●	●	●
○	○	○
Ethernet, RS232, Laser-Interlock, Marking-Start (24 VDC), Marking-Stop (24 VDC),E-Stop, Error-Reset, Laser-Busy, assignable digital I/O’s (4/4;24 VDC), USB, Ethernet, RS232		
F = 100, F = 160, F = 210, F = 254, F = 330, F = 420		
Atmos Nano Atmos Pure 300 Atmos Pure 600		

	 SpeedMarker 300 Fiber	 SpeedMarker 50 Fiber
Maximum working area[1]	190 x 190 mm | 7.48 x 7.48 in	310 x 310 mm | 12.20 x 12.20 in
Max. workpiece height[1]	61 x 229 mm | 2.40 × 9.02 in	
Overall dimensions (W x D x H)	449 x 619 x 177 mm | 17.68 x 24.37 x 6.97 in	651 x 160 x 120 mm | 25.63 x 6.30 x 4.72 in
Max. marking speed	12 m/s	12 m/s
Weight	65 kg | 143 lbs	8.5 kg | 18.74 lbs [4]
Max. loading	50 kg | 110.23lbs	
Laser power		
Laser power fiber	20, 30, 50 W	20, 30, 50 W
Laser power MOPA	20, 100 W	20, 100 W
Laser power CO_2		
Laser safety	CDRH Lasersafety; Laserclass 2; CE [EN 60825-1]	CDRH Laser SafetyLaser Class 4 with EC Declaration of Incorporation according to Machinery Directive
Available axes		
Software		
SpeedMark®	●	●
SpeedMark® Vision - Smart Adjust	○	○
Functions and Options		
Dynamic Shifter		○
Rotary attachment	○	○
Lift door	manual	
Extended linear table[3]		
Shuttle table[3]		
Pass-through[2]	○	
TroCare	○	○
External interfaces		
Interfaces	Ethernet, RS232, Laser Interlock, Marking Start (24 VDC), Marking Stop (24 VDC), Emergency Stop, Error Reset, Laser Busy, optional digital I/Os (4/4;24 VDC)	Ethernet, RS232, Laser Interlock, Marking Start (24 VDC), Marking Stop (24 VDC), Emergency Stop, Error Reset, Laser Busy, optional digital I/Os (4/4;24 VDC)
Lenses	F = 100, F = 160, F = 210 F = 254, F = 330, F = 420	F = 100, F = 160, F = 210 F = 254, F = 330, F = 420
Compatible exhaust systems	Atmos Nano Atmos Pure 300 Atmos Pure 600	

● Standard ○ Optional

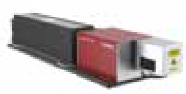
1 Depending on lens and configuration
2 Laser class 4 with pass-through
3 Reduces the maximum marking area
4 laser rack and controller IPC not included

SpeedMarker 700

CO_2

SpeedMarker 50

CO_2



SpeedMarker 50

CO_2

375 x 400 mm | 14.76 x 15.75 in	535 x 535 mm | 21.06 x 21.06 in	
109 - 363 mm | 4.29–14.29 in		
1388 x 780 x 1800 mm | 54.65 x 30.71 x 70.87 in	274 x 773 x 163.5 mm | 10.79 x 30.43 x 6.44 in	274 x 988 x 172 mm | 10.79 x 38.90 x 6.77 in
13.4 m/s	38.5 m/s	
330 kg | 728 lbs	26 kg | 57.32 lbs [4]	33 kg | 72.75 lbs [4]
50 kg | 110.23lbs		
60, 120 W	45 W	60, 120 W
CDRH Lasersafety; Laserclass 2; CE [EN 60825-1]	CDRH Laser SafetyLaser Class 4 with EC Declaration of Incorporation according to Machinery Directive	
z, y		
●	●	●
○	○	○
automatic		
○	○	○
Ethernet, RS232, Laser-Interlock, Marking-Start (24 VDC), Marking-Stop (24 VDC),E-Stop, Error-Reset, Laser-Busy, assignable digital I/O's (4/4;24 VDC), USB, Ethernet, RS232		
F = 150, F = 200, F = 300, F = 400	F = 100, F = 150, F = 200 F = 300, F = 400, F = 720	
Atmos Pure 300 Atmos Pure 600 Atmos Pre-Filter VA5		

For further details, please refer to the technical data sheet

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