







LASER TECHNOLOGY: FAST AND HIGH QUALITY MARKING ON ALL MATERIAL!

To meet the ISO quality requirements, traceability is essential. This is the reason why laser marking is used by manufacturers to automate marking operations and thus guarantee 100% control of their processes.

This laser marking technology consists of releasing radiation from a source. It is then amplified through an optical fiber and directed through a galvo head toward the part to be marked. The beam focused on the material by the lens creates a marking chemical reaction.

SIC Marking's fiber laser doped with Ytterbium is a latest generation technology. It is high performant, enduring, easy to implement and without maintenance cost. This technology is mainly used for direct marking on all types of materials, from plastic to metal parts, irrespective of their hardness or surface finish. The laser makes it possible to carry out quality marking in a reduced cycle time.



OUR INTEGRATED LASER SYSTEMS

Our integrated laser systems have been engineered for intensive use in any industrial working environment. They can be integrated into production lines or used as a stand-alone marking station. They are suited for both low and high rates of production, and can be fully customized with additional features and tools. Manufacturing dedicated tooling systems or adding extra axes (e.g. Z and rotary) can be made on request.



- GREAT VALUE FOR MONEY
 - SIC Marking fiber laser
 - Proven technology
 - Multi applications (metals, plastics...)
 - + VERSATILITY
 - Marking on all types of materials and difficult surface conditions
 - Surface or hollow marking
 - •1D or 2D codes (Data Matrix) marking
 - Images or vector logos marking
 - Decorative marking

ROBUSTNESS AND RELIABILITY

- •Long-life components (≥ 100 000 h)
- Suitable for intensive use in industrial environments.
- Reduced maintenance
- •2 years warranty

EASE OF USE AND INTEGRATION

- Small size
- Built-in communication cards and memory
- No PC required to operate on the line
- Adjustable pulse duration per object (for HD configuration)

A WIDE VARIETY OF SOURCES AVAILABLE



Standard pulsed fiber laser

These lasers are mainly used for marking metals and certain plastics.

20 W Standard fiber

- ✓ Economical solution: perfect for standard applications
- ✓ Versatility: suitable for marking metals and plastics

30 W Standard fiber

- ✓ Ideal balance between performance and budget: higher speed than 20W
- ✓ Versatility: suitable for marking metals and plastics

50 W Standard fiber

- ✓ Increased power: ideal for deep, long-lasting engravings
- ✓ Accelerated cycles: significant time per part

HD MOPA fiber laser

MOPA lasers enable pulse duration to be adjusted, offering more precise control for more complex applications.

20W HD MOPA

- ✓ Plastic compatibility: adapts to the main polymers
- ✓ Controlled thermal effect: improved contrast on aluminum

60W HD MOPA

- ✓ Fast, precise marking: higher speed than MOPA 20W
- ✓ Accelerated cycles: significant reduction in time per part

100W HD MOPA

- ✓ Deep engraving: durable marking in minimum time
- ✓ Industrial applications intensive applications high-speed marking

Green laser

The green laser (532 nm) is an alternative to fiber lasers for specific materials.

- ✓ Wide range of materials: effective on a very wide range of range of plastics
- for sensitive materials

Green 3W

✓ Less thermal effect: ideal

TECHNICAL AND MECHANICAL SPECIFICATIONS

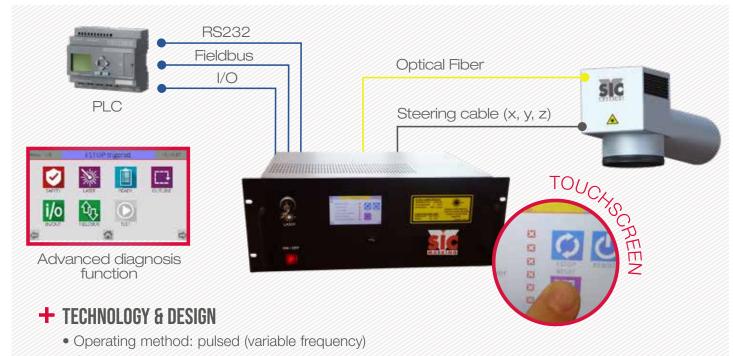
FIBER LASER (Standard & HD MOPA) 65,5 114 **GREEN LASER** 459

	Standard & MOPA fiber	Green
Wavelength(s)	1064 nm	532 nm / 1064 nm
Marking fields *	60*mm, 100 mm, 170 mm, 220*mm, 300*mm	100 mm, 170 mm
Fiber length	3m** (standard)	1,6 m
Head weight	5 kg	6 kg
Consumption	750 W	
Safety	Laser Class 4 (EN60825-1 standard) safety measures required	

^{*} Consult us for these marking fields

^{**} Consult us for other lengths

THE FIBER UNIT



- Consumption: 750 W • Wavelength: 1 064 nm
- Digital axis control (linear and rotary)
- Ultra Compact: 4U height (177mm)

+ RELIABILITY AND PERFORMANCE

- Long-life components (≥ 100 000 h)
- Self diagnostic function
- Cooling: by air only
- Warranty: 2 years (5 years optional)

+ COMMUNICATION CARDS (optional)







+ OPERATING

- Laser driven by «SIC LASER» software
- USB interface, Windows environment
- User-friendly interface with icons navigation

Programming mode:

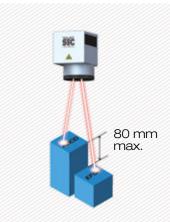


- Creation of entities to be marked: characters, logos,1D or 2D
- Font choice «True Type»
- Pen setups

Production mode:



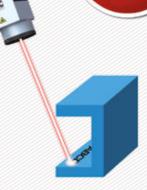
3D MARKING FUNCTION



Marking of one or several parts on different height levels.

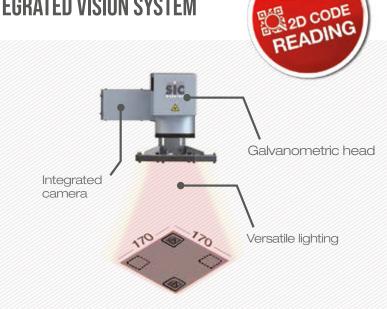






Marking on cylinders (without turning the part), inclined planes and difficult to access parts.







Reading & grading of several 2D codes (QR-Code, Datamatrix) in a large marking window (170 x 170). Reading possible in the entire marking window.

OPTIONS



Fit Laser Safety funnel



Motorized Z axis



Extraction and filtration systems



Custom protective box



SIC MARKING, A GLOBAL SPECIALIST IN MARKING AND TRACEABILITY SOLUTIONS.

SIC Marking is an international group developing permanent marking solutions and vision systems for the traceability of industrial components. SIC Marking has developed a complete range of dot peen, scribing and laser marking machines.

With 30 years of experience, SIC Marking develops traceability applications for a wide range of materials such as steel, alloys, stainless steel, titanium, aluminum and plastics.

Today we work with professionals in various industries such as: automotive, aerospace, metallurgy, mechanical engineering, plastics processing, railway, medical, construction, defense...

With an experienced, responsive and involved team, SIC Marking offers a complete range of standard products, and custom machines to meet all your needs.



SIC Marking is ISO 9001: 2015 certified.









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