Laser Welding

INDUSTRY



LM-C

Automatic laser welding system

sisma

LM-C

Available configurations include an open working chamber (Open) or a closed working chamber rated as Class 4 or Class 1

+ LM-C is an automated laser system designed for welding small-sized objects. Comfortable and low-noise, it is equipped with an Nd:YAG (flash lamp) laser, which ensures a stable output from the very first pulse, producing high-quality, narrow-bead welds —even on thin materials. The programmable 3-axis CNC motion system—which can also incorporate a mandrel—is synchronized with the laser beam emission, ensuring precise and repeatable welds, even on complex geometries.
Using the standard 10" touchscreen panel, software developed by Sisma manages welding recipes, linear and/or circular paths, and all welding parameters, including spot size.
This minimizes the heat-affected zone and reduces distortion, enabling micro-welding and small-scale repairs on objects or molds. The resulting welds are smooth and uniform, requiring no subsequent cleaning or finishing steps. The rotatable upper section facilitates the loading of workpieces, while the integrated vision system provides an excellent view of the working area.



LM-C Open



LM-C

Find out more by scanning the QR code:

LM-C combines precision, safety, and operational flexibility, featuring equipment specifically designed to meet welding requirements:

+ **Standard Nano Spot**: enables highly detailed welding with a spot size of just 0.05 mm—ideal for high-precision tasks.
+ **Safety configurations**: available as a Class 4 system (open or closed) or a fully closed Class 1 system, adapting to any work environment.
+ **Status indicators**: colored LEDs provide an immediate overview of the machine's status, enhancing safety and process control.
+ **Context camera** (T model): installed inside the work chamber, it allows for monitoring the process from the same angle as the inspection window.
+ **Coaxial gas flow nozzle kit**: ensures optimal protection of the welding zone.
+ **Optional accessories**: a comprehensive range of accessories designed to improve efficiency, comfort, and ergonomics.

Technical data	LM-C 230 NS	LM-CT 260 NS
Laser type	Nd: YAG (flash lamp)	
Laser class	4 / 1*	
Wavelength	1064 nm	
Rated maximum average power	85 W	95 W
Rated peak power	9 kW	10,5 kW
Pulse repetition frequency	0 - 50 Hz	
Pulse duration	0,55 - 25 ms	
PL of laser safety functions	PLe	
Laser source cooling	Water/air	
Coaxial camera	Not available	Standard
Rated voltage	230 V~ 50/60 Hz	
Maximum current	13 A	
Plug type	CEE 16 A 1P+N+T	
Dimensions	1223 mm (max.) x 850 mm x h 1560mm	
Weight	200 kg	





* only in the LM-C cl. 1 version

The features, images, performances, weigths and measures contained in the catalogue are completely indicative and approximate and may change without notice.

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SISMA S.p.A. Via dell'Industria, 1 | 36013 Piovene Rocchette | Vicenza - Italia | Tel. +39 0445 595511 | info@sisma.com - www.sisma.com