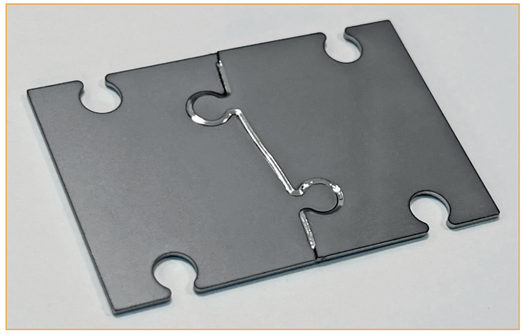
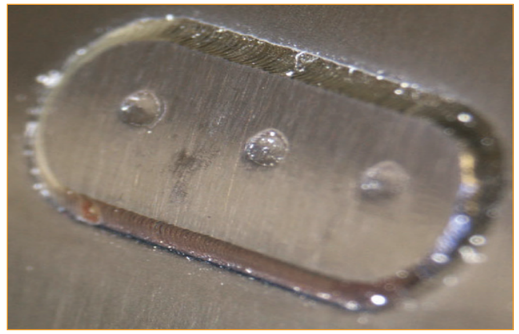
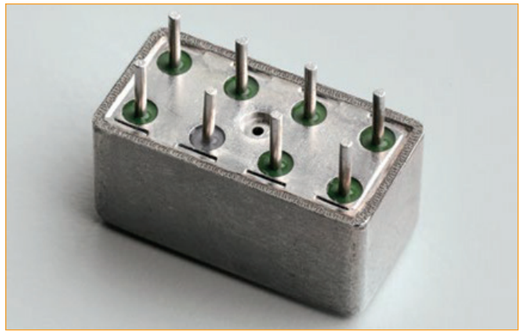
APPLICATIONS







Technical data

Available welding sources	Fiber 150/1500 QCW – 2500 CW
Axes stroke / Working plane area	Max. 630 x 460 x 400 h mm / 1000 mm x 800 mm (Size M)
Positioning repeatability	Up to 10 µm
Available control panels	Standard / Plus / Touch
Air supply	Dual, independent and adjustable by program
Process gas	Self-adjusting
Max. dimensions (L x P x A)	Size S: 980 x 1980 x h 2060 mm / Size M: 1300 x 1980 x h 2060 mm
Weight	Size S: 1100 kg / Size M: 1300 Kg

03-2026

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Laser Welding

INDUSTRY

MODO Weld Remote

Remote laser welding system

AXES REPEATABILITY

High precision and repeatability down to 10 µm ensure repetitive positioning related to multiple jigs on the work surface.
Each machine is accompanied by the ISO 230-2:2014 certificate.

VARIABLE LASER SPOT SIZE

Laser spot diameter can vary within a single working cycle from 100 µm to 1000 µm with F160 focal length.
End-of-process check of the state of the optics to ensure the same weld quality every time.

VIRTUAL WINDOW

SISMA's patented protection system that allows, thanks to a virtual window, a view of the work area in total safety.

WORKING CHAMBER AUTOMATIONS

Electrical and pneumatic supplies programmable by the operator within the welding program are available in the working chamber.
It is also possible to use spindles with up to two axes.

SENSITIVE PROTECTIONS

If the laser beam accidentally hits the work surface or other neighboring surfaces, the system would stop the emission, avoiding danger to the operator.

WORKING AREA

The machine can mount the 160 mm or 254 mm focal lengths: thus the workable area can be up to 700 mm x 350 mm.

OPENING FOR EQUIPMENT LOADING

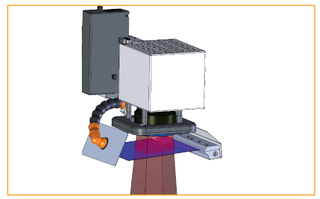
The lowered top with front opening was created to facilitate the loading of fixtures and to increase the available space in the workroom.

SISMA LASER CORE

2500 W CW – Smart Pulse 1÷20 kHz – Laser safety PLd – BPP <1,5

SISMA's CW fiber laser source provides effective power on the part to be welded up to 2500W that can be set in coninuous wave mode with power ramp management.
The integrated SISMA control enables Smart-Pulse functionality that allows working in pulsed mode up to a frequency of 20 kHz with Duty cycle from 0.1 to 0.95.
The quality of the laser beam is very high enough to approach a single-mode beam.
The assembly of safety devices allows to reach a PLd laser safety level in CLASS I.

ACCESSORIES

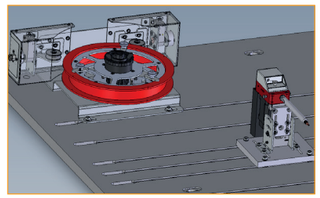


Air blade

It creates an air barrier to prevent welding residue or spatter from affecting the focal spot.

Proportional regulation of support gas

Gas regulation with flow feedback allows machining to be carried out in a repeatable way, ensuring the correct supply of process gas at all times.
Within the work cycle, its supply can be varied to optimize consumption and achieve the best possible result.



Wire feeder

Device to control and adjust the tension, speed and wire path during the welding process.
Accepts threads from 0.2 up to 2 mm.

Axis encoder hand wheel or Sisma pendant device

Device to remotely control axes even when the door is open.
The joystick allows movement of up to 3 axes simultaneously.
The touch panel allows selection of the axes to be moved and their speed, as well as access to other control functions of devices and automatisms in the working chamber.

SOFTWARE

MODOConsole

Simple and intuitive man-machine interface that, integrated in the vertical touch monitor, allows the full potential of the machine to be exploited.
The thematic tabbed management allows the control of the process status with steps shown in sequential order.

MODOInspector

MODOInspector is a diagnostic system that makes it easy to monitor and resolve any anomalies present in the machine, as well as to quickly set up setups dedicated to the specific process (e.g., vary axis dynamics, or gas management) without the need to update the software.