

## SWA 150



## SWA 300



## SWA 150R



## LM-D OPEN



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### TECHNICAL DATA

MODEL	LM-D OPEN 60	LM-D OPEN 100	SWA 150R	SWA 150	SWA 300
Average power	60 W	80 W	150 W	150 W	300 W
Peak power	7.5 KW	9 KW	10,5 KW	10,5 KW	12 KW
Pulse energy	60 J	100 J	70 J	70 J	100 J
Pulse frequency		0-50 Hz		0-50 Hz	0-50 Hz
Pulse duration		0.3-25 ms		0.3-25 ms	0.2-25 ms
Spot diameter		0.2-2 mm 0.1 optional		0.2-2 mm 0.1 optional	0.6-2 mm
Laser beam transport		Direct	Direct	Fiber-coupled	Fiber-coupled
Focusing optics		120 mm		120 mm	120 mm
Vision system		Leica binocular		Leica binocular	Leica binocular
Moving speed		0-6 mm/s		0-20 mm/s	0-20 mm/s
X axis stroke		75 mm		300 mm	300 mm
Y axis stroke		75 mm		150 mm	150 mm
Z axis stroke		170 mm		500 mm	500 mm
Cooling		air		air	air
Power supply	230V 50/60Hz 1ph - 1,9 Kw	230V 50/60Hz 1ph - 2,3 Kw	230V 50/60Hz 1ph - 1 Kw e 400V 50/60Hz 3ph - 3,5 Kw		230V 50/60Hz 1ph - 1 Kw e 400V 50/60Hz 3ph - 8 Kw
Dimensions w x l x h		690x540x1330 mm		1950x1100x1610 mm	2100x1200x1610 mm
Net weight		90 Kg		270 Kg	310 Kg

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laser technology at your hand



Welding  
Laser  
for moulds

# laser



## SWA series

Sisma SWA and LM-D, a complete range of laser systems for mold maintenance. Sisma offers several laser welding systems for moulds maintenance and repairing moulds, with and without filler material. The range includes the best-selling SWA 150, SWA 150 with resonator (perfect for high-precision operations) and the powerful SWA 300. Sisma Class IV laser systems are designed for fast action with excellent results. The laser parameters are managed through a practical and intuitive touch screen that allows you to manage the waveform, the diameter of welding and any rotating spindle. Sisma Laser systems for moulds maintenance are designed to deal with long work sessions on a daily basis without losing precision and quality of the result.



## process

To ensure maximum effectiveness in moulds maintenance and moulds repair, Sisma both designs and manufactures its laser welding systems. With multiple adjustments of the optical head and the motorized axes, the welding operation has never been so easy. Time saving and excellent quality of the results are ensured. The flexibility of the transport fiber laser is another of the salient features of the Sisma SWA Laser Systems for moulds maintenance. The reliability of the system pump is at the top, as well as the duration offered by the lamp. Moulds always in perfect conditions guarantee a high quality production: Sisma has created a line of sophisticated laser systems rated exclusively for this purpose.



## great moving freedom for the welding head



Sisma SWA Laser System offers flexible positioning of the welding head along the X, Y and Z axis: this feature makes it adaptable to every need of the process, providing tremendous flexibility. The range is 300 mm along the X-axis, 150 mm along the Y-axis and 500 mm along the Z axis. This feature allows you to make maintenance even inside the moulds, focusing on total versatility.



## accessories



Magnetic sphere: allows the retention of the pieces in position without the aid of clamps. In addition, the holder is rotatable using the appropriate handle.



Mirror at 45 degrees: capable of diverting the laser beam by 90 degrees. Makes it possible to operate welds in areas difficult to reach (for example, inside a mold).



Rotary axis spindle: allows precise machining of circular welding. Thanks to the numerous settings available is adaptable to pieces of different shapes.



Extension of the beam emitter: modular system of extension (integrated with one or more joints at 45 degrees), allows Sisma SAW welding laser system to operate on any piece.



Console support: this sturdy adjustable lectern allows you to facilitate welding operations: It can be placed directly on the moulds thanks to magnetic base.

Other accessories:  
 · 162 mm focal lens  
 · Digital Camera  
 · Ergonomic support (for a more comfortable working position)

## software



Circumference: this feature of the software allows to set welding cycles along circular paths.



Filling: very versatile function, useful for the filling of areas more or less extended of variable shape with material contribution.



Inclined surface: allows extremely accurate working even in the presence of inclined planes regardless the operator's experience.



Overlap: the overlap function allows adjustment of laser's firing frequency while maintaining a constant distance between the points: so you get extremely regular welding seams.