

ORION LASER WELDING SYSTEMS

HIGH PRECISION – LASER WELDERS

ORION LZR COMBO 200

Open laser welder with power and versatility

FEATURES

- Advanced cooling system
- Intuitive touch screen interface
- Microscopic weld joints
- Leica 10x stereo microscope
- Customizable welds

APPLICATIONS

- Mold, die & tooling repair
- Adding metal
- Bonding dissimilar metals
- Welding on precious and non precious metals
- Power to weld thick pieces



ORION LZR 140

Benchtop laser welder with power and precision

FEATURES

- High precision
- Advanced cooling system
- Intuitive touch screen interface
- Microscopic weld joints
- Leica 10x stereo microscope
- Customizable welds

APPLICATIONS

- Precious and non precious metals (including silver)
- Repair antique jewelry
- Repair settings without removing stones
- Repair watches, eye-wear and other minutia
- Weld porosity or cracks using filler material



ORION LZR 100

Benchtop laser welder ready to do it all

FEATURES

- Advanced cooling system
- Intuitive touch screen interface
- Use on any metal
- Leica 10x stereo microscope

APPLICATIONS

- Weld precious and non precious metals
- Repair antique jewelry
- Repair settings without removing stones
- Repair watches, eye-wear and other minutia
- Weld porosity or cracks using filler material



ORION LZR 60

Benchtop laser welder for light duty cycles

FEATURES

- Advanced cooling system
- Intuitive touch screen interface
- Use on any metal
- Leica 10x stereo microscope

APPLICATIONS

- Small wires
- Adding metal
- Bonding dissimilar metals
- Weld dental & orthodontic appliances



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DATA SHEET – SPECIFICATIONS

	LZR 60 BENCHTOP LASER WELDER	LZR 100 BENCHTOP LASER WELDER	LZR 140 BENCHTOP LASER WELDER	COMBO 200 OPEN LASER WELDER
Laser Source and Wavelength	Nd: YAG 1064 nm	Nd: YAG 1064 nm	Nd: YAG 1064 nm	Nd: YAG 1064 nm x2
Average Power	75 W	95 W	100W	150 W
Peak power [kW]	5 kW	5 kW	7 kW	15 kW
Energy [Joule]	0.1 – 60 J	0.1 – 100 J	0.1 – 140 J	0.1 – 200 J
Impulse Time	0.1 – 20 ms	0.1 – 20 ms	0.1 – 20 ms	0.1 – 20 ms
Pulse Frequency	0.5 – 30 Hz	0.5 – 30 Hz	0.5 – 30 Hz	0.5 – 30 Hz
Spot Diameter	0.2 – 2.0 mm	0.2 – 2.0 mm	0.2 – 2.0 mm	0.6 – 2.0 mm
Servo Driven Height Adjustment	30 positions	30 positions	30 positions	n/a
Programs	6 Pulse Shaping Pre-sets	6 Pulse Shaping Pre-sets	6 Pulse Shaping Pre-sets	6 Pulse Shaping Pre-sets
Memories Cell Stored	100	100	100	100
Control Joystick	On Board	On Board	On Board	On Board
External Control	Color Touch Screen	Color Touch Screen	Color Touch Screen	Color Touch Screen
Input Power	110 V AC, 50/60 Hz, single	110 V AC, 50/60 Hz, single	110 V AC, 50/60 Hz, single	230 V AC, 50/60 Hz, single
Ampere	10A	10A	10A	20A
Max Dimensions	[LxWxH] 33x21x22 in	[LxWxH] 33x21x22 in	[LxWxH]33x21x22 in	[LxWxH] 50x50x80 cm
Type	Bench-top	Bench-top	Bench-top	Floor standing
Argon / Air Nozzle	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
Output Power	60 J	100 J	140 J	200 J