



ORION[®] LASER WELDERS FOR THE DESKTOP

**Exceptional Laser Precision with
Unmatched Performance and Engineering!**

Available in Three Models: Eco, Select, and Pro!

With an Orion LZR benchtop laser welder in your shop you'll work faster, weld next to sensitive areas without worry, and seam weld at up to 40 welds per second. Plus, there's an Orion LZR that will fit your budget, from the capable ECO to the feature-rich PRO.

Application Ideas

Mold and Die Repair, Medical Devices, Stents and Catheters, Thermocouples, Lighting Fixtures, Mounting Brackets, Magnet Wire Welding, Jewelry and Jewelry Repair, Dental Appliance Repair, Orthodontic Welding, and more!

Key Features

- Wide Spot Range: 0.2 to 2.0mm
- Optional 0.1 mm Spot Size*
- Up to 40 Welds per Second
- Precision Power Control with Touchscreen Interface
- Convenient Live Video Feed*
- Ultra Clear 10x Leica Optics*
- HDMI Port*
- USB Port
- Argon, Compressed Air Ready
- Advanced Cooling System for Sustained Use
- No Messy Water Filter
- High-efficiency Components
- Large Ceramic Cavity
- External Arm Rests
- Gaussian Smooth Spot Tech*
- Optional 3D Vision*
- Cool LED Lighting Reduces Heat
- Low Maintenance Costs
- Ergonomic Adjustable Pedestal (Optional)
- 3-Year Warranty

*With Select Models

orion[®] LZR^{ECO}



MAX
POWER

UP
TO **165** JOULES

OPTICS

PREMIUM 10X

MAX WELD
SPEED

UP
TO **20** /SEC

orion[®] LZR^{select}!



MAX
POWER

225 JOULES

OPTICS

LEICA 10X

MAX WELD
SPEED

30 /SEC

JOYSTICK

✓ IN CHAMBER

CAMERA

✓ HD WITH
HDMI PORT

orion[®] LZR^{PRO}



MAX
POWER

255 JOULES

OPTICS

LEICA 10X

MAX WELD
SPEED

40 /SEC

JOYSTICK

✓ IN CHAMBER

CAMERA

✓ HD WITH
HDMI PORT

GAUSSIAN
SPOT

✓ SMOOTHER
WELDING



To learn more call **+1 (800) 772-3456**
or visit www.ottofrei.com



Otto Frei

Technical Specifications

	MODEL			
	LZR ECO 35	LZR ECO 165	LZR SELECT	LZR PRO
LASER SOURCE AND WAVE LENGTH	Nd:CE: YAG 1064 nm		Nd:CE: YAG 1064 nm	Nd:CE: YAG 1064 nm
AVERAGE POWER	30 W	75 W	80 W	100 W
PEAK POWER	3 kW	6.5 kW	9 kW	11 kW
ENERGY	35 J	165 J	225 J	255 J
IMPULSE TIME	0.1 to 12 ms	0.1 to 25 ms	0.1 to 25 ms	0.1 to 25 ms
PULSE FREQUENCY	0.5 to 6 Hz	0.5 to 20 Hz	0.5 to 30 Hz	0.5 to 40 Hz
SPOT DIAMETER	0.2 to 2 mm		0.2 to 2 mm	0.3 TO 2.0 MM SMOOTH SPOT (OPTIONAL 0.1 MM)
SPOT SETTING	MOTORIZED		MOTORIZED	MOTORIZED
WAVE PROGRAMS	6 WAVE SHAPING PRESETS		6 WAVE SHAPING PRESETS	6 WAVE SHAPING PRESETS
MEMORY STORAGE CELLS	100		100	
INTERNAL CHAMBER CONTROL	NONE		JOYSTICK	JOYSTICK
EXTERNAL CONTROL	7" TOUCHSCREEN		7" TOUCHSCREEN	7" TOUCHSCREEN
POWER SUPPLY	100-230 VAC AUTO DETECT		100-230 VAC AUTO DETECT	100-230 VAC AUTO DETECT
ARGON NOZZLE	YES		YES	YES
WIDE CHAMBER	NO		NO	YES
OPTICS	PREMIUM 10X		LEICA 10X	LEICA 10X
COOLING SYSTEM	DEIONIZED WATER, SINGLE SYSTEM		DEIONIZED WATER, SINGLE SYSTEM	DEIONIZED WATER, DOUBLE SYSTEM
EXTERNAL ARM REST	YES		YES	YES
GAUSSIAN SMOOTH SPOT	NO		NO	YES
SMSP WAVEFORM	NO		NO	YES
3D VISION	NO		NO	OPTIONAL
ONBOARD HD CAMERA	NO		YES	YES
USB PORT	YES		YES	YES
HDMI OUTPUT	NO		YES	YES
COMPRESSED AIR NOZZLE	NO		YES	YES
CHAMBER LED LIGHTS	1		3	3
0.1 MM MICROSPOT	NO		OPTIONAL	OPTIONAL
CRYSTAL	5 MM, 6 MM		7 MM	7 MM
FOOTPRINT (LXWXH)	28.1x21.7x21.7 INCHES		28.1x21.7x21.7 INCHES	33.5x22.8x23.6 INCHES



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