

■ Pulsed Fiber Laser Welder 150W - 600W **NEW**



ML-3000 Series

Pulsed fiber laser welder release of new type!

High quality, high-stability, low-cost laser welding!

Features

Adopt a new air cooling system and pulse fiber laser system. Compared with YAG laser excitation of the lamp the conventional method, and realization high-quality, significant low power consumption, low running costs and more!

In addition to the fine pulse welding, high speed CW (continuous wave) welding is possible, it supports a variety of applications. It is most suitable for the replacement of a YAG laser.

Be superior to laser oscillation efficiency, this model will contribute to the manufacturing of environmentally conscious energy-saving, low-cost.

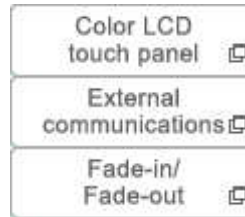
Features

- This welder employs a full air-cooling system, which does not use a chiller, thereby reducing operating costs
- Power consumption of the pulse fiber laser is approx. 85% less than that of

Standard Features

Real-time power feedback <input type="checkbox"/>
Waveform control <input type="checkbox"/>
Power monitor <input type="checkbox"/>

- Nd:YAG lasers (ML-3060AS)
- With its large energy of 60 J this pulse fiber laser welder can be used for the type of welding that was previously only achieved by Nd:YAG lasers (ML-3060AS)
 - The product lineup includes the 300 W ML-3030AS and the 150 W ML-3015AS in the same size body.
 - With a large output of up to 600 W, this pulse fiber laser welder can be used for high speed seam sealing
 - Stable output power with real-time power feedback
 - Consistent spot size without thermal lens effects
 - Pulse and CW (continuous wave oscillation) operations are available
 - Intuitive large color LCD touch screen panel (no PC necessary to configure settings or check operating state)
 - Built-in power monitor
 - ML-3060AS: Up to 4 time-sharing fiber deliveries are available. (When the isolator Option is mounted, Up to 3 time-sharing fiber deliveries are possible) *
 - ML-3030AS/3015AS: Provide 2 laser output deliveries via either time-sharing or energy sharing.
 - The isolation function (Option) protects the oscillator from light reflected from the processing point.



* When the optional isolator is mounted, the laser power output from the fiber decreases by up to 10%.

Specifications

Model	ML-3060AS	ML-3030AS	ML-3015AS
Maximum average power (oscillator output)*	REPEAT mode 600W / CW mode 550 W	REPEAT mode 300W / CW mode 270 W	REPEAT mode 150W / CW mode 135 W
Maximum peak power (oscillator output)*	REPEAT mode 5.5kW / CW mode 0.55kW	REPEAT mode 2.7kW / CW mode 0.27kW	REPEAT mode 1.35kW / CW mode 0.135kW
Pulse width	0.2 to 50.00 ms (0.05ms steps)		
Repeated number of pulse	1 to 1000 pps (REPEAT mode)		
Modulation function	1–5000 Hz (rectangular wave, triangular wave, sinusoidal wave) (CW mode)		
Oscillation wavelength	Fundamental wavelength		
Positioning guide beam	Built-in visible laser (Red)		
Prevention of reflected beam	Built-in reflected beam sensor		
P.F. fiber	SI-0.1 (NA0.20)	SI-0.1/0.2/0.3/0.4/0.6/0.8 (NA0.20)	
Fiber optic delivery	Up to 4 time-sharing fiber deliveries are available.(Option) (When the isolator (option) is mounted, Up to 3 time-sharing fiber deliveries)	Up to 2 deliveries of laser output,including powersharing andtimesharing, are available. (Option)	
No. of programmable schedules	256		

Measurement function	Laser energy (J), Average power (W)		
Counter	Displays the total number of outputs (9 digits)/Displays the number of acceptable outputs (9 digits)/Displays the total LD ON time (7 digits)/Displays the laser output time (7 digits)		
Power supply	Single-phase, 200 V to 240 V AC (+10%/-15%) 50/60Hz		
Max. input current	23A(200V), 21A(220V), 19A(240V)	11A(200V), 10A(220V), 9A(240V)	9A(200V), 8.2A(220V), 7.5A(240V)
Power consumption	3.5kW at max. (0.2kW while stand-by)	2.0kW at max. (0.2kW while stand-by)	1.6kW at max. (0.2kW while stand-by)
Breaker rated current	30A	15A	
External datacom	RS-485		
Cooling method	Forced air-cooled		
Ambient temperature	10 to 35°C		
Ambient humidity	50% to 85% RH (where there is no sudden moisture)		
Dimensions	750(W)×750(D)×1250(H)mm	400(W)×770(D)×810(H)mm	
Weight	250kg or less	150kg or less	

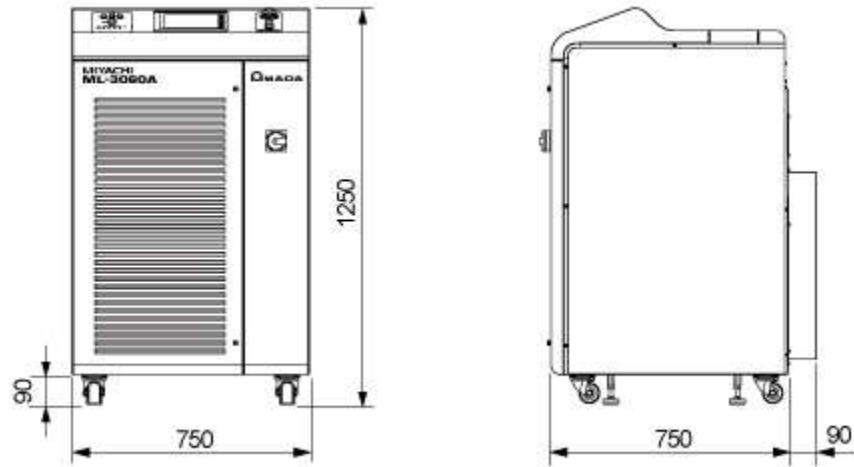
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*Specifications subject to change without notice.

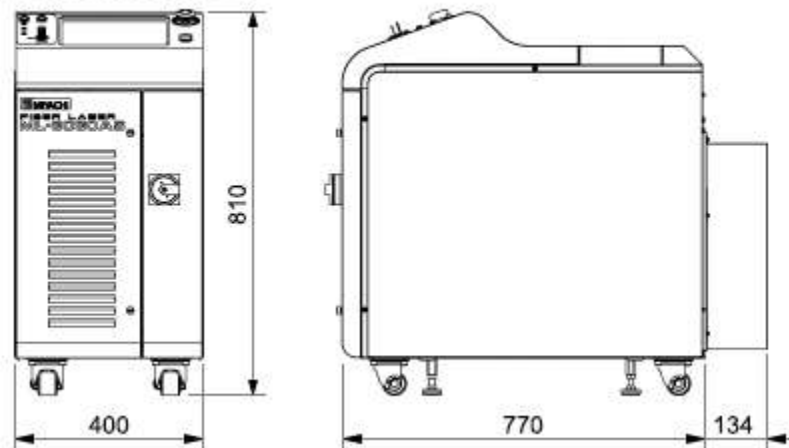
External View

■Dimensions in mm

【ML-3060AS】

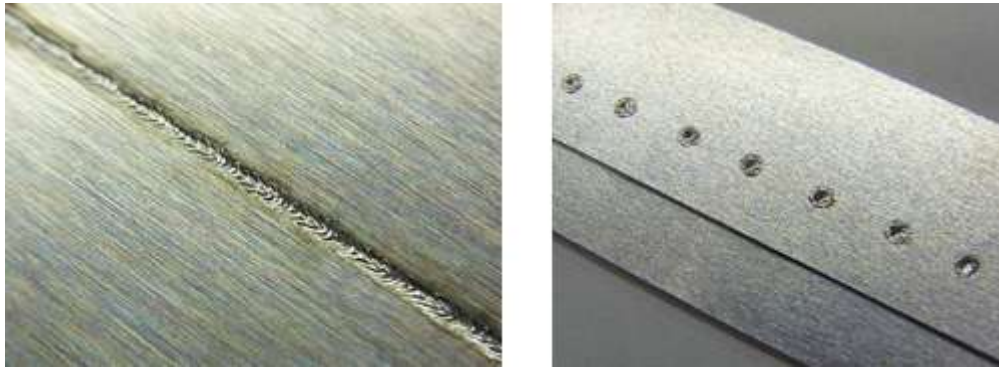


【ML-3030AS/3015AS】



Sample

High-quality spot welding and seam welding of aluminum



High-quality spot welding of SUS 304



Spot welding of copper materials

