

■ YAG Laser Handy Welder 400W **NEW**



ML-2550AM

These handheld welders are easy to use and allow high-quality laser welding to be performed with less burn and distortion.

Easy-to-handle "L-type" handy torch Anyone can easily perform YAG laser welding

Features

- YAG laser welding can be manually performed by using the "L-type" handy torch.
- Various metals (including stainless steel, mild steel, titanium, and some aluminum alloys) can be welded.
- The fast, repeated emission of the laser beam creates beautiful weld beads and eliminates clean-up.
- Up to 2.0 mm thick stainless steel sheets can be welded. *For welding thicker stainless steel sheets, contact AMADA MIYACHI.
- The handy torch is fitted with the safety function of automatically turning off the laser when it is moved off the workpiece.

Standard Features

Real-time power feedback	☐
Variable mirrors	☐
Waveform control	☐
Power monitor	☐
Controller	☐
External communications	☐
Fade-in/ Fade-out	☐

- The torch is fully air cooled and constructed for high-efficiency discharge of the shielding gas from the tip.
- Various applications, including tack welding, correction, low-volume high-mix products, prototypes, and welding of thin sheets with less burn-through distortion.

Handy torch

L-type and lightweight handy torch

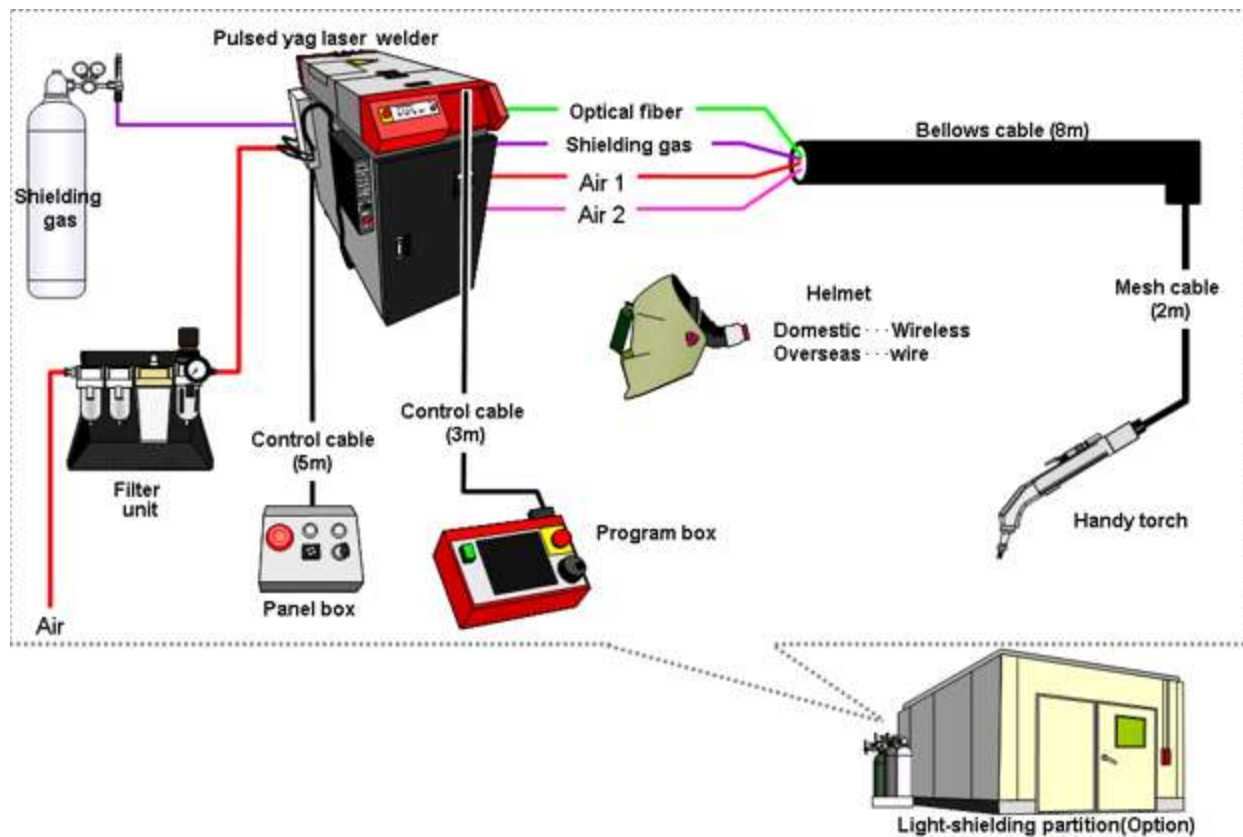
High workability thanks to the lightweight, compact design with a “L-type” torch and a weight of 400g.



Example usage



Equipment layout block diagram



Applications

These welders can be used in various applications, such as temporary welding and modification during prototyping, high-mix low-volume production, mold repair, and cutting (optional nozzle required).

Specifications

【Handy torch】

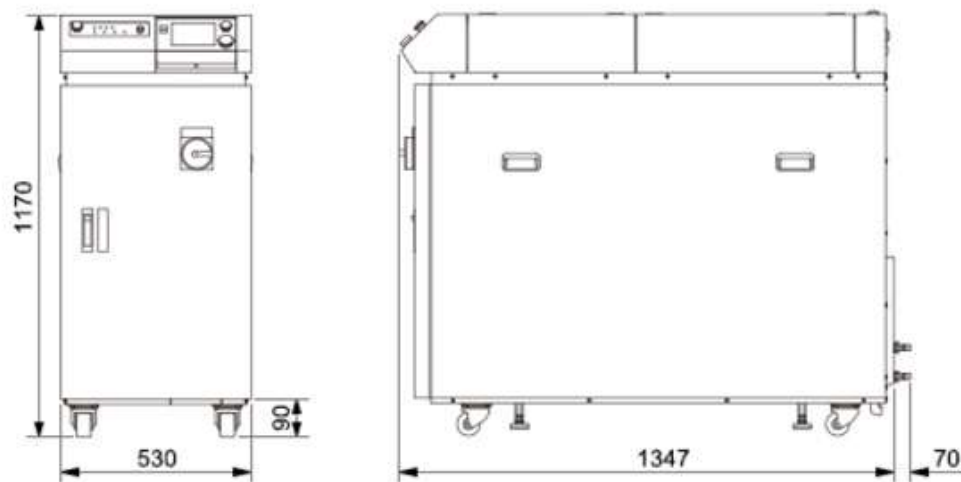
Model		ML-2550AM
Oscillation wavelength		1064nm
Laser output	Maximum rated output	400W
	Maximum energy	80J/P
	Peak power	8kW
Pulse repetition rate		1～500pps
Fiber type		SI type Φ0.6mm
Fiber optic delivery		4-power sharing / 4-time sharing *
Torch	Shape	L-type
	Cooling method	Air cooled
	Spot diameter	① : Φ0.9mm, ② : Φ0.8mm, ③ : Φ0.7mm
Dimensions	Laser oscillator	530(W)×1347(D)×1170(H)mm
	L-type handy torch	① : 309mm, ② : 300mm, ③ : 296mm
	Controller	63(W)×320(D)×330(H)mm
	Relay box	80(W)×270(D)×450(H)mm
	Panel box	150(W)×120(D)×80(H)mm
Weight	Laser oscillator	Approx. 400kg (AC200V,220V,240V) Approx. 450kg (AC380V,400V)
	L-type handy torch	400g
Safety device		Helmet, Light-shielding partition (Option)

* Each oscillator is equipped with one hand unit (additional output units can be used to share deliveries other than those that use the hand unit).

External View

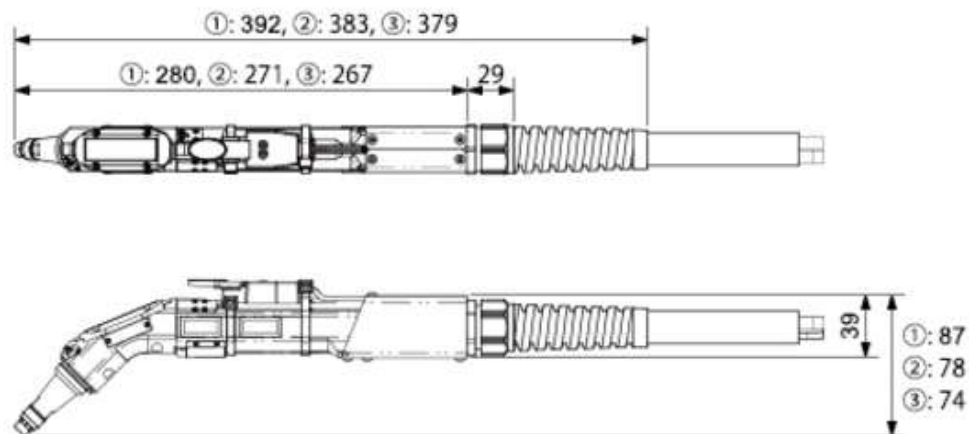
* Unit (mm)

【 Laser oscillator: ML-2550AM 】

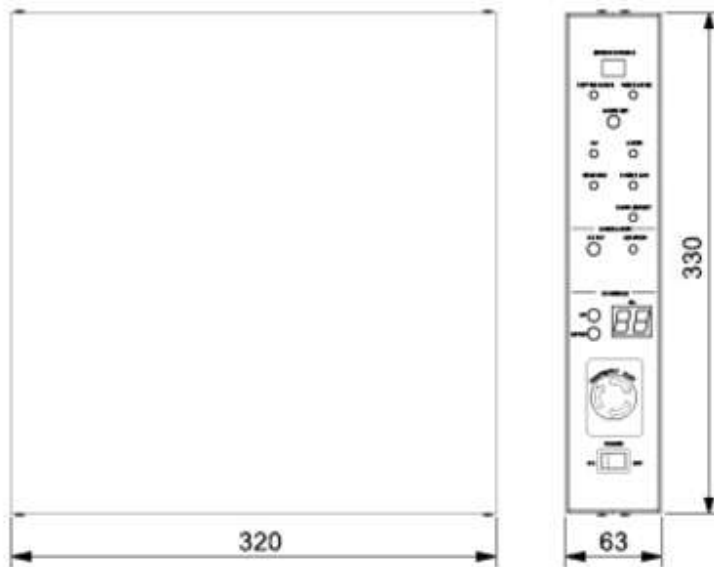


【 L-type handy torch 】

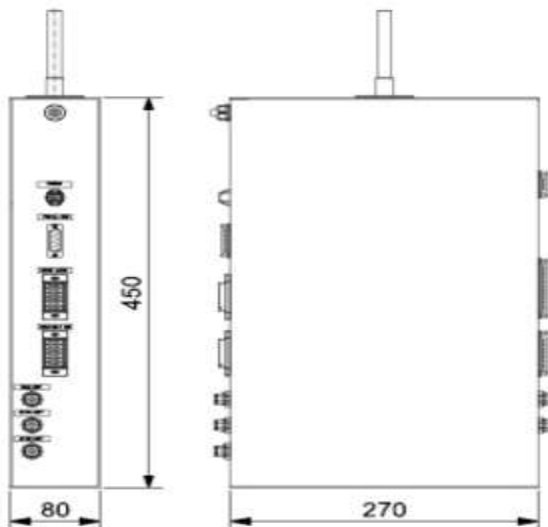
① F40S-F60S ϕ 0.9mm, ② F40S-F50S ϕ 0.8mm, ③ F40S-F45S ϕ 0.7mm



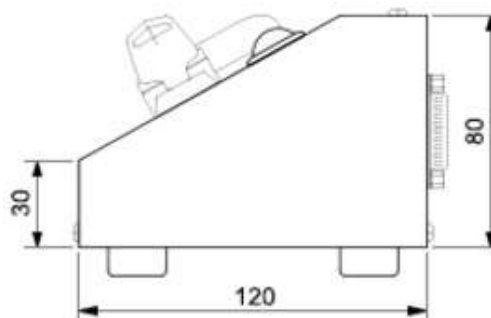
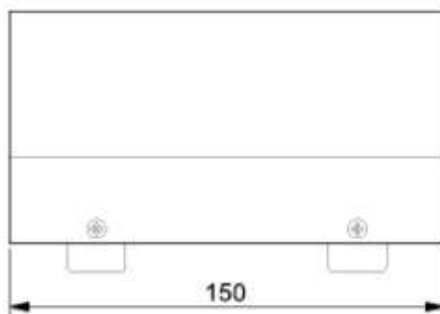
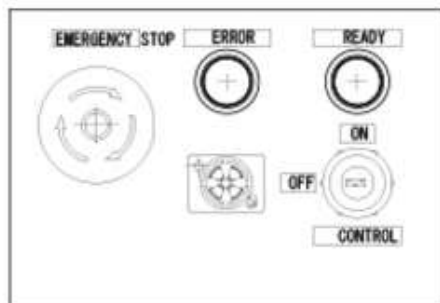
[Controller]



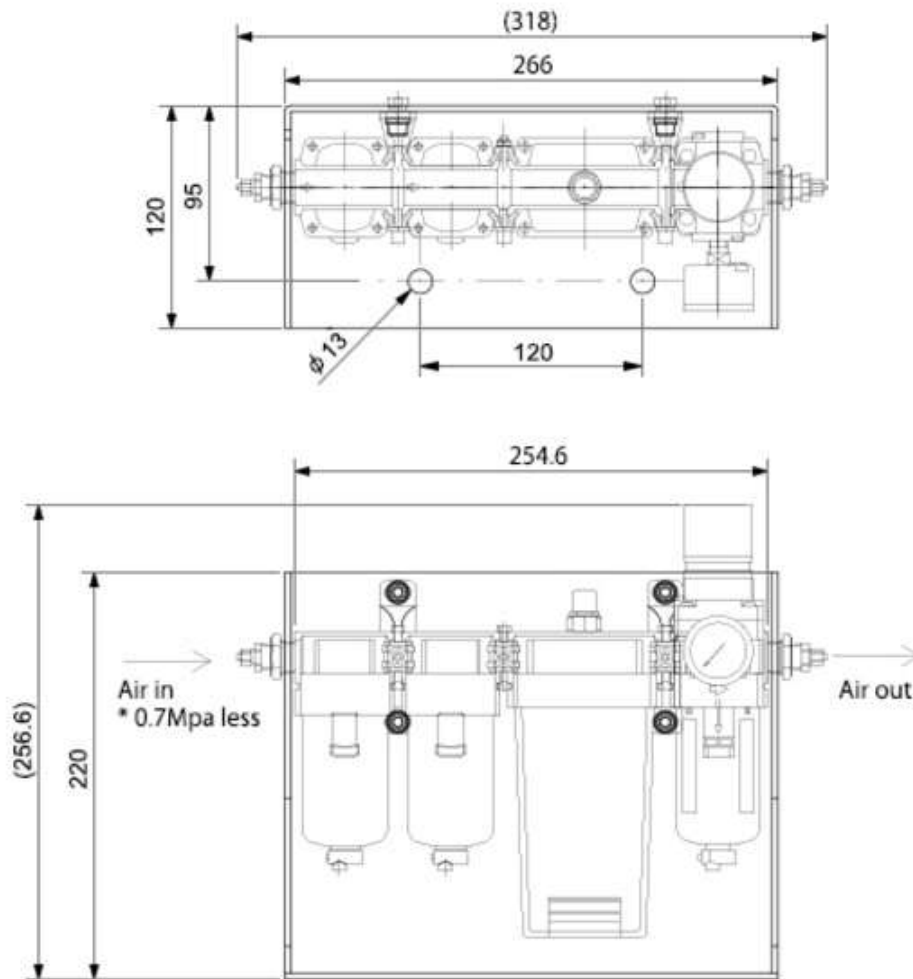
[Relay box]



[Panel box]



[Filter unit]



Sample



Fillet welding of SUS



Cross section of penetration; thickness:
2.0 mm (penetrate possible)



Welding of curved surfaces