

Product number



Manually operable mount set



Electric-powered mount set

Worktable(option)



Top plate	500x350 mm
Range of motion	X : 240 mm Y : 150 mm Z:165 mm (Z Electric:Footswitch/XY Manual)
Load capacity	150 kg
Dimensions	550x450x660~825 mm
Weight	65 kg

Accessories



- ① Chiller filter
- ② Welding material set  
(The photo is an example)
- ③ Protective glasses for YAG laser
- ④ Lens protection glass
- ⑤ Gas regulator (only in Japan)
- ⑥ Gas hose
- ⑦ Foot switch for laser radiation (with cover)
- ⑧ Twenty liters of purified water for chiller  
(not included in the left picture)

Specifications

<b>Power supply</b>	Laser beam	Nd : YAG
	Laser wavelength	1064μm
	Average power	220W
	Weldable wire diameter	Normal mode φ0.1~0.8 mm UD mode Minimum 0.05 mm
	Pulse energy	110J
	Focal diameter	0.2 ~ 2.0 mm
	Pulse output time	0.5 ~ 20ms
	Pulse frequency	1 ~ 99Hz
	Pulse frequency	Single-phase 200V 50/60Hz
	Dimensions	External dimensions : 400x800x1,000 mm Controller Panel : 296x198x62 mm
<b>Weight</b>	Power supply	: 90kg
	Controller Panel	: 2.8kg
<b>Accessories</b>	Power supply / Chiller / Lazer unit	
	Lazer unit mount(Manual · Electric · Other)	
<b>Lazer unit</b>	Focal length	90 mm (Option 200 mm)
	Accessories	Anti-reflection plate / Flexible light x2 15x Binocular microscope
	Option	CCD Camera / Microscope movable unit High-powered binocular microscope etc.
	Dimensions	180x170x1,000 mm
	Weight	35.5 kg
<b>Electric-powered mount</b>	Range of motion	X:130 mm Y:130 mm Z:135 mm (remote control)
	Swiveling range	90 degrees to the right and left (Manual)
	Max size of work	500x500 mm
	Dimensions	500 x 750 x 925~1,060 mm
<b>Manually operable mount</b>	Range of motion	Z:450 mm (Manual)
	Dimensions	350x500x1,250 mm
<b>Chiller</b>	Weight	60 kg
	Cooling	Water cooling
<b>Electric-powered mount</b>	Dimensions	500x800x950 mm
	Weight	110 kg

Wire rod for laser welding machine

This is a straight-rod welding material suitable for laser welding machines. The rod, which is not wound around a reel, can be used as a straight rod. It is convenient for micro welding.



Welding materials(excerpted)

	φ0.8	φ0.6	φ0.5	φ0.4	φ0.3	φ0.2	φ0.1	HRC
NAK-80	●	○	●	●	●	●	○	40~42
STAVAX	●	○	●	●	●	●	○	52~55
SKD-61	●	○	○	○	○	○	○	40~42
SKD-11	●	○	○	○	○	○	○	55~57
S50C	●	○	○	○	○	○	○	28~32
MAS-1	●	○	●	●	●	●	○	28~30
Nickel alloy	●	○	○	○	○	○	○	15~20
Brass	●	○	○	○	○	○	○	
Aluminum 5000	○	○	○	○	○	○	○	

- Straight round rod 250 mm L(20bars/5m)only
- 5m wound wire rod only
- Both straight round rod 250 mm L(20bars/5m)& 5m wound wire rod available

※For details, refer to the welding material catalogue.

●The design and specifications are subject to change without prior notice for product improvement.

**▲ Safety Instructions**

The operation, maintenance, and inspection of this product must be performed by persons with professional knowledge of welding machines. YAG laser welding machines are classified as Class 4. Implement the appropriate safety measures. If you have any questions, feel free to contact us. ※Based on JIS C 6802 : Safety of Laser Products

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Ultra-precision Mold  
Padding Welder

# WELD PRO SW-L220

**Improved Power Output!**  
**220 W High-Power Laser**  
**Equipped with UD Mode!**  
**Minimum Welding Wire Diameter of 0.05 mm Achieved!**



# WELD PRO SW-L220

## Reliable total support

Our duty is not only to simply sell our products but also to deliver products where quality is strictly controlled to ensure customer safety and to help improve efficiency. Furthermore, we support our customers by providing reliable after-sale service, including inspection and repair, and by supplying consumables as long as our products are used. Our greatest pleasure is achieving satisfaction and trust from customers.

Quality + Service = Trust

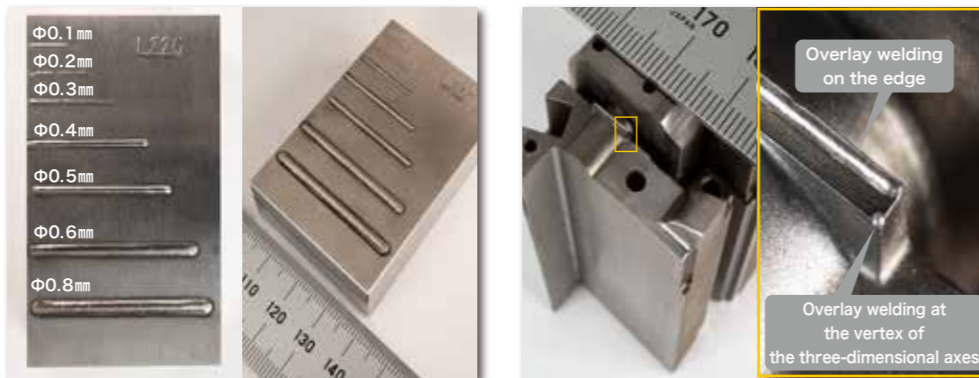
**Power output greatly increased to 220W !  
Maximum welding wire diameter to 0.8 mm !**

**UD mode allows minimum welding wire diameter of 0.05 mm !**

**Able to handle a wide range of processes from die repair welding to precision part processing!**

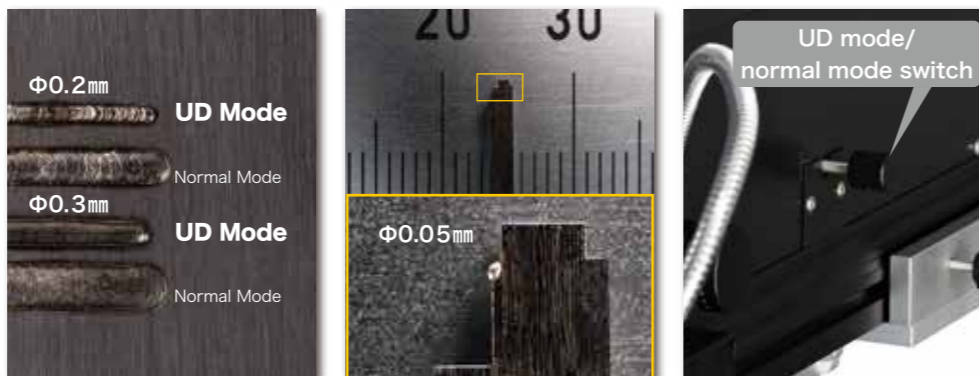
### Power output greatly increased to 220 W!

Power output has been greatly increased, allowing welding in a wider range of situations with more power to spare. The maximum welding wire diameter has been increased to 0.8 mm (from 0.5 mm in the previous model), reducing the time required for shape modification and overlay welding.



### Minimum welding wire diameter of 0.05 mm achieved by UD mode

The machine is equipped with the UD mode (ultra-small diameter mode), which enables pinpoint micro-welding. A minimum welding wire diameter of 0.05 mm is achieved. It enables the repair of fine defects on thin films, the processing of thin metal plate parts and the repair of vertices and parting lines that requires high accuracy.



### Detachable controller panel

The control/display panel is now detachable as a unit. The flexibility in the layout of power supply and chillers has been greatly improved. The machine can be introduced into a factory without changing the layout. The length of the cable can be adjusted according to the layout.

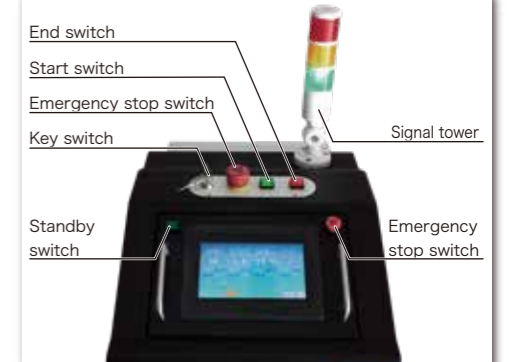


### Two types of mounts available

You can choose from either an electric-powered mount that improves work efficiency or a reasonably priced manually operable mount. The range of motion of the electric-powered mount is X: 130 mm, Y: 130 mm, Z: 135 mm (remote control operation) or 90 degrees to the left and right (manual operation), and can accommodate a work size of 500 x 500 mm. The range of motion of the manually operable mount is z: 450 mm (manual operation).



### Safety-conscious operation interface design



### Meeting various needs with easy operation + easy memory

"Want to weld hard with high pressure." "Want to weld softly and lightly." The weld pattern can be set in either preference or even wider. To meet a wide range of conditions, 100 condition patterns can be set and saved. It can be used for many applications such as normal welding, copper alloy/aluminum, castings, and ultra-micro-welding.



The radiating part of the electric-powered mount swivels 90 degrees to the right and left.

### Broad Application Range

- Plastic mold ■ Die casting mold ■ Press mold
- Glass mold ■ Blow mold ■ Rubber mold
- Copper alloy mold etc...

### Diverse Purposes

- Parting line part, slide edge areas where shocks are applied
- Pin-gate areas, tunnel-gate areas
- Repair of ejector-holes, thin edge areas
- Smoothing pinholes and surface depressions after argon welding
- Padding after electric discharge machining, nitriding, and tuffride processing