

# 500ER2

## ● Fantastic three-layer four-room structure

Power semi-conductors, rectifier, PC board, switches and variable resistors are arranged in rooms to prevent electromagnetic interference and avoid dust collection, hence improving the reliability of the machine.

The air intake is located on the top layer to avoid collecting dust. The special cooling channel can improve the efficiency of heat emission.

## ● The trust-worthy reliability

500ER2 is specially designed for heavy duty cycle and parameters under tough working surroundings of the shipbuilding industries such as dust, salt spray, high temperature and humidity etc.

### ■ High anti- interfering-interference performance of

#### ■ Perfect protecting function

- Lightning-proof
- Phase failure protection
- The protection against output short-circuit
- Double overheating protection
- Over-current and over-voltage protection
- High corrosion and moisture resistant capacity
- More designs ensuring reliability

Adopting the alternating current fan improves the cooling ability. The safety of the power source is enhanced by using multi-measures including switch +AC contactor + instant fuse. The control circuit and the external port are insulated, assuring the reliability.

## ● High-performance wire-feeding system

The wire feeding system adopts IVF patent technology which provides powerful wire feeding force and good stability of welding. Even if the cable is extended as long as 40 meters, enough wire feeding force is still ensured.

## ● Easy-to-use operation

By taking use of the built-in specialist database, what you need is just to turn the single welding current knob, and then the welding voltage and arc parameters can be automatically matched and welding parameters are optimized, realizing the full unitary adjustment function.

## ● Rated specification

Power Source Model	YD-500ER2		YD-500EL2
Rated Input Voltage Number of Phases	V	AC380 3 phases	
	Hz	50/60	
Rated Input Capacity	kVA	23.3	23.1
	kW	22.4	22.2
Rated Output Current	A	500	

Rated Output Voltage	V	39	
Rated Duty Cycle	%	100	
Rated Output No-load Voltage	V	70	69
The range of the output current*1	A	60 ~ 550 (Output capacity tested on resistance load)	
The range of the output voltage*1	V	17 ~ 41.5 (Output capacity tested on resistance load)	
Shielding Gas	-	CO <sub>2</sub> Gas, MAG Gas	
Sequence Function	-	Three:Welding; Three:Welding; Welding~Crater; Welding~Crater; Arc tack welding Arc repeat	
Welding Method	-	Individual/Unitary	
Enclosure Protection Class	-	IP21S	IP23
Insulation Grade	-	155℃ (electric reactor 200℃.) H-Grade(main transformer B-rank)	
Cooling Method	-	Forced air cooling	
Applicable Wire	-	Solid-core or Flux-core	
Applicable Wire Diameters	mm	Solid-core 1.2/1.6	Solid-core 1.0/1.2/1.6
		Flux-core carbon steel 1.2/1.4	Flux-core 1.2/1.4/1.6
Dimension (W×D×H)	mm	384×545×669 380×545×635	
Weight	kg	62	60
Wire-feeding Device	-	YW-50KM3	YW-50CA2
Applicable Wire Diameters	mm	1.2/1.4/1.6	
Cable Length	m	1.8	0.6(with cable connector plug)
Welding Torch	-	YT-50CS4	YT-35CS4
Gas regulator	-	-	W-201TH

\*Note:The output ranges are tested on the conditions of resistance load according to GB15579.1-2013.

# 500EL2

- The welding cable length can be extended as long as 50 meters, suitable for mobile welding operations
- With no control cable, cable disconnection breakdown with the machine has diminished considerably in contrary to frequent control cable disconnection breakdown with conventional machines
- Once short-circuit happens along wave-carrier cable, the indicators on front panel of power source and wire feeder display accordingly. And then the power supply of wire feeder PC Board can be cut off, as a result, no power outputs.After removing short-circuit, wire feeder PC Board gets power supply automatically, machine resumes to work.
- Thanks to power factor correction technology, the power factor is levered up to 0.95, reducing the demand and pollution of the grid.
- High efficiency, high reliability and high over-load capacity
- The power source is dust-proof and the wire feeder is anti-shock, dust-proof and drip-proof



● **Safety precautions** ● Before attempting to use any welding product, always read the manual to ensure correct use.

# Panasonic

Digital CO<sub>2</sub>/MAG Welding Machine  
**500ER2/500EL2**

An ideal machine specialized for shipbuilding industry with high performance and high reliability



**500ER2**

An ideal wave-carrier controlled machine specialized for shipbuilding industry



**500EL2**

Panasonic pursues **Only One** in welding