

Economically priced wave soldering machine for maximum quality and minimal manufacturing cost.

CE Certified  
ROHS compliant.



Machine can be different from the shown image.

The machine is simple, easy to use and maintain. The welding angle can be adjusted by guideway support structure to achieve the ideal welding effect.

The component foot length  $\leq 12\text{mm}$ .

The maximum length of the long foot is less than 25mm

### MACHINE COMPOSITION

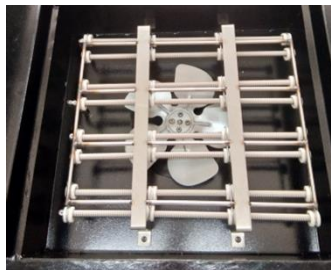
#### 1-Spray flux zone

- Flux tank about 7L
- A rod cylinder for spray nozzle movement
- Spray flux volume regulating valve and control solenoid valve.
- Spray flux speed regulating valve and control solenoid valve.
- Spray flux shape regulating valve and control solenoid valve.
- Control sensor and PLC controller

In actual use, only these 3 regulating valves need to be adjusted. Spray width: change the sensor location according to the PCB width.



#### 2-Preheat zone



##### Hot air

Before pcb enters the solder zone, the PCB is heated, Let the flux on the PCB board reach the active temperature, and reduce the temperature difference between the PCB and the solder.

The active temperature of flux is usually between 90-130°C, Check with your flux supplier the correct active temperature.

##### Control mode:

**Normal mode**, PCB moves at set speed during all conveyor.

**Time control**, PCB stays in the preheated zone based on your setting time.

Infrared thermometer is needed for time acquisition: The infrared thermometer measured the temperature of PCB in the preheat zone to determine the time required.

#### 3-Soldering zone

Single or Dual wave, roll out pot.

The solder pot parts are all detachable structure, easy to melt solder and clean oxidation slag.

Temp controller: Reference temperature controller manual

Solder bars melt method: There are three groups for heating elements installed in the solder pot wall; longer and bottom sides.

#### 4-Cool zone

The cooling zone consists of three fans.

#### 5-Conveyor

##### Carrier

PCB is placed on the carrier, the carrier width can be adjusted based on pcb size.

##### Guideways

Guideway height can be adjusted by hand wheel, both the front end and

the rear end of the guide can be adjusted, the distance and angle of pcb with wave nozzle.

Usually the distance between the finger (the finger hold pcb, it is on carrier) and the wave nozzle is 5-8mm.

##### Adjust welding height method.

First adjust guideway height or low, second slight adjust the wave motor speed.

“Welding with the lowest wave height, Minimize the amount of tin oxidation”.

Flux Unit	
Flux Capacity	7 lts
Nozzles	One built int
Speed	Adj. with cylinder
Exhaust pipe	On cover
Dispensing capac.	10-100ml/min

Preheater Unit	
Elements	Armour plated Resistors.
Length	1500mm, 3 stages
Max Power	Up to 12KW *
Preheating time	Adjustable
Preheating t <sup>a</sup>	Room to 200°C

Carrier Conveyor Unit	
PCB Size	50 x 350mm. Other under request.
Speed	30-180 cm/min
Conveyor angle	From 4-7 deg.
Type	Titanium Finger (Option Pallet)
PCB Input height	750 +/- 50mm

Solder Unit	
Solder bath capacity	Up to 400Kg *
Power consumption	Up to 7,2 KW *
Wave height	From 0-12 mm
Heat up time	90min approx.
Low temp. pump protection.	

Transportation	
Crate Dimension	L3200 x W1580 x H2000
Weight	1065Kg

\*Depending on machine configuration

Control Unit	
Operator panel is composed by independent modules to control all machine parameters.	
<ul style="list-style-type: none"> <li>• Power supply module for preheating.</li> <li>• Time control unit for preheating.</li> <li>• Power Supply module for solder pot.</li> <li>• Soldering temperature control module.</li> <li>• Conveyor speed control unit.</li> <li>• Solder alloy pump speed control unit.</li> </ul>	

Facilities	
Electrical Power supply	380v 3 phases 50/60Hz
Total Power	Up to 24 KW
Running Power	5-6Kw
Air	0,4MPa
Cable section	4mm each
Exhaust	10-20m <sup>3</sup> /min 2 x 200mm diam.
Dimensión	3600(L) x 1360(W) x 1650(H) (mm)
Weight	780Kg



Titanium fingers



Control Unit (Panel)



PC Control (Option)

Modular solder pot (Option)



Advantages:

- Impeller can be taken out directly for easy maintenance.
- Easy adjustment of baffle.
- Internally installed with cast iron plate, the tin pot is not easily deformed and has a long service life