

### W-series Lead Free Wave Soldering Machine



#### Introduction:

W series lead-free wave soldering machine, after many years market testing, is ETA's mature product, W series lead-free wave soldering machine has long-term positive feedback from customers. Its unparalleled heating performance and temperature control system meet the requirements of various welding processes, especially energy saving design has been a leading-edge product advantage, maximum reducing the using cost for customers.

#### Features:

- 1.Nozzle: Japan Kuroda Seiko nozzles, adjustable atomizing area, ensuring the long time spray uniformity and reliability.
- 2.Spray control:plc control or manually adjust switch, precise control the spray time, spray speed, economy and environmental protection, digital FLUX flow, spray flow, angle, density, width and other parameters can be recorded.
- 3.Cleaning device: automatic cleaning, modular design, easy maintenance.
- 4.Temperature Protection: third-party over-temperature protection, multiple protection layers to ensure safe operation.
- 5.Products comply with CE, CCC, UL and other standards and specifications.
- 6.User-friendly design: fault detection (such as heaters abnormal alarm, etc.), regular maintenance reminders,economy functions, emergency manual transmission function and tool-free maintenance, reduce equipment failure rates.
- 7.Heating module: horizontal reflow design makes each heating zones not influenced by adjacent zones to ensure accurate temperature curve, while ensuring high production capacity and heat exchange capacity, and achieve high adaptive capacity (to meet the soldering of automotive electronics, communications, electronics, computers and mobile phones, and other consumer electronics.).
- 8.Moving parts: PLC adjustment, stepper motor control, accuracy and stability, to ensure accurate spray.
- 9.Temperature control: PLC + PID independent temperature control, real-time monitoring preheat temperature.
- 10.Core components: using imported components to ensure long-term stability of equipment operation, reduced maintenance costs.
- 11.Can choose different configurations of flux processing system, to ensure the furnace hall clean.
- 12.Closed-loop transmission speed control systems, transportation control accuracy  $\pm 2\text{mm} / \text{min}$ , ensuring speed more stable.
- 13.Dross Collection: Automatic dross return channel,the most energy-efficient channel design.

#### TOP Advantage:

Simple: combined with advanced international concepts, based on the Oriental-designed operating system, easy to understand, easy to learn, easy to maintain.

Expertise: learn imported reflow oven's advanced design concepts, and the components are using imported top brands.

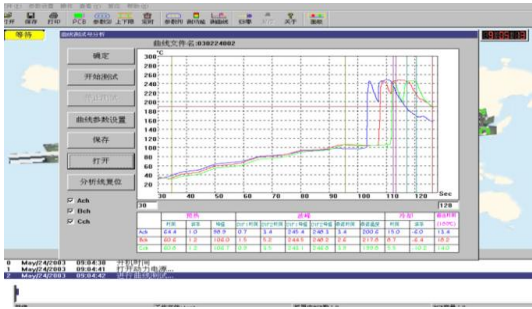
Hedging: Import hardware configuration,low failure rate in production,more than a decade service life.

Safety: Based on the general rules of international design, close to imported reflow rating, the highest security level.

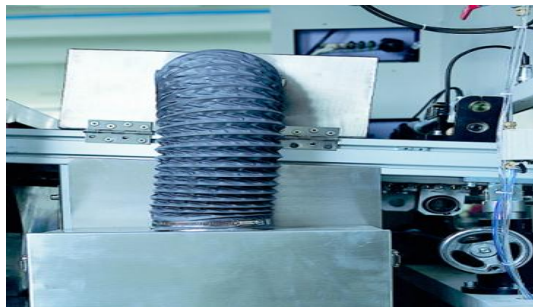
Stable: mature software, hardware and top production processes ensures stability of each equipment.

#### Products pictures:

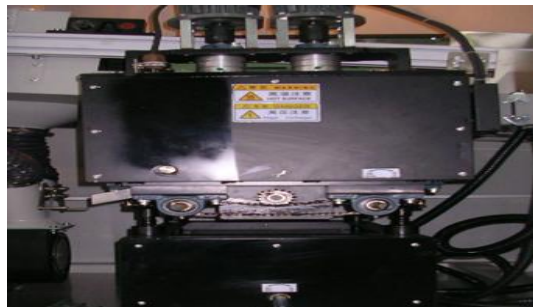
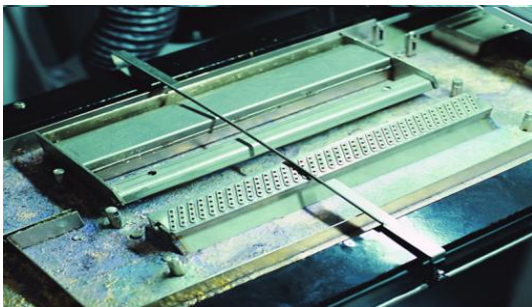
1. Temperature curve and spray nozzle



2. Chamber and high temperature parts



3. Solder Pot



Parameter:

Specifications	W4	W3	W2
Photo			
Dimension:(mm)	4200X1250X1500	3600X1250X1500	2900X1160X1500
Weight(kg)	Approx.1500kg	Approx.1200kg	Approx.790kg
Power Supply	3P5W,380/220V 50Hz	3P5W,380/220V 50Hz	3P5W,380/220V 50Hz
Startup Power	32kw	24kw	16kw
Operation Power	12kw	9kw	7kw
Control System	Touch Screen + PLC		
	Spray System		
Transmission Method	Step motor		

Spray Pressure	0.25Mpa--0.4Mpa		
Flux flow	10--100ml/min		
Exhaust Diameter	Φ200mm		
Exhaust Capacity	25m <sup>3</sup> /min		
Preheating System			
Preheating Mode	Hot air		
Control Mode	PID + SSR		
Preheating Zone	4	3	2
Preheating Length	1800mm	1600mm	1200mm
Preheating Temp.	(Room Temperature)-250℃		
Warm-up Time(min)	Approx.15min (setting 150℃)		
Conveyor System			
PCB Width	60~350mm		
Conveyor Speed	0-2000(mm/min)		
Conveyor Height	750+/-20 (mm)		
Finger	Double hook claw (Standard)		
Conveyor width control	Manually		
Conveyor Angle	4~7degree		
Soldering System			
Solder Pot style	Mechanical Motor drive		
Solder Pot Material	Full Titanium (Standard FT)		
solder pot temperature	300℃		
solder pot capacity	Lead-free 350kg	Lead-free 300kg	Lead-free 250kg
Nitrogen System (Option)			
Consumption	12m <sup>3</sup> /H 1000PPM		
Pressure	0.5-*0.8MPa		
Flowmeter	3		
N2 Sources	≤10PPM		
Other			
finger cleaning system	brush		

**Configuration:**

Item	Brand	Note
Spray nozzle	Kuroda	Japan
PLC	XINJE	Taiwan
Solid relay	Schenider	France
Relay base	Schenider	France
Contactactor	Schenider	France
Wire	Jinglongyu	China
Air switch	DELIXI/FATO	China
Power supply	MW	Taiwan
Converter	Delta	Taiwan
Magnetic valve	AIRTAC	Taiwan

High temp. motor	TCG	Taiwan
Thermal fuse	Hotset	Germany
Three-color light	Dahong	China

**Standard Accessories:**

1	Operation Software	1 set
2	Heating	1 pcs
3	Colander	1 pcs
4	Finger	10 pcs
5	Chain buckle	5 pcs
6	Fuse	1 pcs
7	Relay	2 pcs
8	Solid State Relay	1 pcs
9	Air switch	1 pcs
10	K-type Test Line	1 pcs
11	Manual	1 book
12	Tool Case	1 set

\* Attachments may change with product upgrade. If different, please follow the new list.

Video: <https://youtu.be/ncPFTg49WEg>

**Thanks for choosing ETA.  
ETA looks forward to win-win cooperation.**