

# E-THERM/ E-400 LEAD FREE WAVE SOLDER MACHINE



## ECONOMICAL LEAD FREE WAVE SOLDER MACHINE

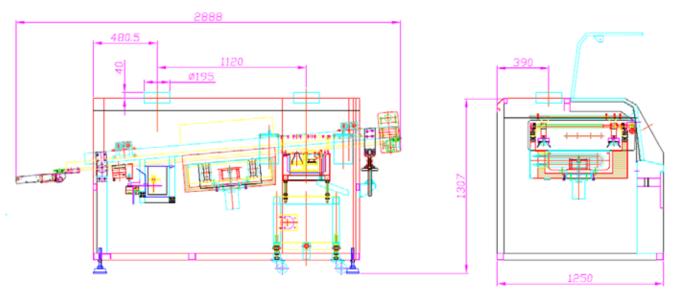
## **Description:**

E-400 is a CE certificated compact Lead Free Wave Solder Machine with inline finger conveyor, stepper driven spraying fluxer, hot air preheat zone & Ti dua wave solder pot.

## E-400 Lead Free Wave Solder Machine Description:

- PLC and touchscreen control system
- High quality sprayer driven by stepper motor
- 1 individual bottom hot air preheat zone
- Full Titanium dual wave solder pot
- Solder pot in/out automatically
- Titanium finger conveyor
- 01Max PCB width 400 mm
- Machine dimension: 2900(L)\*1150(W)\*1350(H)

#### Structure:

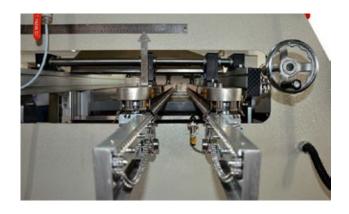


#### **Features:**

- PLC and touchscreen controlling system which can save more than 50 sets parameters.
   User-frienly interface is easy to be operated, temperature can be set/saved/modified in touchscreen.
- The high quality sprayer provides perfect atomization performance of the flux.It is driven by stepper motor and rail / slider, moving speed set on touchscreen, stepper driver and PLC control system make a smooth and low noisy movement.
- Forced air convection preheat zone creates enough uniform heat for the PCB. Specially designed preheating system makes maintenance easier, motor and blower can be dismantled easily from bottom, heater can be move out from rear side like drawer.
- Adopt cast iron heater for the solder pot, its mounted outside of the solder pot. This new assembling way prolongs the lifetime of the solder pot.
- Dual wave solderpot. Both wave heights are controlled invidually by transducer. Changing the wave height via adjusting the frequency of wave motor's power supply in touchscreen.
- Solder pot is made of Ti material, 100% capable for the lead-free solder.
- Customer can set on and off time of machine with weekly timer.
- Light&Sound alarm for overheating and emergency stop.
- Ti finger conveyor system, be able to form an in-line through-hole soldering line.
- Customer can choose "L" finger for pallet, or dual hook finger for pcb.
- N2 optional for the solder pot.

# **Specifications:**

MODEL	E-400	
PCB width	30-400MM	
Solder pot capacity	200kg	
Running power/general power	2-5KW/12KW	
Dimension	2900(L)*1150(W)*1350(H)	
Net weight	800KG	
Controlling system	Touchscreen + PLC	
Conveyor motor	3Ph 380V ,90W	
Conveyor speed	200MM-1800MM/Min	
Flux capacity	6.5 liter	
Alcohol capacity	4.5 liter	
PCB Conveyor direction	Left to right	
Spray method	stepper motor drive , linear rail and slider moving sprayer	
Sprayer	Japan ST-6	
Preheating zone	1 individual bottom preheating zone	
Preheating power	4kw/zone	
Solder pot material	Fully Ti	
Solder pot heater	Cast iron	
Heater power	1.2KW*5PCS	
Wave number	dual waves	
Wave type	Turbulence first wave and Lambda 2ndwave	
Melting time	60 minutes	
Solder pot lift up&down	Manual	
Solder pot in&out	Motorized	
Finger cleaning pump	1PH 220V 10W	
Finger type	Dual hook	
Finger material	Ti	
Solder angle	3-7°	
Air supply	3-5BAR	
Power supply	3PH 380V 50HZ	



In-loading system: which can connect with the insertion conveyor directly, the sensor at bottom for counting and spray fluxer on/off; with ruler and and needle for instruction of width.



Air supply to spray flux system, all the air flow pressure is adjustable by flow pressure meter.



The high quality sprayer driven by stepper motor and rail / slider, moving speed set on touchscreen, stepper driver and PLC control system make a smooth and low noisy movement. Compare with traditional air cylinder drive, the moving speed can be set in touchscreen and moving speed will not be influented by air pressure like air cylinder.



1 individual bottom preheating zone, the heaters can be drawn out at rear of machine, the blowers can be drawn out at bottom of preheat, very easy for maintenance.



Titanium solder pot made by 3mm thickness pure Ti material. It can be move in/out automatically, with the quick connector for solder pot, it's easy for swap between leaded and lead-free. Italy wave motor will keep the wave stable and long lifetime.



Ti fingers. In this machine the same conveyor rail can accommodate for both L finger and Hook finger, customer can choose any of them or mixed them.



Solder pot is equipped with quick connector and trolley, can easy change between leaded and lead free solder pot.



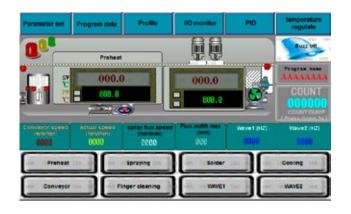
Optional with N2 feeding system, enhance the solderbility andreduce solder dross generation.



All brand electrical parts, such as Panasonic conveyor motor, Mitsubishi breaker, Schneider transducer etc all wiring cetificated by CE.



Touchscreen and PLC for controlling system.





User-friendly interface is easy to be operated, temperature can be set/saved/modified in touchscreen.

PLC and touchscreen controlling system which can save more than 50 sets parameters.

## **Controlling & Electircal:**



Mitsubishi Breaker



Panasonic motor



Schneider Relay



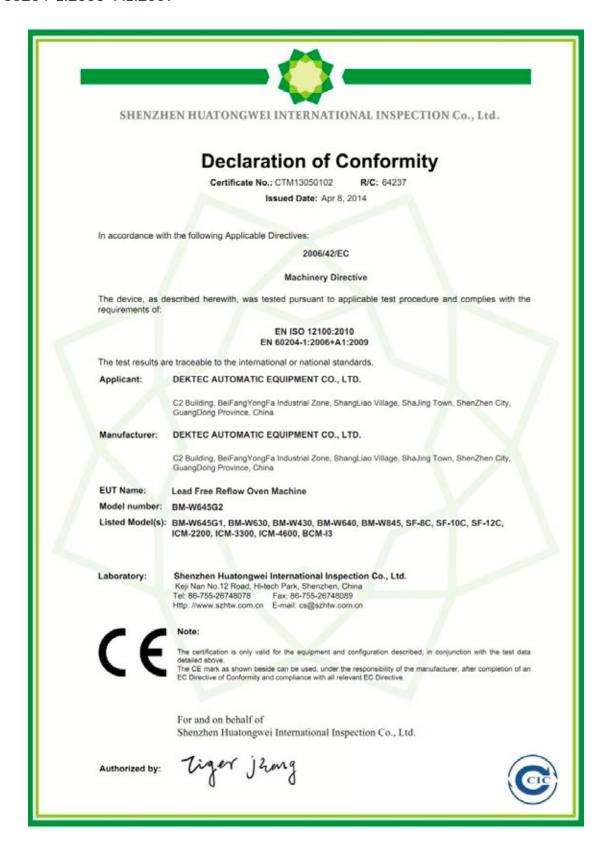
Schneider Transducer



Xin Jin PLC(Made In Taiwan)

## CE report:

CE certification machine under 2006/42/EC Machinery Directive, EN ISO 12100:2010 EN 60204-1:2006+A1:2009



### E-400Lead Free Wave Solder Machine included:

- Lead free wave solder machine
- Spraying system driven by step motor and PLC controller
- 1 individual bottom preheating zones
- Titanium alloy dual wave solder pot
- Titanium alloy finger conveying system.
- Colored touch screen panel
- Machine dimension: 2900(L)\*1150(W)\*1350(H)
- Machine weight: 800KGS
- 1 year parts warranty

#### SHIPPING INFORMATION:

- Dimensions: L3.3\*W1.53\*H1.6m
- Gross Weight:900 KG
- Cubic Meter: 8.08CBM

## Package & shipping:



## E-400 Lead Free Wave Solder Machine Plenty Spare parts:

### Free accessories as below:

ITEM NAME	DESCRIPTION	QUANTITY	UNIT
Blower Motor and Blower	90W1P	1	pcs
Preheater	2.5KW 220V L=390mm	2	pcs
Preheater Sensor	3M	2	pcs
Heater plate	1.2KW	1	pcs
Thermocouple	150MM	1	pcs
Conveyor chain clip	35B	3	set
Conveyor sensor	U shape sensor S-670	1	pcs
Ti finger	/	15	pcs
SSR	SSR-KD-40-L	1	pcs
Cooling fan	3.5" 220VAC	4	set
Cooling fan	4"220VAC	4	set
Hex spanner		1	set
Open spanner		1	set
Key of door	705	2	set
Fuse		3	set
Alarm light bulb		3	set
Torque limiter spanner		1	set
Thermocouple for machine	4M	3	pcs
Tool box		1	pcs
Resistor	20D471k	2	pcs
Screw	M5*6	10	pcs
Screw	M6*6	10	pcs
Hexagon Socket head Screw	M5*12	10	pcs
Hexagon Socket head Screw	M5*12	10	pcs
Hexagon Socket head Screw	M6*15	10	pcs
Hexagon Socket head Screw	M6*25	10	pcs
Hexagon Socket head Screw	M8*25	10	pcs