

E-THERM /M-400 MEDIUM VOLUME LEAD FREE WAVE SOLDER MACHINE



Description:

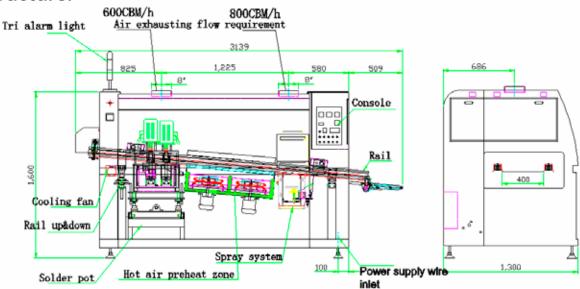
M-400 is a CE certificated compact Lead Free Wave Solder Machine with inline finger conveyor, stepper driven spraying fluxer, hot air preheat zone & Ti dua wave solder pot.

M-400 Lead Free Wave Solder Machine Description:

- PLC and touchscreen control system
- High quality sprayer driven by stepper motor
- 2 individual hot air preheat zone
- Full Titanium dual wave solder pot
- Solder pot in/out manually
- Titanium finger conveyor
- 01Max PCB width 400 mm

- Machine dimension: 3140(L)*1250(W)* 1600(H)
- Solder pot in/out manually
- Titanium finger conveyor
- Max PCB width 400 mm
- Machine dimension: 3140(L)* 1250(W)*1600(H)

Structure:



Features:

- A new streamline design replaces a conventional right-angled exterior. And the design is based on mechanical aesthetics and practicability, making the maintenance an easy job;
- PLC controller, Touchscreen and on-line UPS form a stable,safe and efficient controlling system.
- The software has the functions like PCB counting, temperature setting and editing, PCB parameter menu, and profile testing, alarms and mutilanguages conversion. In the meanwhile, the software has make a lots effect about the safety issues just like wave motor running safe temperature etc.
- The one-week timer will provide a amazing function for customer. The operator can edit his
 work schedule for this wave solder machine weekly.
 And the machine can turn on automatically to melt the solder before operator come to work.
 When it's time to work, the solder has been melt and everything is ready. It will save about 1.5
 hours for customer everyday.
- The specially designed guiding rail reduce the deformation caused by heat; After two years working you only need to change the cooper bars instead of change the whole conveyor rails.
- Sprayer droved by stepper motor, the speed can be set on touchscreen. The moving and stopping time will be set in a more precious way.
- The sprayer is made in Japan; it provides perfect atomization performance of the flux.
- Adding flux automatically(OPTION), there are two sensors on flux tank. When flux is lower than limit, it will switch on the pump to feed flux in automatically. Operator just need to put the whole barrel flux into the flux tank, meanwhile put the sucking tube into the barrel.



- Forced air convection preheat zone control by temperature controller in PID model. The preheat zone will provide enough uniform heat for the PCB.
- 2 individual bottom hot air zone and third upper hot air zone optional, this configuration will provide the greatest preheating effect for soldering.
- Adopt cast iron heater for the solder pot, it's mounted outside of the solder pot. This new assembling way will prolong the life of the solder pot.
- Dual wave solder. Both wave heights are controlled by transducer. Changing the wave height via adjusting the frequency of power.
- Solder pot is made of 3mm thickness Ti material. Long life warranty.
- High quality B&M wave motor which made in Italian, small noise and more stable.

Specifications:

MODEL	M-400
PCB width	30-400MM
Solder pot capacity	390kg
Running power/general power	8-12KW/22KW
Dimension	3140(L)*1250(W)*1600(H)
Net weight	750KG
Controlling system	Panel control
Conveyor motor	3Ph 220V, 90W
Conveyor speed	200MM-1500MM/Min
Flux capacity	6.5 liter
Alcohol capacity	4.5 liter
PCB Conveyor direction	Left to right
Spray method	Stepper motor drive
Sprayer	Japan ST-6
Preheating zone	2 hot air convection zone
Preheating power	5kw/zone
Solder pot material	Ti
Solder pot heater	Cast iron Heaters
Heater power	1.2KW*8PCS



MODEL	M-400
Wave number	dual waves
Wave type	Turbulent first wave
Melting time	60 minutes
Solder pot lift up&down	Manual
Solder pot in&out	Manual
Finger cleaning pump (option)	1PH 220V 10W
Conveyor Type	Ti finger
Solder angle	3-6°
Air supply	3-5BAR
Power supply	3PH 380V 50HZ Optional: 3PH 220V 60HZ

Conveyor System:



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



V type Ti finger for standard conveyor.



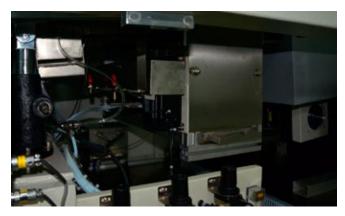
Optional with V type Ti finger or V mixed with L finger.





Optional with heavy load finger which made of 5mm Ti, it can transport PCB weight as 20kgs/unit.

Flux System:



Stepper motor/driver etc, make sure the spray nozzle moving at needed speed smoothly.



Sprayer's flow, flux shape, automization etc adjustable, so to meet a perfect flux applying performance.



Flux is adding via a SMC pump automatically, save operator's time and job (OPTION).

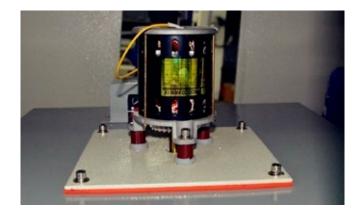
Preheating System:





Standard equipped with 2 hot air convection preheating zone at bottom, provide enough heat to active the flux performance.

Heater can be take out from rear side of machine, easy for maintenance.



Blower motor can be take out from upper side of machine, easy for maintenance.

Preheating System:



Fully Ti material made solder pot, even for impeller, shaft, nozzle, and bolts. All is Ti and 100% capable for Lead free. Two wave nozzle, one is for turbulent wave and another is for flat wave.





Optional with N2 feeding system.



connector, easy to change solder pot if customer had one for leaded pot and another for lead free pot.

Solder pot is connected with a quick

Solder pot in & out by manually.

Electrical System:



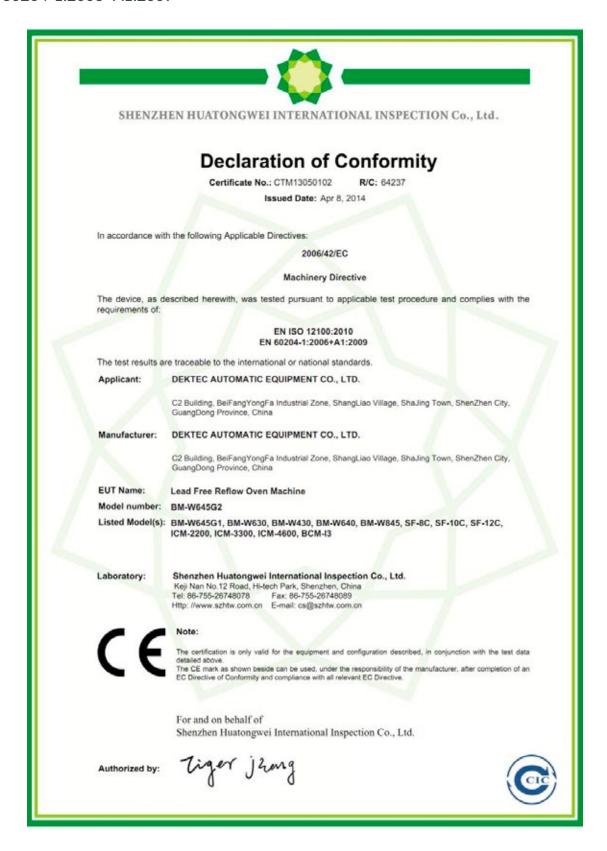


All brand electrical parts , such as Panasonic conveyor motor ,Mitsubishi breaker , etc all wiring cetificated by CE .

Touchscreen and PLC for controlling system

CE report:

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



M-400Lead Free Wave Solder Machine included:

- Lead free wave solder machine
- Spraying system driven by step motor and PLC controller
- 2 individual preheating zones
- Titanium alloy dual wave solder pot
- Titanium alloy finger conveying system.
- Touchscreen and PLC control system
- Machine dimension: 4260(L)*1495(W)*1725(H)
- Machine weight: 1500KGS
- 1 year parts warranty

M-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	set
SSR	SSR-KD-40-L	1	pcs
Cooling fan	3.5" 220VAC	4	pcs
Cooling fan	4"220VAC	4	pcs
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



ITEM NAME	DESCRIPTION	QUANTITY	UNIT
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

Package & shipping:

