

## for Medium to High Production Volumes



## WAVE SOLDERING SYSTEM FOR HIGH VOLUME PRODUCTION VOLUMES

The WS-S400 is a CE certificated compact Lead Free Wave Solder Machine with inline finger conveyor for bare boards or pallets. Equipped with three convection preheating zones, a double soldering wave, an exchangeable solder pot, the integrated motor driven spray fluxer and optional N2 operation and makes this machine the best choice for medium to high volumes.



Dual wave solder. Both wave heights are controlled by transducer. Changing the wave height is controlled by adjusting the frequency of power. High quality wave motors made in Italy.

Optional with N2 operation on both waves to enhance solderability and reduction of solder dross.



Titanium solder pot made out of 3mm pure Titanium material with quick connector for easy change of solder pot. Impeller, shaft, nozzles and bolts made out of Ti as well.

Solder pot can lift up and down, move in and out automatically. Ideal changing the solder pot for different applications and the conversion between leaded and lead-free.



Japanese made sprayer for perfect atomization performance of the flux unit. Fully programmable and driven by stepper motor for precise spraying applications.

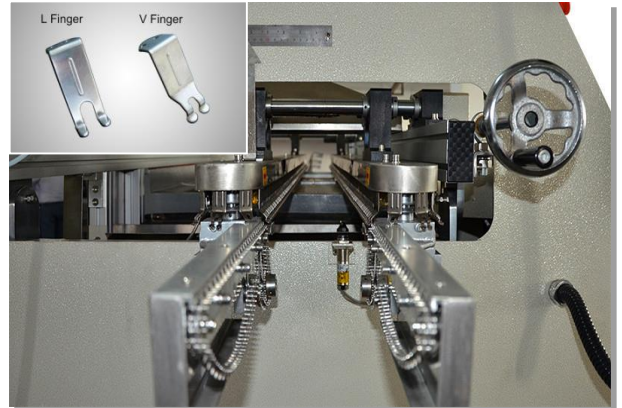
Optional Automatic flux level controlled with dual sensor system. When flux is lower than limit, it will switch on the pump to feed flux in automatically. Operator just needs to put the whole barrel flux into the flux tank



## OVER 300 INSTALLATIONS WOLDWIDE

The specially designed heavy duty guiding rails 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.

Standard with V-Fingers, optional with L-fingers or combined L-fingers mixed with V-Fingers all made out of Titanium.



Optional with heavy load Titanium fingers (5mm) to transport PCBs/Pallets of up to 20 kgs per unit

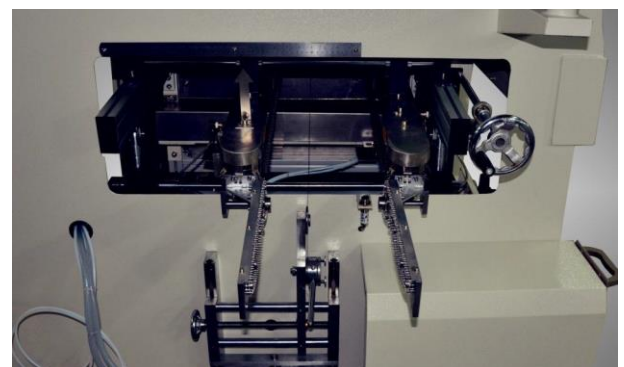


*Four group of width adjustment systems which guarantee the parallelism of the conveyor throughout the entire machine*



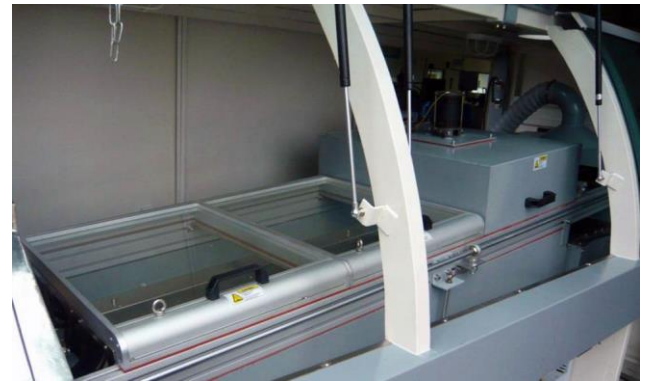
Optional In-loading system: which can connect with the insertion conveyor directly, the sensor at bottom for counting and spray fluxer on/off; with ruler and needle for instruction of width.

Optional center support system with adjustable position.



Standard equipped with 3 hot air convection preheating zone at bottom, provide enough heat to active the flux performance.

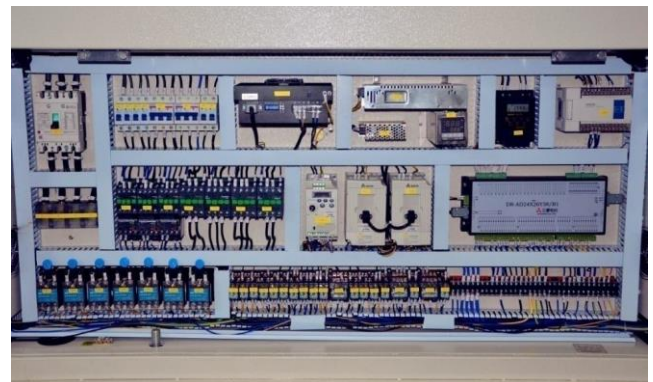
Optional to add 3rd upper preheating zone, minimize the PCB up/bottom side temperature difference and reduce the board deformation.



The heaters can be drawn out of the rear of the machine and the blowers can be taken out at the top of the zones making maintenance easy and fast



All electrical parts are from well know global suppliers. The machine, the components and the wiring is tested and certified by CE.



PLC controller Industrial PC in combination with an on-board UPS form a stable, safe and efficient controlling system.

The software include all functions like PCB counting, temperature setting and editing, PCB parameter menu, and profile testing, alarms, control of motor temperatures as well as Multilanguage support.

Time saving preheating by one-week timer allowing individual pre-settings for startup times on specific days. When it's time to work, the solder has been melt and everything is ready. Up to 1.5 hours time savings per day.



## Technical overview:

Items	WS-S400
PCB width	50-400MM
Solder pot capacity	390kg
Running power/general power	5-12KW/25KW
Machine dimension	4260(L)*1495(W)*1725(H)
Net weight	1500KG
Controlling system	PC + PLC
Conveyor motor	3Ph 380V , 90W
Conveyor speed	200MM-1800MM/Min
Alcohol capacity	4.5 liters
Conveyor direction	Left to right
Spray method	stepper motor and slider moving sprayer
Sprayer	Japan ST-6
Preheating zone	3 individual bottom preheating zones
Preheating power	4kw/zone
Solder pot material	Fully Titanium
Solder pot heater	Cast iron
Heater power	1.2KW*10PCS
Wave number	dual waves
Wave type	Turbulence first wave and Lambda 2ndwave
Melting time	110 minutes
Solder pot lift up&down	Electrical switch
Solder pot in&out	Electrical switch
Finger cleaning pump	1PH 220V 10W
Finger type	Dual hook Or L finger
Finger material	Titanium
Solder angle	3-7°
Air supply	3-5BAR
Power supply supply	3PH 380V 50HZ

Technical data are subject to change



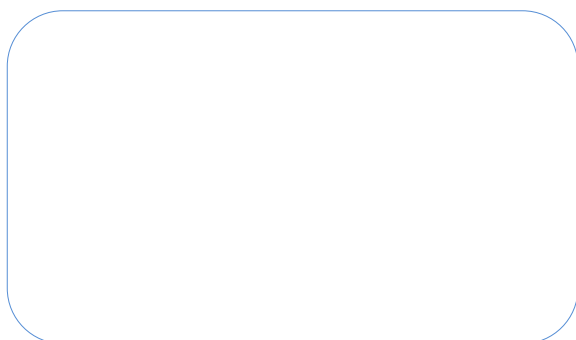
## PRODUCTION EQUIPMENT FOR THE EUROPEAN MARKET

Lavortec offers a full range of cost effective, high quality production equipment and tools for the European Electronic Manufacturing market.

The Products are carefully selected by Lavortec and sourced on the world market. All manufacturers are inspected at their factories before they get included in our product portfolio. We are making sure that the manufacturers have proven their knowhow, capacity and quality in their regional markets and that a large reference base is existing. Local specialists of Lavortec ensure additionally that the quality is constantly supervised and every shipment is quality checked before the machines are shipped to Europe. As a customer you buy locally from our European hub. An extensive European network ensures local pre-sales and after sales support

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