

EMST WSM Range



EMST Stallion fc - PLC

Wave Soldering Machines



EMST Stallion cc - PLC

Wave soldering machine range offered by EMS Technologies comes in two combinations with Finger type conveyor for high productivity and Carrier Conveyor type suitable for batch production. With over 20+ years of experience EMS Technologies has been well known brand in the SMT field

The field proven Stallion Wave Soldering Machine is now introduced in PLC version with many more enhanced features.

Fluxer Options



Foam Fluxer

Stainless steel tank of 5 ltrs capacity with porous candle
External compressed air driven
Air knife to blow off excess flux back to the tank



Spray Fluxer

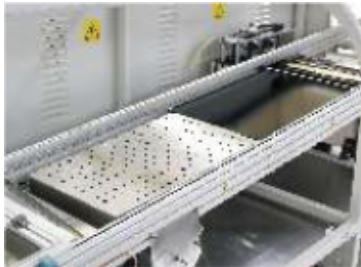
Modular design - Spray, Control & Infeed Modules
Auto spray as per length & width of board



Drawout Fluxer Tank

(only for finger conveyor model)
Foam Fluxer tank is mounted on drawout sliding base
Easy access to nozzle and porous candle for maintenance

Preheater Options



IR & Convection (for Carrier Models)

One IR and one Hot Air Convection Preheater
Total Length of 1000 mm & each 5KW
Intelligent power saving circuit between IR heater & Solder Pot



Two Hot Air Convection Preheaters

Total Length of 1000 mm and 5KW each High reliable open coil heaters with blower
Twin output impeller housing for better



Three Hot Air Convection Preheaters

Total Length of 1200 mm and 4KW each
Highly reliable open coil heaters with blower
Twin output impeller housing for better efficiency

Solder Pot Options



150 Kg Lead Free / 170 Kg Leaded Pot

Available in SS, Nitrided SS or Titanium
Three Cartridge internal heaters for better efficiency
AC pump motor with speed control for uniform & stable wave height



Orbital 'O-Wave' SMD Option

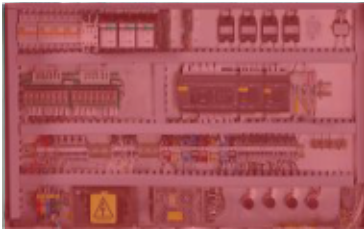
Patented Italian Technology and field proven over years
Fin Assembly moving in narrow elliptical orbit inside nozzle area to create orbital wave
O-Wave speed and amplitude controlled by AC Motor
Orbital turbulence of O-wave eliminates shadow areas around SMD components



225 Kg Lead free / 255 Kg Leaded Dual Wave Pot

Available in SS, Nitrided SS or Titanium
Multi Jet wave for SMD soldering, covering the entire width
AC Motor with speed control for both Main and Jet wave
High Reliable External Plate heaters

Control and Interface



Overall Machine Control thru PLC
Independent PID control for Preheater & Solder Temperatures
Auto / Manual / Diagnostics mode with Password Protection



HMI
Touch panel for Operator Interface
USB Port for Data Logging
Extensive Monitoring of Alarm conditions with messages



Software Features
Wide range of functions built-in
Weekly / Daily Timer
Auto sON
Auto Flux On (in Finger model) Interlocks to prevent improper operation

Carrier (Pallet) Conveyor Model Features



Conveyor
Aluminum Extruded Conveyor Assembly to ensure Thermal compensation for perfect parallelism
Carrier / Pallets of Aluminum extrusion with Titanium fingers
AC Variable speed motor with closed loop Encoder for precise speed control



Carrier/Pallet Options
Carrier with adjustable center rod with fingers for accommodating additional rows for small PCBs
Wire type center support to avoid warping of PCB



Conveyor Angle
Manual adjustment of Conveyor Angle - 3°, 4° or 5°
Simple adjustment by shifting slots in bracket

Finger Conveyor Model Features



Conveyor
Rigid lead screw/guide shafts for perfect parallel movement
Titanium fingers on chain drive with back support all around for perfect alignment
AC Variable speed motor with closed loop Encoder for precise speed control



Conveyor Angle and Width
Manual adjustment of Conveyor angle - 4° & 5°
Simple wheel adjustment of both conveyor and solder pot
Manual conveyor width adjustment by wheel



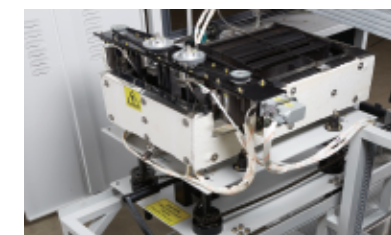
Finger Cleaning
Brush cleaning of fingers with solvent pumped from recirculating tank
Stainless steel tank for solvent with level indicator for easy refilling



Inlet & Exit PCB Feeder
Chain Type inlet feeder with 3 mm pins coupled to main conveyor and running at same speed
Chain type or simple parking type exit feeder



Anti Warp Support
Wedge type support on solder pot to prevent pcb warpage.
Wire type support also available.



Roll out and Exchangeable solder pot (both Finger & Carrier models)
Solder pot can be easily rolled out for cleaning
Exchangeable pot assembly with motors, heaters, sensor etc available for quick exchange between Lead & Lead free pot
All connections of pot thru quick lock connectors

Technical changes reserved.

Spray Fluxer Technical Data

The technical drawings provide the following dimensions (in mm):

- Front View (Top Left):** Total width 3600, total height 2033, machine body width 2780, machine body height 1535, and a base height of 300.
- Right Side View (Top Right):** Total width 1370, total height 1865, machine body width 840, machine body height 1370, and a base height of 130. It includes a label: "EXTERNAL STAND FOR SOLDER TANK CLEANING".
- Left Side View (Bottom Left):** Total width 1530, total height 2075, machine body width 1090, machine body height 1530, and a base height of 700. It includes a label: "EXTERNAL STAND FOR SOLDER TANK CLEANING".
- Top View (Bottom Right):** Total width 3600, total depth 1565, machine body width 2780, machine body depth 1530, and a base height of 750. It includes a label: "750 ~ 800 CONVEYOR FEEDER HEIGHT AT INLET".

Stallion - cc PLC Floor Plan

Stallion - fc PLC Floor Plan

Owing to continuous Research and Development, specifications are subject to change without notice.

Manufactured by
EMS TECHNOLOGIES PVT. LTD.

emst
Marketing Pvt. Ltd.

Gat No.322, Plot No.1, At Post- Pirangut Tal- Mulshi,
Dist. PUNE 412115- India
P: +91 95955 25010 | E: contact@emstonline.com
W: www.emstonline.com