

## Flexible Preheating Concepts, High-Quality Materials and Many Years of Experience in Lead-Free Production Lines



The ERSA POWERFLOW represents a new future-oriented machine design consisting of different intelligent solutions adding value to the customer's production process. The POWERFLOW is based on a modular, flexible machine frame. Every module fully meets the requirements of lead-free soldering without any compromises. Flux, preheat and solder module can be configured individually so that board-specific properties can be considered.

### Fluxer

The spray fluxer provided in the standard equipment processes VOC-free fluxes in a safe and reproducible way. A second spray head with separate flux supply is optionally available. Flux type and the amount of flux to be deposited is selected individually for each component in the solder program. In addition, it is possible to monitor the amount of flux deposited via sensors. Spray pattern programming is effected via a user-friendly, intelligent graphic operating surface. Automatic board shape recognition is optionally available.

### Preheating

The high demands of lead-free soldering with regard to the preheating process were met and realized in the ERSA POWERFLOW machine design. Modular, flexible preheating lengths and configurations of up to 2.4 m assure gentle and effective heat-up of multilayers. High-mass components are safely warmed up in the POWERFLOW's preheat module. Optional top-side convection heaters provide for optimal heat-up of thermally demanding boards. The preheating length

can freely be composed of short and medium wave length IR emitters as well as convection heaters thus covering numerous heat transfer possibilities. In this way, individual production requirements can optimally be met.

### Solder module

The POWERFLOW's solder module design is based on proven technologies and optimized for lead-free solders. For maintenance purposes the solder module is drawn out of the machine. Large solder capacity, RPM-regulated solder pump drives and different nozzle shapes ensure constant and reproducible soldering results. An optionally available solder bar feeder provides for a constant solder level.

### Conveyor system

The conveyor system offers frame or finger conveyor. The frame conveyor can optionally be designed as a segmented conveyor so that different speeds can be realized in the preheat and solder module. The finger conveyor is installed in the solder module whereas the remaining conveyors are pin-and-chain conveyors.

### Control

The POWERFLOW is controlled via laptop or industrial PC with touchscreen which communicates with the machine control. The operating surface is very user-friendly and clear. Due to the network interface, the machine's computer can be integrated into production networks. Thus the latest production and / or traceability data is available any time.

### ERSA product range

#### Soldering tools

- NEW DIMENSION
- PROFI-LINE
- BGA / SMT rework
- CLEAN-AIR

#### Soldering systems

##### Wave soldering

- ETS line
- EWS line
- N-Wave line

- POWERFLOW

##### Reflow soldering

- HOTFLOW 2/12
- HOTFLOW 2/14
- HOTFLOW 2/20

##### Selective soldering

- VERSAFLOW line  
40/50  
50/60  
Highspeed  
Multiwave  
Ultimate
- EAS line

##### Process optimization

- EPOS 1

##### Accessories

- Nozzle Regeneration Workstation

#### Inspection systems

- ERSASCOPE
- ImageDoc software

#### Seminars&Service

- Know-how seminars
- In-House trainings
- Test soldering
- Installation and maintenance assistance
- Process support

