

## Advanced Service & Performance: Ideal Energy Balance, Reduced Maintenance, & Intelligent Set-Up



### ERSA HOTFLOW 2/14 ASP - Highest Quality, Lowest Downtime, Fastest ROI

The new ERSA HOTFLOW 2 line is setting the industry standard for lead free reflow soldering by providing the ultimate in performance! Highest thermal performance, maximum flexibility, best possible machine availability rates (uptime) as well as lowest possible mean time to repair (MTTR) rates are the standards set by ERSA for the HOTFLOW 2 series of quality reflow ovens.

The HOTFLOW 2/14 offers up to 2.6 meters heating length and up to 0.9 meters cooling length at a total process length of approx. 3.5 meters. Subject to your process specifications, the HOTFLOW 2/14 can be equipped with up to 14 separately controlled heating zones and 4 cooling zones providing maximum flexibility with regard to profile set-up. Exact zone separation and homogenous temperature distribution provide for the best soldering results. All materials and parts used are suitable for lead free soldering in that they can handle the higher temperatures.

The Advanced Service & Performance package was designed by ERSA to guarantee customer satisfaction after the machine has been installed. ASP maximizes operating stability and minimizes operational costs! Apart from the lowest possible energy and process material consumption, minimization of maintenance and cleaning costs are critical to achieving a competitive manufacturing edge. All top-side heating and cooling modules are quickly accessible due to the hinged hood. Heaters, fan motors, turbines and thermocouples are installed on flange sheets which can easily be removed.

Recognizing that choosing the right lead free profile and setting up the oven will be the most important steps, ERSA developed the revolutionary EPOS Process Guidance & Optimization Software package. An intelligent and efficient reflow oven set up will make lead free implementation more manageable!

#### Features ERSA HOTFLOW 2/14 ASP

● Standard ○ Option

Bottom-side preheating, Multijet version	○	Additional bottom side cooling in the cooling zone	○
Nitrogen option	○	Additional low-mass tubular conveyor	○
Residual oxygen monitoring and control	○	Dual track conveyor, second PCB center support	○
Increased process atmosphere cleaning	●	Status indication light	●
- in the cooling zone	○	Inline communication interface (e. g. SMEMA)	○
- in the preheating zone	○	PCB pass through control	○
Low-mass tubes for pin-and-chain conveyor	○	Panel PC including swing arm and touch screen	○
PCB center support	○	Standard PC (notebook) incl. swing arm ERSAsoft and EPOS basic module	●
- motorized adjustment (momentary push button)	○	Autoprofiler	○
- programmable adjustment	○	Uninterrupted power supply (conveyors, hood, SPS)	○
Conveyor width adjustment	●	Temperature profiling system (Sensor Shuttle)	○
- motorized adjustment (momentary push button)	○		
- programmable adjustment	○		
Automatic chain lubrication	●		
- for conveyors and center supports	●		

#### ERSA product range

##### Soldering tools

- NEW DIMENSION
- PROFI-LINE
- IR-Rework
- CLEAN-AIR

##### Soldering systems

###### Wave soldering

- ETS-line
- EWS-line
- N-Wave-line

###### Reflow soldering

- HOTFLOW 2/14
- HOTFLOW 2/20
- HOTFLOW 2/24
- Hotflow line
- ERS 250 /260

###### Selective soldering

- VERSAFLOW
- VERSAFLOW line
- Highspeed
- Multiwave
- Compact
- Place & Solder
- EAS-line

###### Process optimization

- EPOS 1

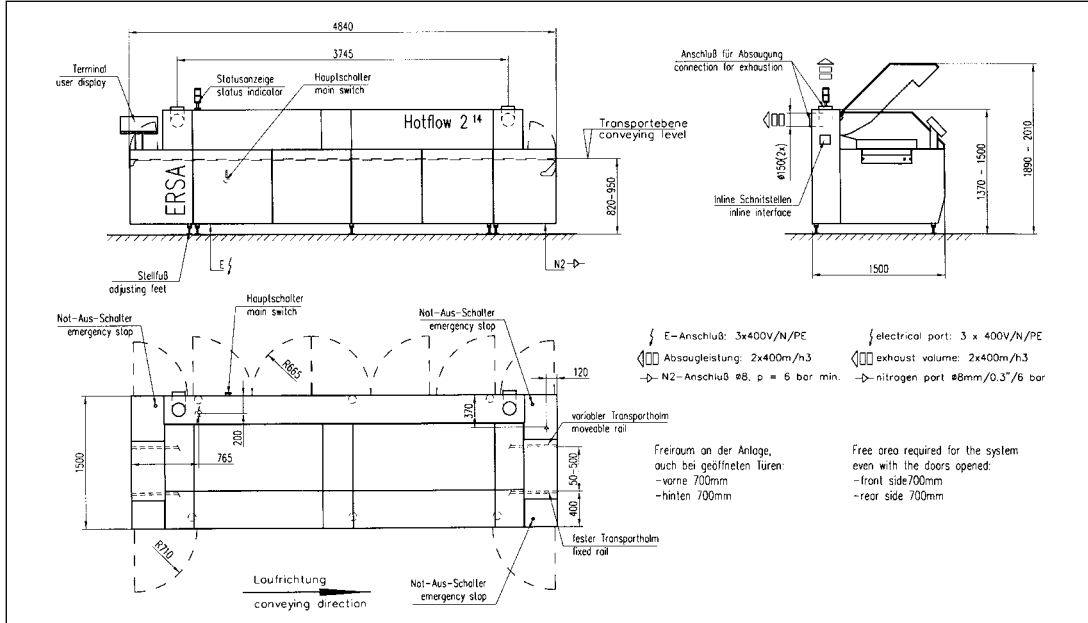
##### Inspection systems

- ERSASCOPE
- ImageDoc Software

##### Other services

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

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**Dimensions (Basic machine):**

Length: 4,840 mm (191")  
 Width: 1,500 mm (59")  
 Height: 1,370 - 1,500 mm (54" - 59")  
 Height (open): 1,890 - 2,010 mm (74" - 79")  
 Weight: approx. 2,200 kg (4,850 lb) incl. all options

**Paint:** RAL 7035 / 7016**Conveyor system:**

Working width: 50 - 500 mm (2 - 20")  
 Working width with PCB center support: 50-500 mm (2-20")  
 Board clearance: +35 / -25 mm (+1.4" / -1")  
 Conveyor speed: 20 - 200 cm/min (8 - 79")  
 Conveyor height from floor: 820 - 950 mm (32 - 37")  
 Pin-and-chain conveyor: 5 mm (0.02") as standard,  
 2.85 mm (0.1") available as an option

**Process zone:**

Process length: 3,440 mm (135")  
 Heating zone: 2,570 mm (101")  
 Cooling zone: 870 mm (34")  
 Infeed zone: 700 mm (28")  
 Outfeed zone: 700 mm (28")  
 Process chamber width: 700 mm (28")

**Heating system:**

Convection: 100%  
 Gas flow/module: approx. 500 m³/h (17,657 ft³/h)  
 adjustable, Multijet system  
 Convection modules: 7 top, max. 2 - 7 bottom  
 • Preheating: 5 top / max. 5 bottom (option)  
 • Soldering zone: 2 top / 2 bottom  
 Nominal rating per module: 3.3 kW / 400 V

**Cooling:**

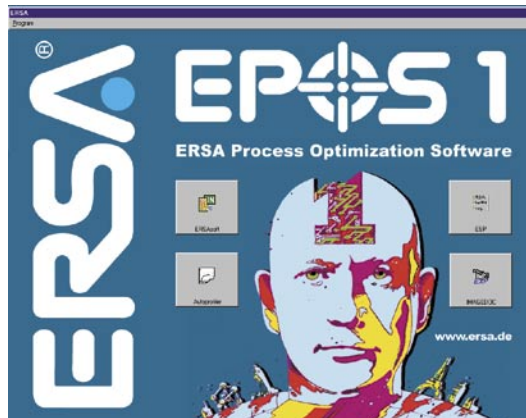
Cooling zone: ERSA Multijet system,  
 2-stage version and active water recooling  
 Coolant: water / R407C / air

**Ambient temperature:** max. 32°C (90°F)**Nitrogen option:**

Gas injection: in soldering zone  
 Gas flow: 0 - 30 m³/h (0 - 1,059 ft³/h)  
 Pressure control: 6 bar

**Safety devices:**

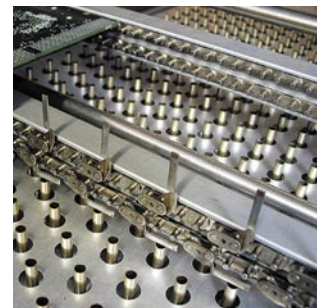
- 1 main switch
- 4 Emergency-Stop buttons
- 1 process atmosphere monitoring per module

**Electrical data:**

Power: 5-wire system, 3 x 400 V, N, PE  
 Power tolerance range: + 6 %, - 10 %  
 Frequency: 50 / 60 Hz  
 Max. fuse rating: 3 x 125 A  
 Nominal rating: 33 kW - 59 kW (subject to configuration)  
 Nominal current: 58 A (subject to configuration)  
 Reduced rating: 40 kW

**Exhaust rating:**

Exhaust stacks: 2 stacks, 150 mm (6") diameter each  
 Exhaust volume per stack: 400 m³/h (14,126 ft³/h)  
 Exhaust monitoring per stack: integrated

**Permanent noise level:** <68 dB (A)**Asia:**

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