

HOTFLOW 2/20

Reflow soldering system with flexible profile set-up and integrated process manager



ERSA HOTFLOW 2/20 - the Next Generation of Reflow Soldering!

The ERSA HOTFLOW 2 line consists of various machine types all based on the same design. They are only set apart by the number of heating zones and the process length.

The HOTFLOW 2/20 offers up to 3.8 meters heating length and up to 1.2 meters cooling length at a total process length of about 5 meters.

Subject to your process specifications, the HOTFLOW 2/20 can be equipped with up to 20 separately controlled heating and 6 cooling zones giving you maximum flexibility with regard to profile set-up. Exact zone separation and homogenous temperature distribution provide for best soldering results.

Whatever your demands: high throughput, easiest parameter setting, processing area cleanliness, conveyor system flexibility or easy maintenance - the

HOTFLOW 2/20 will equally meet these demands. Every material and part used is of course suitable for lead-free soldering.

Machine availability rates (uptime) higher than 99 percent as well as average repair times (meantime to repair) of less than 15 minutes are the standards set by ERSA itself for the concept of the HOTFLOW 2 line. Realizing these standards, 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.

With the EPOS 1 software package (ERSA Process Optimization Software) ERSA points the way in the future. It is a unique, valuable and indispensable tool for the user to optimize the process and to measurably increase productivity.

Features ERSA HOTFLOW 2/20

● Standard ○ Option

Bottom-side preheating	○	Inline communication interface (e. g. SMEMA)	○
Nitrogen option	○	PCB pass through control	○
Residual oxygen monitoring and control	○	PC interface with ERSAsoft	○
Process atmosphere cleaning	○	PC / Notebook with swing arm	○
Low-mass tubes for pin-and-chain conveyor	○	Autoprofiler	○
PCB center support		EPOS 1 software package for process optimization	○
- motorized adjustment (momentary push button)	●	Uninterrupted power supply	○
- programmable adjustment	○	Temperature profiling system (Sensor Shuttle)	○
Conveyor width adjustment			
- motorized adjustment (momentary push button)	●		
- programmable adjustment	○		
Automatic chain lubrication			
- for conveyor and center support	○		
- for conveyor 2 and center support 2	○		

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

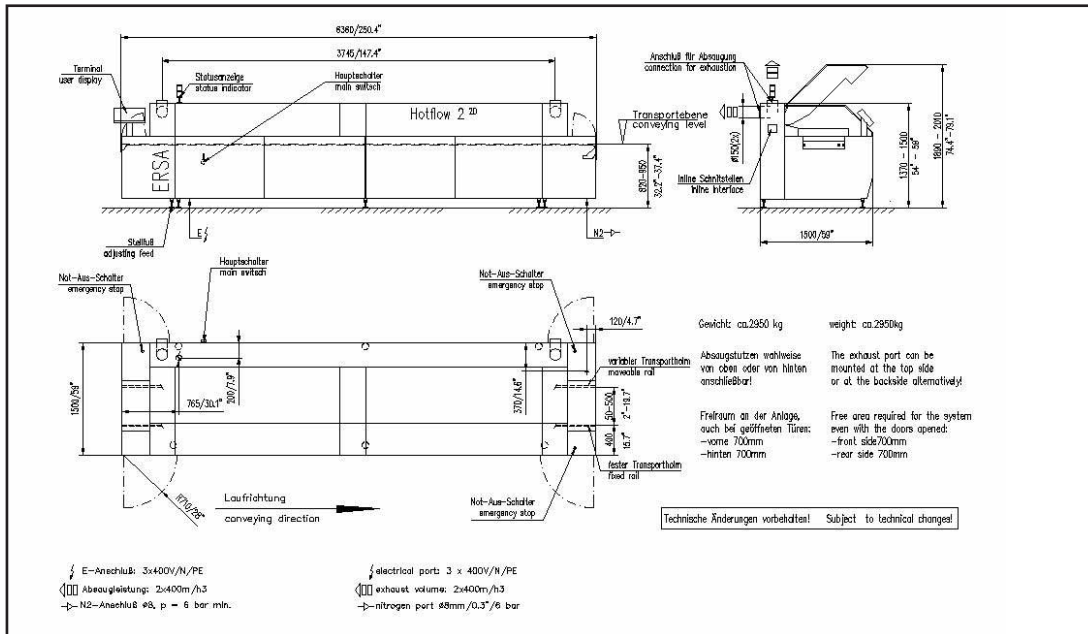
Inspection systems

- ERSASCOPE
- ImageDoc Software

Other services

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

Reflow soldering system with flexible profile set-up and integrated process manager



Dimensions (Basic machine):

Length: 6,360 mm (250")
 Width: 1,500 mm (59")
 Height: 1,370 - 1,530 mm (54" - 59")
 Height (open): 1,890 - 2,040 mm (74" - 80")
 Weight: approx. 2,900 kg (6,393 lb) incl. all options

Paint: RAL 7035 / 7016

Conveyor system:

Working width: 50 - 505 mm (2 - 20")
 Working width with PCB center support: 50-505 mm (2-20")
 Board clearance: +35 / -25 mm (+1.4" / -1")
 Conveyor speed: 20 - 200 cm/min (8 - 79")
 Conveyor height from floor: 820 - 980 mm (32 - 39")
 Pin-and-chain conveyor: 5 mm (0.02") as standard,
 2.85 mm (0.1") available as an option

Process zone:

Process length: 4,960 mm (195")
 Heating zone: 3,860 mm (152")
 Cooling zone: 1,280 mm (50")
 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
 Convection modules: 10 top, 3 bottom consisting of:

- Preheating: 7 top
- Soldering zone: 3 top / 3 bottom
- Preheating: 7 bottom (option)

 Nominal rating per module: 3.3 kW / 400 V

Cooling:

Cooling zone: ERSA Multijet system,
 3-stage version for top-side standard, for bottom-side available as option, water cooling

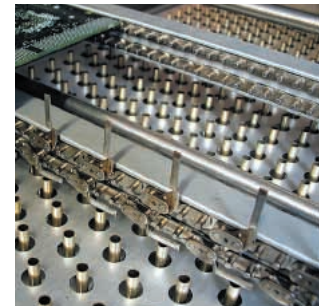
Ambient temperature: max. 35°C (95°F)

Nitrogen option:

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

Safety devices:

- Main switch
- Emergency-Stop button
- Process atmosphere monitoring



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Electrical data:

Power: 5-wire system, 3 x 400V, N, PE
 Power tolerance range: + 6 %, - 10 %
 Frequency: 50 Hz
 Max. fuse rating: 3 x 90 A (slow blow)
 Nominal rating: 45 kW - 63 kW
 Different ratings within this range are available as option.
 For the exact rating please refer to the rating plate.

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: <64 dB (A)