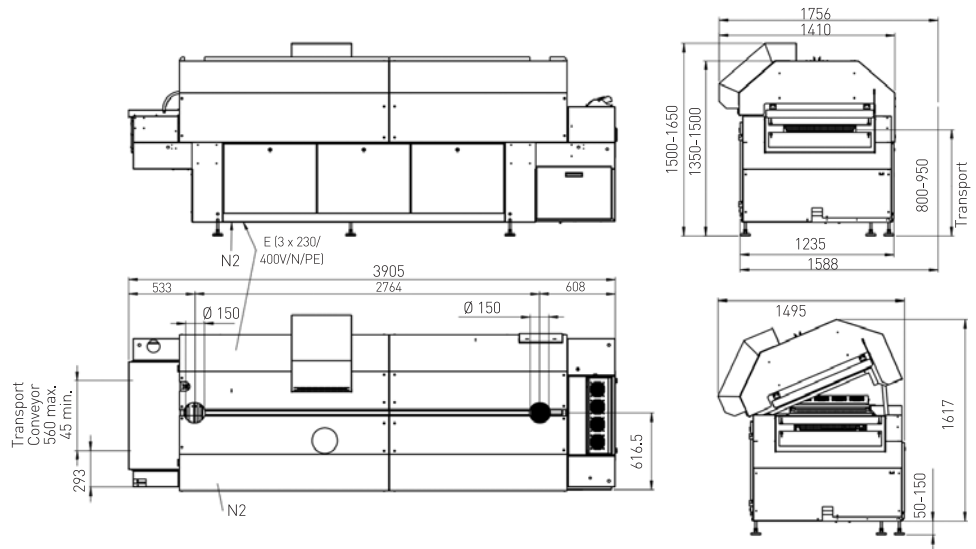


High-End Reflow Soldering System with Outstanding Thermal Performance And Best Energy Balance

HOTFLOW 4/8



High-end reflow soldering system with outstanding thermal performance and best energy balance



The HOTFLOW 4/8 is the shortest reflow system in the new HOTFLOW 4 series. This system, with a process length of 3,25 meters split into 8 heating zones and 1 cooling zone and characterized by its high energy efficiency, provides a vastly increased throughput while maintaining the customary high process- and soldering quality.

The reduction of operating cost is based on the use of economical and efficient fan motors, which reduce the consumption of power, and on the superior control of the N2 system, which reduces the consumption of N2 by 20 %. All in all, total energy saving is in the range of 25%.

From a productivity versus floor space requirement standpoint, the HOTFLOW 4 sets the industry standard. With dual or triple track options, it is possible to increase throughput considerably without increasing floor space! Tracks run at their own set speed and at their own PCB width for maximum flexibility. It is now possible to run as many as three different products simultaneously at three different set speeds and widths. Only highest quality materials have been used in order to guarantee the highest machine availability. Finally, all major parts are exchangeable within only minutes in order to keep machine downtime to an absolute minimum.



Grip conveyor for extremely thin PCB or flexfoils



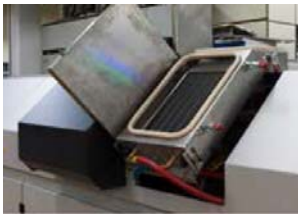
Multi track conveyor for variable PCB width



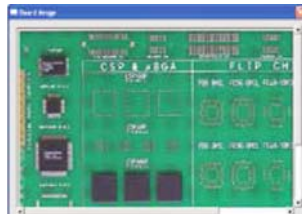
Efficient cooling in outfeed section



Retractable nozzle sheets for quick maintenance



Optimized access to maintenance units



Ersa Autoprofiler: Easy offline profiling for highest machine uptimes.

Software-Highlights

- New process control software (EPC)
- Ersasoft – process data recorder
- Ersasoft – user friendly machine control
- Auto profiler for rapid offline profiling
- Standby & sleep mode
- Job management

Unique Technology Advantages

- Dual, triple track transport increases throughput
- Energy efficient fan motors
- Optimized heat transfer, minimized Delta T, zone separation & temperature controlled cooling
- 100 % tested process tunnel (gas sealed)
- Lowest energy and N2 consumption
- New process control software
- Best machine uptime
- Without any tool retractable heating modules
- Ultra low-mass center support
- Energy efficient blower motors

Features HOTFLOW 4/8	
Bottom-side preheating, 3 convection modules	■
Adjustable fan speed in cooling and soldering zones	■
Adjustable fan speed in preheating zones	□
Nitrogen equipment	□
Residual oxygen monitoring	□
Nitrogen consumption measurement	□
Temperature monitoring of the cooling zone	■
Basic cooling top	■
Power Cooling with 3 convection modules top/bottom, controlled cooling zone 1	□
External cold water supply	□
Low-mass conveyor 560 mm	■
Low-mass track conveyor 1	□
Adjustable speed for each track conveyor	□
Low-mass support tubes, 540 mm/21" width	□
Low-mass center support 1 to 2 with uninterrupted rest	□
Safety conveyor	□
Program controlled width adjustment for conveyors and center support	□
Automatic chain lubrication	■
PC with TFT screen	■
TFT touch screen	□
Status indication light	■
Emergency power supply (transport, hood, SPS, PC)	□
Temperature measurement device (Sensor Shuttle)	□
Ersa process control (EPC)	□
Online servicing	□
Auto Profiler	□
Energy measurement	□
Energy consumption calculation	■

Standard ■ / Option □

Specifications

Model	HOTFLOW 4/8
Dimensions (basic machine)	
Length	3.905 mm
Width	1.410 mm
Height	1.350 – 1.500 mm
Height (open)	1.670 – 1.820 mm
Weight	approx. 2.500 kg
Paint	RAL 7035/7016
Conveyor system	
Working width	45 – 560 mm
Working width (PCB center support)	45 – 560 mm
Board clearance (standard)	+35/-40 mm
Center support pin height	18 mm
Conveyor speed	20 – 200 cm/min
Conveyor height from floor	820 – 980 mm
Pin-and-chain conveyor	3 mm edge clearance, option: 4 mm, 5 mm
Process zone	
Process length	3.260 mm
Heating zone	1.525 mm
Cooling zone	1.735 mm
Infeed zone	620 mm
Process chamber width	approx. 745m
Heating system	
Convection share	100 %
Gas flow/module	approx. 500 m ³ /h. adjustable
Convection modules	4 top / 4 bottom
Preheating	3 top / 3 bottom (option)
Soldering zone	1 top / 1 bottom
Nominal rating per module	3.3 kW
Cooling	
Cooling zone	3-stage version and water recooling
Coolant	water / R134A (option) / air
Ambient temperature	max. 32°C (90°F)
Nitrogen option	
Gas injection	in process zones
Pressure control	4.5 – 10 bar
Electrical data	
Power	5-wire-system, 3 x 400 V, N, PE
Power tolerance range	+/- 10 %
Frequency	50/60 Hz
Max. fuse rating	3 x 50 A
Nominal rating (subject to configuration)	55 kW
Reduced rating	25 kW
Continuous rating for operation	ca. 6 – 8 KW
Exhaust rating	
Exhaust stacks	2 stacks, 150 mm (6") ø each
Exhaust volume per stack	300 m ³ /h - 600 m ³ /h
Exhaust monitoring per stack	integrated
Noise level	
Permanent noise level	< 70 dB (A)
Safety devices	
■ 1 x main switch ■ 2 x emergency-stop buttons ■ 2 x exhaust monitors	