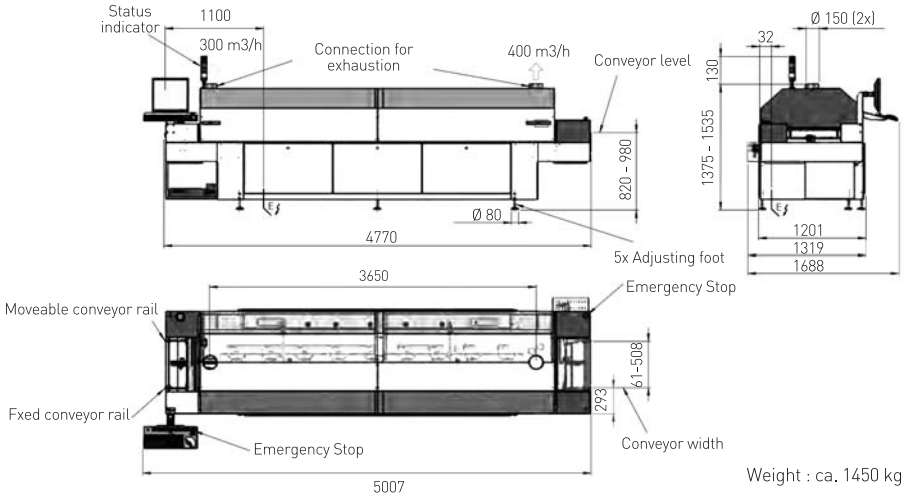
Grup Endüstri Otomasyon
Ticaret ve Sanayi Limited Şirketi

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

HOTFLOW 3/14

kurtz ersa

Highest throughput, optimized energy balance, best process control and maximum machine uptimes.



Weight : ca. 1450 kg

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The new HOTFLOW is the third generation machine based on the proven & proprietary multijet Ersa heating technology. The R&D of this HOTFLOW series had its focus on improved heat transfer via a complete redesign of the process tunnel, reduced energy and N2 consumption, improved cooling, as well as optimized process control.

From a productivity versus floor space requirement standpoint, the HOTFLOW sets the industry standard. With dual, triple and now quad track options, it is possible to increase throughput by as much as 400 % 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 four 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.

Improved heat transfer with high density Ersa multijet

Process tunnel, tested for tightness, guarantees longterm stability

Maintenance-friendly condensation management with cleaning granulate

Maintenance "On-the-Fly" continues to operate while the condensation management system is being cleaned

Quick and easy servicing through excellent accessibility

Ersa Autoprofiler: Easy offline profiling for highest machine uptimes.

Software-Highlights

- New process control software (EPC)
- ERSASOFT - process data recorder
- ERSASOFT - user friendly maschine control
- Auto profiler for rapid offline profiling

Unique Technology Advantages

- Dual, triple and quad track transport increases throughput
- Optimized heat transfer, minimized Delta T, zone separation & temperature controlled cooling
- "On-The-Fly" maintenance reduces downtime
- Switchable internal / exernal cooling unit
- 100 % tested process tunnel (gas sealed)
- Lowest energy and N_2 consumption
- New process control software
- Best machine uptime
- Retractable heating modules top and bottom
- Ultra low-mass center support

Features Ersa HOTFLOW 3/14	
Bottom-side preheating, 5 convection modules	☐
Adjustable fan speed in cooling & heating zones	☐
Temperature management system with optimized zone separation	☐
Nitrogen equipment	☐
Residual oxygen monitoring	☐
Nitrogen consumption measurement	☐
Temperature monitoring of the cooling zone	■
Basic cooling plus with cold water cooler and air conditioning compressor	☐
Power cooling with 4 convection modules, controlled cooling zone 1 & "On-The-Fly" process atmosphere cleaning	☐
External cold water supply	☐
Switchable external / internal cold water supply	☐
Low-mass conveyor	■
Low-mass dual track conveyor	☐
Low-mass triple track conveyor	☐
Low-mass quad track conveyor	☐
Low-mass support tubes, 540 mm / 21" width	☐
Low-mass center support 1 to 4 with uninterrupted rest	☐
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)	☐
Auto profiler	☐
Energy measurement	☐

Standard ■ / Option ☐

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Specifications

Model	HOTFLOW 3/14
Dimensions (basic machine)	
Length	5.190 mm
Width	1.530 mm
Height	1.450 - 1.580 mm
Height (open)	1.810 - 1.940 mm
Weight	approx. 2.500 kg
Paint	RAL 7035 / 7016
Conveyor system	
Working width	50 - 536 mm
Working width (PCB center support)	60 - 536 mm
Board clearance (standard / option)	+25/-35 mm / +35/-35 mm
Center support pin height	15 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
Process zone	
Process length	3.750 mm
Heating zone	2.650 mm
Cooling zone	1.100 mm
Infeed zone	700 mm
Outfeed zone	700 mm
Process chamber width	approx. 700 mm
Heating system	
Convection share	100 %
Gas flow/module	approx. 500 m^3/h (17,657 ft3/h), adjustable, multijet system
Convection modules	7 top / 2 - 7 bottom
■ Preheating	5 top / 5 bottom (option)
■ Soldering zone	2 top / 2 bottom
Nominal rating per module	3.3 kW
Cooling	
Cooling zone	Ersa multijet system; 3-stage version and water recooling
Coolant	Water / R407C (option) / air
Ambient temperature	max. 32°C (90°F)
Nitrogen option	
Gas injection	In process zones
Gas flow	13 - 19 m^3/h (459.10 - 670.98 ft^3/h)
Pressure control	6 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 100 A
Nominal rating	53 kW - 86 kW (subject to configuration)
Reduced rating	41 kW
Continuous rating for operation	ca. 11-15 KW
Exhaust rating	
Exhaust stacks	2 stacks, 150 mm (6¨) ø each
Exhaust volume per stack	400 m^3/ (14,126 ft3/h)
Exhaust monitoring per stack	integrated
Noise level	
Permanent noise level	< 70 dB (A)
Safety devices	
■ 1 main switch ■ 2 exhaust monitors ■ 4 Emergency-stop buttons	