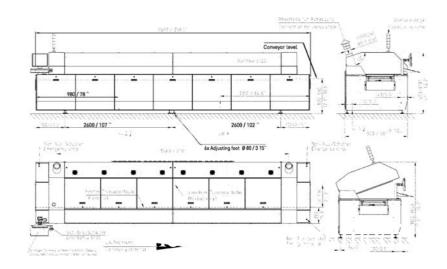


Highest Throughput, Optimized Energy Balance, Best Process Control and Maximum Machine Uptimes.

HOTFLOW 3/20



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







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 minimumen.



Improved heat transfer with high density Ersa multijet nozzle system



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.

Unique Technology Advantages

- New process control software (EPC)
- ERSASOFT process data recorder
- \bullet 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) with lowest energy and N₂ consumption
- New process control software
- Best machine uptime
- Retractable heating modules top and bottom
- Ultra low-mass center support

Features HOTFLOW 3/20		
Bottom-side preheating, 7 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 □



Specifications

Model	HOTFLOW 3/20
Dimensions (basic machine)	
	6.590 mm
Length	1.530 mm
Width	
Height	1.450 - 1.580 mm
Height (open)	1.810 - 1.940 mm
Weight	approx. 3.200 kg incl. options
Paint	RAL 7035 / 7016
Conveyor system	
Working width	50 - 536 mm
orking width (PCB center support)	60 - 536 mm
oard 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	5.150 mm
Heating zone	3,700 mm
Cooling zone	1.450 mm
Infeed zone	700 mm
Outfeed zone	700 mm
Process chamber width	approx. 700 mm
Heating system	αρριολ. 700 ΠΠΠ
Convection share	100 %

Gas flow/module	approx. 500 m³/h (17,657 ft3/h), adjustable, Multijet system
Convection modules	10 top / 3 - 10 bottom
■ Preheating	7 top / 7 bottom (option)
■ Soldering zone	3 top / 3 bottom
Nominal rating per module	3,3 kW
Cooling	
Cooling zone	Ersa multijet system; 4-stage version and water recooling
Coolant	Water / R407C (option) / air
Ambient temperature	max. 32°C (90°F)
Nitrogen option	
Gas injection	in prozess zones
Gas flow	14 - 20 m³/h (494.41 - 706.29 ft³/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	65 kW - 104 kW (subject to configuration)
Reduced rating	55 kW
Continuous rating for operation	ca. 16-22 KW
Exhaust rating	Cd. 10 22 IVV
Exhaust rating Exhaust stacks	2 stacks 150 mm (L") a sach
	2 stacks, 150 mm (6") ø each
Exhaust volume per stack	400 m³/ (14,126 ft3/h)
	integrated
Exhaust monitoring per stack	
Noise level Permanent noise level	< 70 dB (A)