



### Economically priced reflow system for maximum quality and minimal manufacturing cost

The HOTFLOW 3/14e is the latest model of the Ersa HOTFLOW reflow systems, and it delivers exceptional soldering results on account of its superior thermal performance, its low transverse profile and its excellent zone separation.

The “e” attached to its signature stands for “efficiency” underlining the importance Ersa has put on the economic efficiency during the development of the system.

For designing the system, ersa was able to draw on their extensive know-how and a hoard of experience gained during the 25 years of Ersa’s excellent track record in building reflow systems. Numerous economical and technical solutions could be ideally combined, without compromising the reliability and uptime of the system. The high-grade materials and proven components expected to be found in equipment have Ersa also been used for these Hotflow systems.)

There was made no compromise in the selection of the controller. The HOTFLOW 3/14e is equipped with a premium PLC controller and offers a PC with Windows 7 operating system as user interface. The comfortable system visualization simplifies programming and has all necessary operating and process data on board.

The solder protocol, available in the standard program version, is built on the ZVEI standard, which is a pre-requisite for future traceability applications.

The HOTFLOW 3e systems enthruse because of their very attractive price. Together with their high level of machine availability excellent TCO values and a quick ROI are assured.

#### Software-Highlights:

- Ersasoft – Process Data Recorder
- Ersasoft – User Friendly Machine Control
- Auto Profiler for Rapid Offline Profiling
- Online support

#### Unique Technology Advantages:

- Dual Track Transport Increases Throughput
- Optimized Heat Transfer, minimized  $\Delta T$ , Zone Separation
- Internal Cooling
- Lowest Energy Consumption
- Removable Heating Modules top and bottom
- Extreme Low-Mass Center Support

#### Features Ersa HOTFLOW 3/14e

Bottom-side preheating, 5 convection modules	■
Soldering, 2 convection modules top/bottom	■
Cooling, 2 convection modules top/bottom	■
Low-mass conveyor, 516 mm	■
Low-mass dual track conveyor	□
Low-mass support tubes, 510 mm (20") width	□
Low-mass center support 1 to 2	□
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)	□
Autoprofiler	□
Adjustable fan speed	□
Dualspeed	□
Energy consumption calculation	■
Energy measurement	□
Extraction support	□

Standard ■ / Option □



Ersasoft:  
User Friendly Machine Control



Optimized Heat Transfer,  
minimized  $\Delta T$ , Zone Separation



Low-mass center support



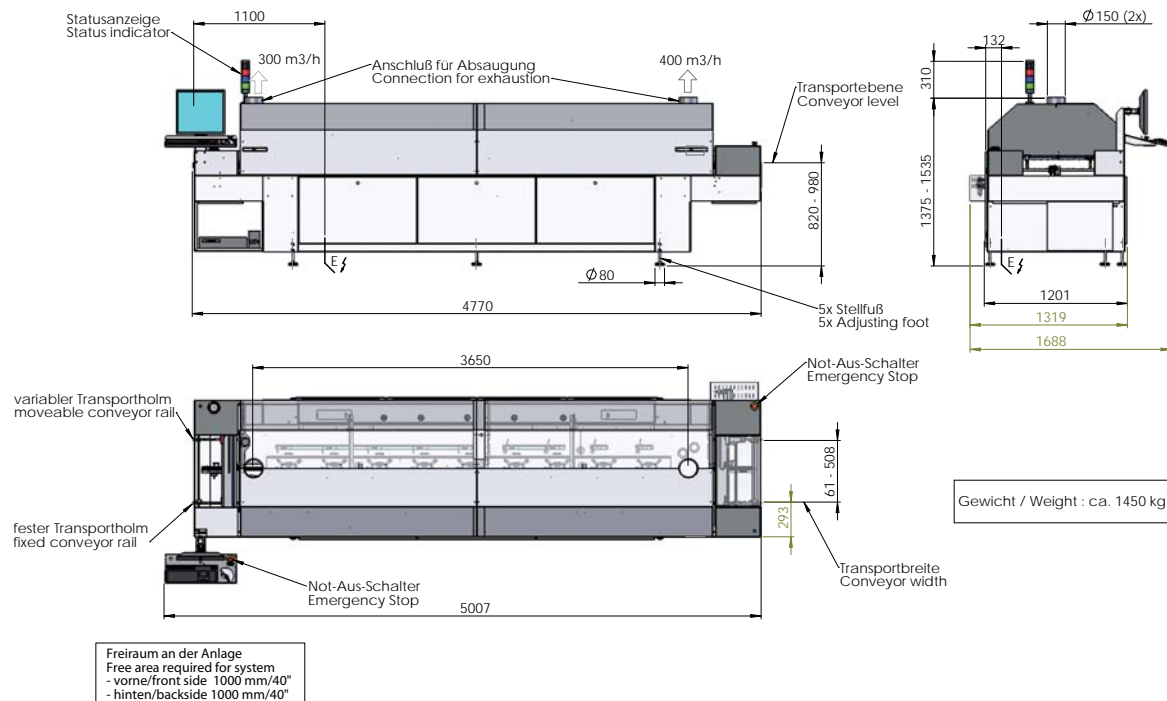
Ersa Autoprofiler:  
Easy offline profiling for  
highest machine uptimes.



Integrated Bluetooth wireless  
module, Data transmission and  
display in real-time.



Only high quality materials are  
used, also in the basic system.



Freiraum an der Anlage  
Free area required for system  
- vorne/front side 1000 mm/40°  
- hinten/backside 1000 mm/40°

Dimension (Basic machine):	
Length:	4,770 mm
Width:	1,201 mm
Height:	1,375 – 1,535 mm
Height (open):	1,705 – 1,865 mm
Weight:	approx. 1,450 kg
Paint:	RAL 7035/7016

Conveyor system:	
Working width:	45 – 516 mm
Working width (PCB center support):	45 – 516 mm
Board clearance (standard):	+35/-37 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, 5 mm)

Process zone:	
Process length:	3,345 mm
Heating zone:	2,610 mm
Cooling zone:	735 mm
Infeed/Outfeed zone:	630/775 mm
Process chamber width:	approx. 700 mm

Heating system:	
Convection share:	100 %
Gas flow/module:	approx. 500 m³/h, adjustable
Convection modules:	7 top/7 bottom
■ Preheating:	5 top/5 bottom
■ Soldering zone:	2 top/2 bottom
Nominal rating per module:	3,3 kW
Nominal rating last module:	4,5 kW

Cooling:	
Cooling zone:	2-stage version
Coolant:	air
Ambient temperature:	max. 32 °C (90 °F)

Safety devices:	
■ 1 main switch	
■ 2 x Emergency-Stop buttons	
■ 2 x exhaust monitors	

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 80 A
Nominal rating:	69 kW
Reduced rating:	33 kW
Continuous rating for operation	ca. 11 – 14 kW

Exhaust rating:	
Exhaust stacks:	2 stacks, 150 mm (6") ø each
Exhaust volume:	feeding: 300 m³/h discharge: 400 m³/h
Exhaust monitoring per stack:	integrated

Noise level:	
Permanent noise level:	< 65 dB (A)