



Economically priced reflow system for maximum quality and minimal manufacturing cost

The HOTFLOW 3/20e is the newest reflow system in the Ersas HOTFLOW family, 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". By being part of the name of the product, it underlines the importance ersa has put on the economic efficiency during the development of the system.

For designing the system, Ersas was able to draw on their extensive know-how and a hoard of experience gained during the 25 years of Ersas's excellent track record in building reflow systems. Numerous economical and technical solutions could be ideally combined, without compromising in any way the reliability and uptime of the system. At the same time, the high-grade materials and proven components expected to be found in Ersas equipment are specified, yet, should a component fail, the necessary ease of access to repair and service is available to facilitate these services.

There was no compromise made in the selection of the controller. The HOTFLOW 3/20e is equipped with a premium PLC controller, and it offers a PC with Windows 7 operating system as the 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 3/20e enthruses not only because of its technical features and performance, but also on account of its very attractive price. Considering it all, and taking it together with its 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
- Job management

Unique Technology Advantages:

- Dual track transport increases throughput
- Optimized heat transfer, minimized ΔT , zone separation
- Internal cooling
- Lowest energy consumption
- Removable heating modules top and bottom
- Extreme low-mass center support

Features Ersas HOTFLOW 3/20e

Bottom-side preheating, 7 convection modules	■
Soldering, 3 convection modules top/bottom	■
Cooling, 3 convection modules	■
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 ΔT , Zone Separation



Low-mass center support



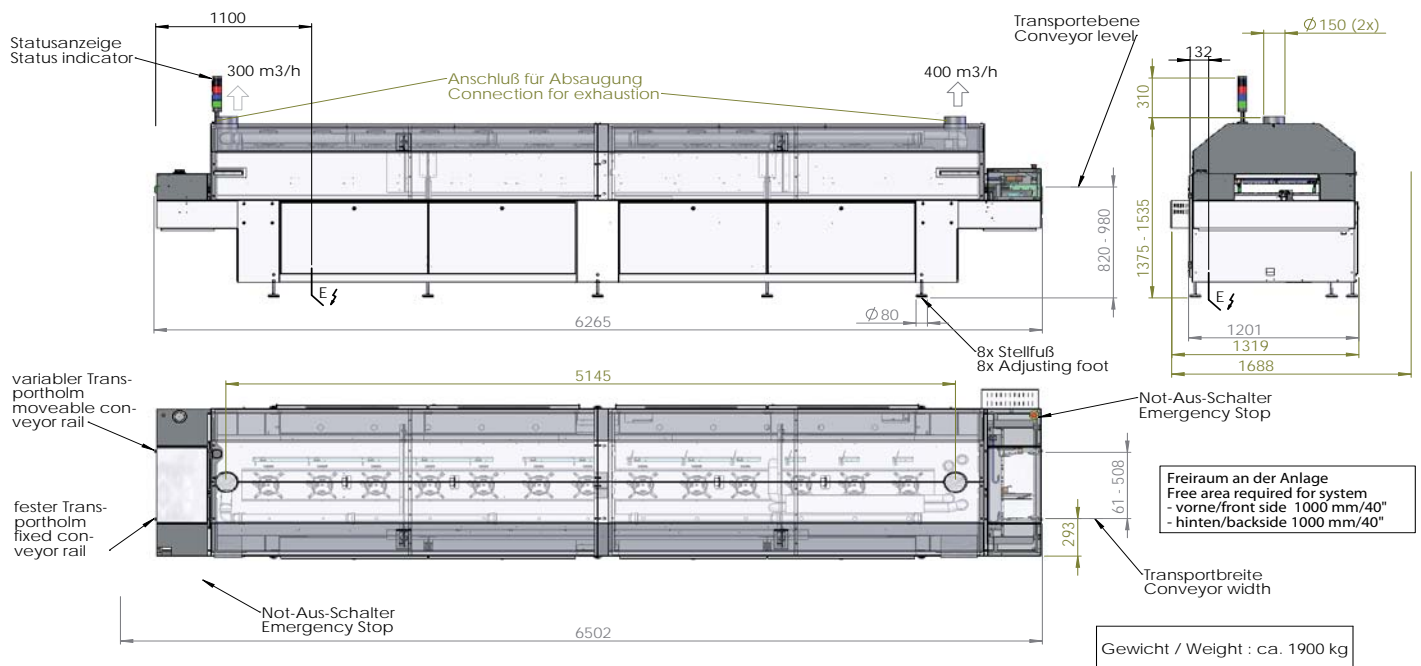
Ersas Autoprofiler:
Easy offline profiling for
highest machine uptimes.



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



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



Dimension (Basic machine):	
Length:	6,265 mm
Width:	1,201 mm
Height:	1,375 – 1,535 mm
Height (open):	1,705 – 1,865 mm
Weight:	approx. 1,900 kg
Paint:	RAL 7035/7016

Conveyor system:	
Working width:	45 – 516 mm
Working width (PCB center support):	45 – 516 mm
Working width (PCB center support):	+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:	4,840 mm
Heating zone:	3,725 mm
Cooling zone:	1,115 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:	10 top/10 bottom
■ Preheating:	7 top/7 bottom
■ Soldering zone:	3 top/3 bottom
Nominal rating per module:	3,3 kW
Nominal rating last module:	4,5 kW

Cooling:	
Cooling zone:	3-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:	92 kW
Reduced rating:	44 kW
Continuous rating for operation:	12 – 16 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)