

# A new era for Reflow.

## **NEW: HOTFLOW THREE**

The Best Reflow Performance in every Aspect:  
Quality. Efficiency. Flexibility. Cleaning. Connectivity.



GLOBAL. AHEAD. SUSTAINABLE.



Unique efficiency: the SCPU® motor and control units were developed exclusively for Ersas

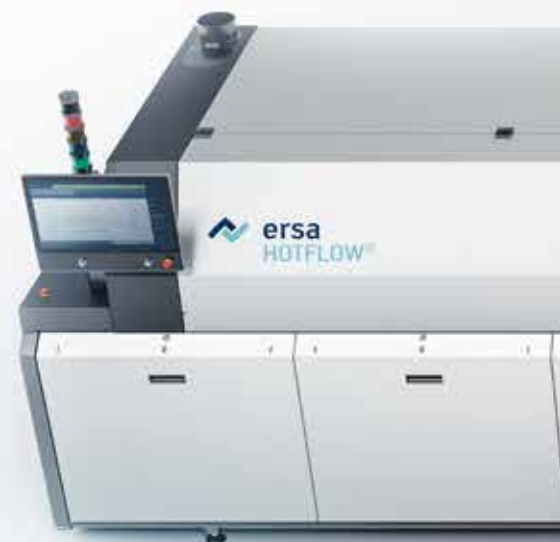
With the HOTFLOW THREE, Ersas makes a clear statement for even more quality in soldering. Absolutely unique selling point is the SMART CONVECTION POWER UNIT (SCPU®). The motor and control unit which has been developed exclusively for Ersas ensures an optimized soldering profile and thus an even better soldering result. Single zones can be controlled individually, which enables perfect alignment with the requirements of material and solder paste.

In addition, the SCPU® only consumes the power it actually requires – just like cooling zones and the installed high-performance cooling unit. Absolutely precise injection and monitoring of nitrogen reduces consumption to a minimum.

The result is further enhanced machine availability coupled with maximum productivity, short maintenance times and intuitive operation via ERSASOFT 5 – while keeping consumption low.

#### Features

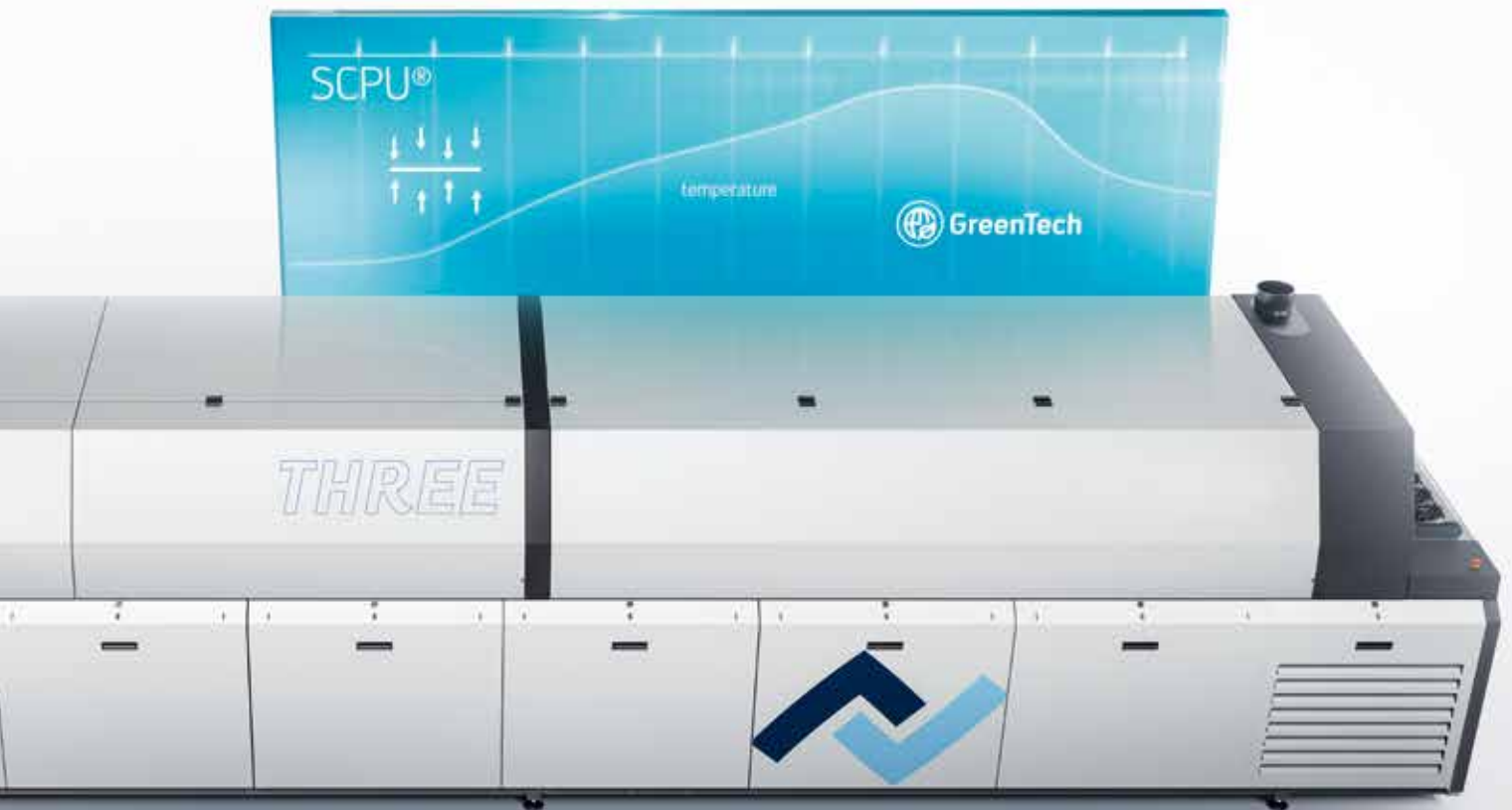
- Setting the Benchmark in reflow soldering
- Better performance
- Lower energy consumption
- Sustainable production



# Ultimate Soldering Quality.

## **HOTFLOW THREE**

The new, unique SMART CONVECTION POWER UNIT (SCPU®) provides previously unknown soldering quality.



# Increasing Productivity. Decreasing Consumption.

## **HOTFLOW THREE**

The precisely coordinated interaction of the new motor and control unit is highly efficient and only consumes energy when required.



## Intuitive User Interface and Precise Industry 4.0 Data.

### **HOTFLOW THREE**

Excellent user interface for easy operation and exact process data.



Award-winning ERSASOFT 5 user interface provides easy machine operation and Industry 4.0 data

The HOTFLOW THREE is easy to operate! The industrial PC with touch screen and the intuitive ERSASOFT 5 make the solder program creation and management extremely convenient and future-proof. With the new SMART CONVECTION POWER UNIT, which was exclusively developed for Erska, the HOTFLOW THREE delivers exact process data from every single zone.

#### **Connectivity: Kurtz Erska Connect**

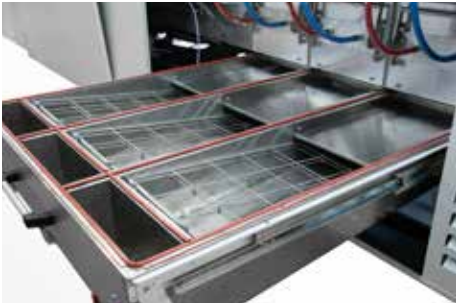
With Kurtz Erska GATE, the THREE has Industry 4.0 on board. The gateway ensures reliable, standardised connections between Erska systems and the world outside - including communication between cloud, applications and systems. It processes the obtained measurement data and information and transmits them safely to the Kurtz Erska Cloud or optionally directly to your MES system.

#### **Features**

- Maximum usability
- User-friendly industry PC with touch GUI
- Easy MES integration due to standard interfaces
- Real-time data due to standardization
- Traceability (process information)



Intelligent features make machine maintenance super easy



Just like the other components of the Ersa SMART Cleaning system, the SMART CONDENSATION UNIT is quick and easy to access

### Ersa THREE stage cleaning system

Another highlight is the innovative cleaning system with SMART ELEMENTS® filter which provides for better handling, longer service life and extended maintenance intervals – or in short: for an increased overall equipment effectiveness (OEE). In the preheating zone, residues are reliably collected, while the SMART PYROLYSIS CLEANER in the peak zone is designed for maximum removal of particle residues. In the cooling zone, the SMART CONDENSATION UNIT is for collection the condensate in a effective way.

### Features

- Less maintainance
- Outstanding overall equipment effectiveness
- Higher throughput and performance
- Fast cooling/profile change





It goes on and on and on.

**HOTFLOW THREE**

Incredible OEE due to the patented, three stage cleaning system with complete accessibility.

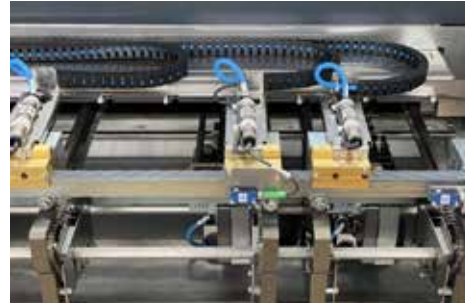


# Flexibility that fit your needs.

**HOTFLOW THREE**  
Various configurations and optional features always ensure the right system.







Single track or THREE variable dual track conveyor systems are available for HOTFLOW THREE

HOTFLOW THREE, available with 16, 20 or 26 heating zones, offers single track and variable dual track systems for PCB widths of up to 650 mm (single track) or up to 2x 300 mm or 510 mm width (dual track). All versions come with a center support, which can be optionally activated or deactivated.

The HOTFLOW THREE is also convincing when it comes to maintenance – service for the cooling zone and cleaning of the filter systems is easy and carried out via the front.

#### Features

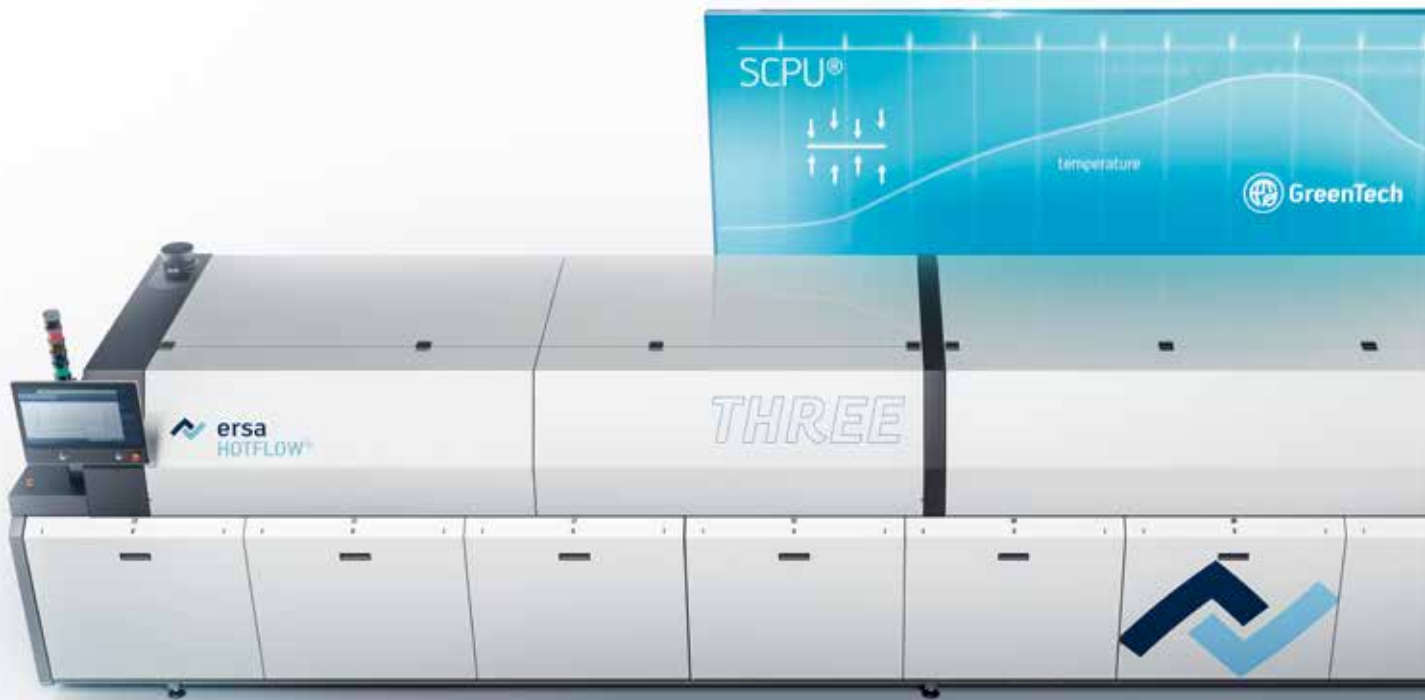
- Flexible conveyor system
- Nitrogen flexibility



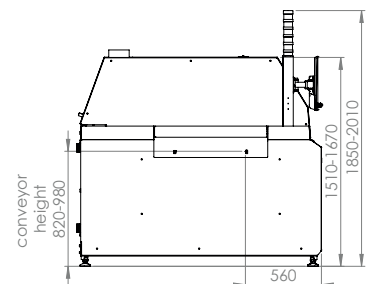
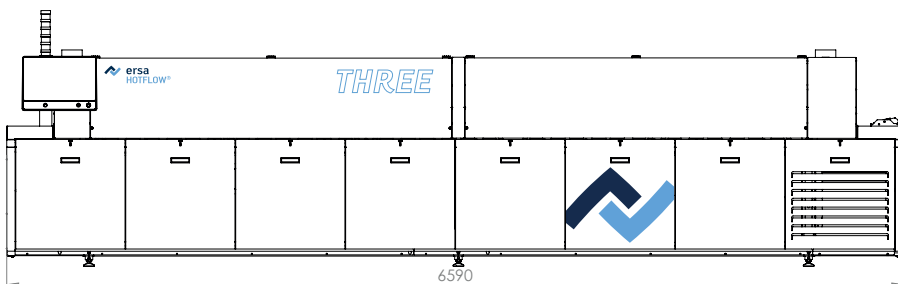
Exemplary visualisation of single or dual track transport and centre support.

## Basic configuration    Technical Highlights

- SCPU®
  - SMART CONDENSATION UNIT
  - Single Track – max working width 510 mm (650 mm optional)
  - Programmable width adjustment
  - Industry-PC with ERSASOFT 5
- Optimal soldering quality, no matter how complex the assembly, no matter how demanding the components
  - SMART CONVECTION POWER UNIT (SCPU®)
  - Higher productivity with lower/minimized energy consumption
  - Longer maintenance intervals due to innovative three-fold cleaning system
    - SMART ELEMENTS®
    - SMART PYROLYSIS CLEANER
    - SMART CONDENSATION UNIT
- Super maintenance friendly and easy to access components minimize downtimes
  - Intuitive ERSASOFT 5 software platform



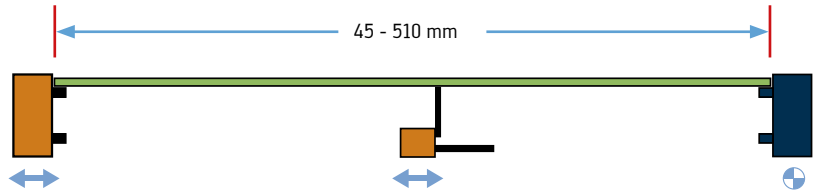
## HOTFLOW THREE 20



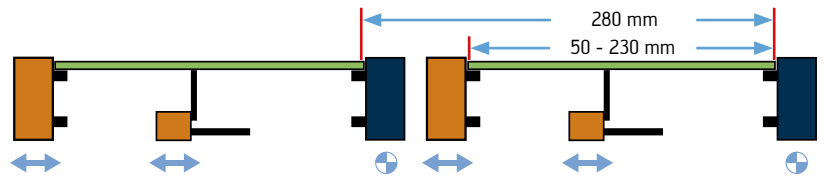


## Conveyor systems from single to dual track and with up to two different speeds

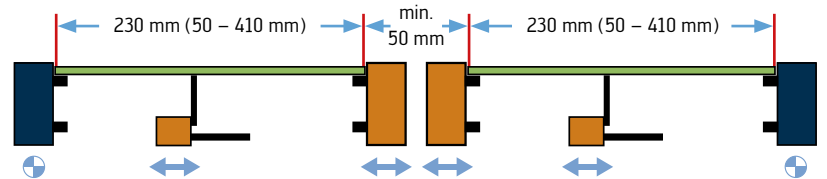
Single track: 1 center support and 1 rail variable – working width 510 mm



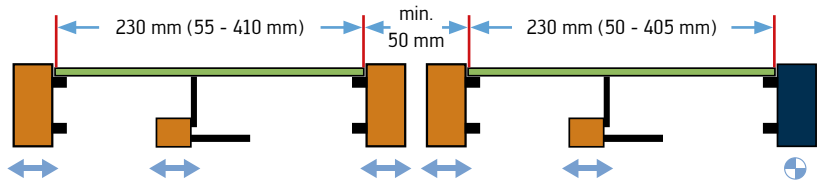
Dual track: 2 center supports and 2 rails variable



Dual track: 2 center supports and 2 rails variable

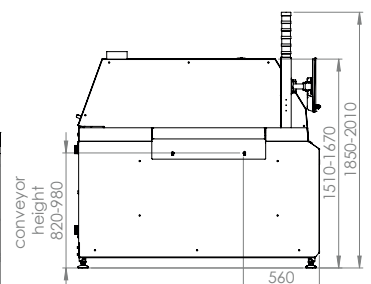
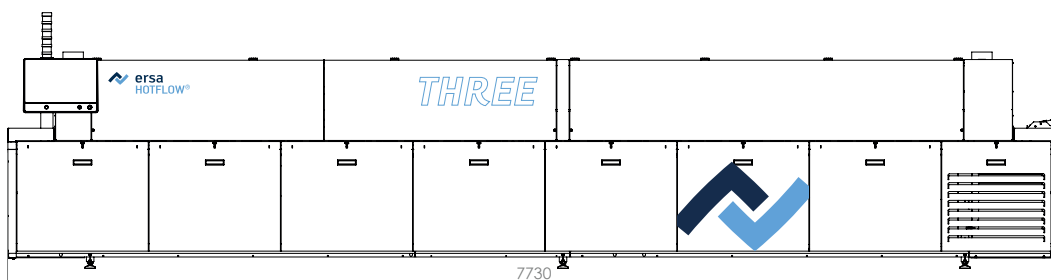


Dual track: 2 center supports and 3 rails variable



**HOTFLOW THREE 26**

**HOTFLOW THREE 16**  
from Summer 2022!



# HOTFLOW THREE – Technical Data

Dimensions (basic machine)	HOTFLOW THREE 16	HOTFLOW THREE 20	HOTFLOW THREE 26
Length x Width x Height*	5.65 m x 1.77 m x 1.62 m	6.60 m x 1.77 m x 1.62 m	7.73 m x 1.77 m x 1.62 m
Weight	3.500 kg	4.000 kg	4.500 kg
<b>Process zone</b>			
Heating zones	8 top/bottom	10 top/bottom	13 top/bottom
Heating length	3 m	3.8 m	5.0 m
Cooling zones	3 top/bottom	3 top/bottom	3 top/bottom
Cooling length	1.17 m	1.38 m	1.38 m
<b>Conveyor system</b>			
Conveyor width**	50 - 510 (650) mm	50 - 510 (650) mm	50 - 510 (650) mm
Dual track	2x 50 - 230 (300) mm	2x 50 - 230 (300) mm	2x 50 - 230 (300) mm
Board clearance	+/- 35 mm	+/- 35 mm	+/- 35 mm
Conveyor speed	20 - 200 cm/min	20 - 200 cm/min	20 - 200 cm/min
Conveyor height from floor	830 - 970 mm	830 - 970 mm	830 - 970 mm
Pin-and-chain conveyor	3-4-5 mm	3-4-5 mm	3-4-5 mm
<b>Nitrogen option</b>			
N2 pressure control	5 - 10 bar	5 - 10 bar	5 - 10 bar
<b>Cooling</b>			
Cooling zone	3 Zones with water cooling	3 Zones with water cooling	3 Zones with water cooling
Cooling type	Internal chiller, external or internal chiller and external		
<b>Electrical data</b>			
Power	5 wire system 3 x 400 V, N, PE	5 wire system 3 x 400 V, N, PE	5 wire system 3 x 400 V, N, PE
Frequency	50/60 HZ	50/60 HZ	50/60 HZ
Max. fuse rating	3 x 63 A	3 x 80 A	3 x 100 A
Max power	111 kW	128 kW	156 kW
Reduced power	33 kW	44 kW	55 kW
<b>Exhaust</b>			
Exhaust stacks	2 x 150 mm	2 x 150 mm	2 x 150 mm
Volume per stack	400 m <sup>3</sup> /h	400 m <sup>3</sup> /h	400 m <sup>3</sup> /h
<b>Noise level</b>			
Noise Level	<62 dB (A)	<62 dB (A)	<62 dB (A)

\*Conveyor height 830-970mm, \*\*with and without center support

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