

# VERSA FLOW



## ERSA VERSAFLOW 4 CORE EDITON

Available models: ELITE, ELITE PLUS or PRO.



## Flexibility for electronics production

### Ersa VERSAFLOW 4 CORE EDITION

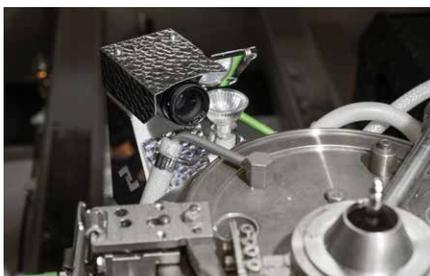
The machines of the VERSAFLOW 4 CORE EDITION are built to match large-scale series production with little product changes (high volume, low mix) as well as to manufacturing small lots incorporating frequent product changes (high mix, low volume).

With different configurations available, the modular inline systems of the VERSAFLOW 4 CORE EDITION are easy to adapt to customer requirements. The flux module incorporates a precision

spray fluxer with an integrated spray test function that performs cyclical functional checks, ensuring a safe, automated process.

IR emitters and convection heaters make up the heating module of the VERSAFLOW 4 CORE EDITION, so that safe, efficient, and even warm-up of complex electronic assemblies is ensured, as well. The VERSAFLOW 4 CORE EDITION is available with one soldering module which can be equipped with a single or dual solder pot.

Alternatively, it can also be supplied with two solder modules each consisting of a single solder pot. This provides users with flexibility for a wide range of applications, minimizes setup times, and increases efficiency in electronics manufacturing. Thanks to the VERSACAM process monitoring camera, the soldering process can also be tracked in detail, allowing quality to be verified in real time.



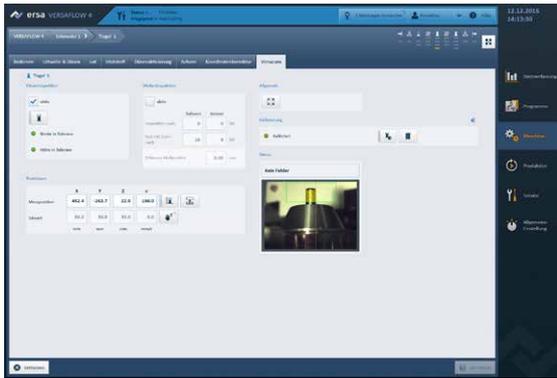
VERSACAM



Automatic nozzle activation



Automatic wave height adjustment



ERSASOFT 5

The intuitive ERSASOFT 5 machine software offers end-to-end process monitoring and visualization. It reduces parameter configuration times and provides complete process data management. The software documents all process- and machine-related data and offers interface options for traceability.



Flux module with spray fluxer



Infrared emitters in the heating module



Solder module with dual solder pot

#### Basic configuration:

- Precision spray fluxer with spray test function and flux level monitoring
- Bottom-side IR preheater and top-side convection heater
- Continuous roller conveyor with programmable conveyor width adjustment
- max. PCB size 508 x 508 mm
- Process visualization incl. process monitoring with VERSACAM
- Solder pot with electromagnetic solder pump, automatic solder wire feeder and nozzle activation
- Solder level and solder wave monitoring



Further information



A future-proof investment – technology and services from the global market leader



Selective soldering system for inline production concepts



Intuitive operating concept with ERSASOFT 5



Assembly sizes up to 508 x 508 mm



Short delivery times to meet dynamic market demands



## Machine with one single-pot solder module

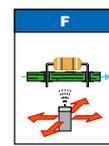
### VERSAFLOW 4 CORE ELITE

#### Configuration:

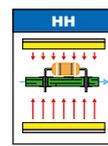
- Programmable conveyor width adjustment
- Increased PCB bottom-side clearance, 80 mm
- Pressure monitoring of flux storage tank
- Stainless steel spray head, 130 µm
- Preheating with bottom-side IR emitters and top-side convection heater
- Failure monitoring for IR emitters
- Automatic solder wire feeder
- Nozzle activation
- VERSACAM
- High-performance PC for VERSACAM
- Video monitor
- SMEMA inline interface for infeed
- SMEMA inline interface for outfeed
- Kurtz Ersa CONNECT BASIC one-year license
- Accessory package for VERSAFLOW 4 CORE EDITION

#### Option:

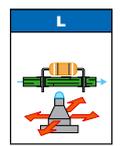
- Solder module with top-side convection heating



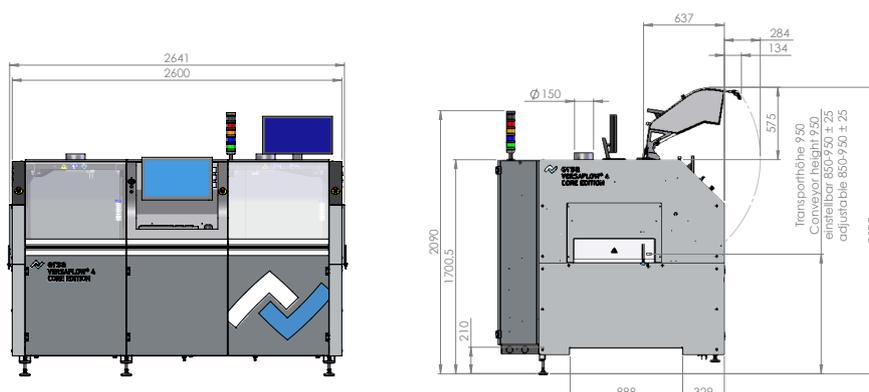
Flux module with spray fluxer



Preheat module with bottom- and top-side heating



Solder module with single pot





# Machine with one dual-pot solder module

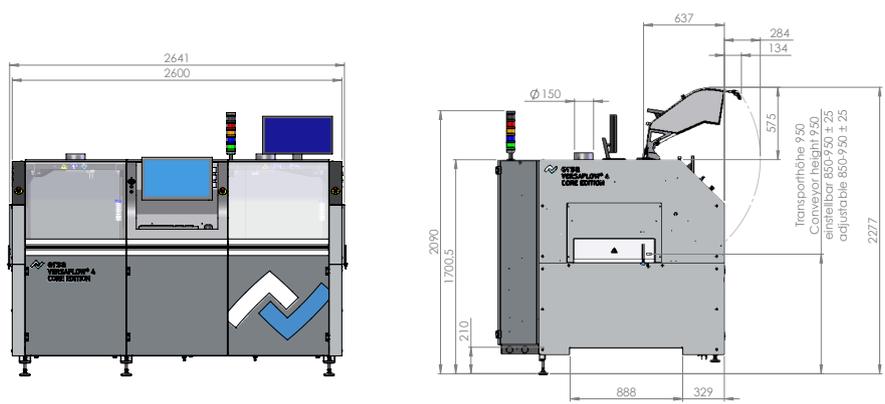
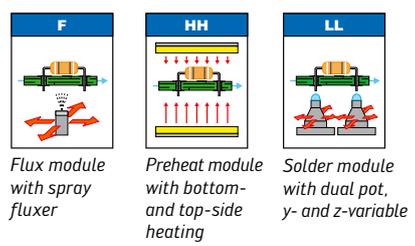
## VERSAFLOW 4 CORE ELITE PLUS

### Configuration:

- Programmable conveyor width adjustment
  - Increased PCB bottom-side clearance, 80 mm
  - Pressure monitoring of flux storage tank
  - Stainless steel spray head, 130 µm
  - Preheating with bottom-side IR emitters and top-side convection heater
  - Failure monitoring for IR emitters
  - Solder module with dual pot, y- and z-variable
  - Automatic solder wire feeder
  - Nozzle activation
- VERSACAM
  - High-performance PC for VERSACAM
  - Video monitor
  - SMEMA inline interface for infeed
  - SMEMA inline interface for outfeed
  - Kurtz Ersa CONNECT BASIC one-year license
  - Accessory package for VERSAFLOW 4 CORE EDITION

### Option:

- Solder module with top-side convection heating





# Machine with two single-pot solder modules

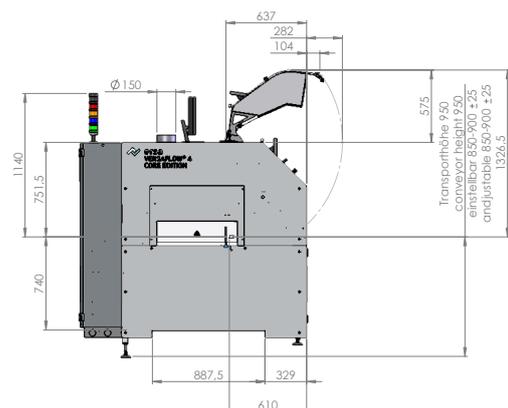
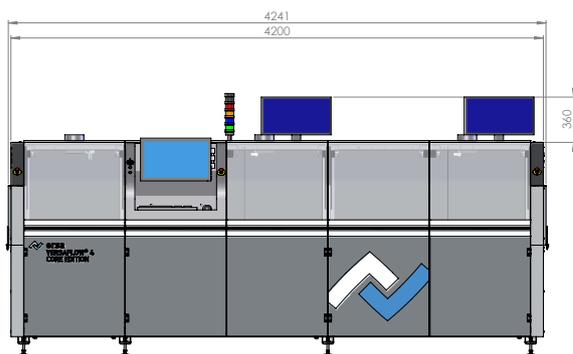
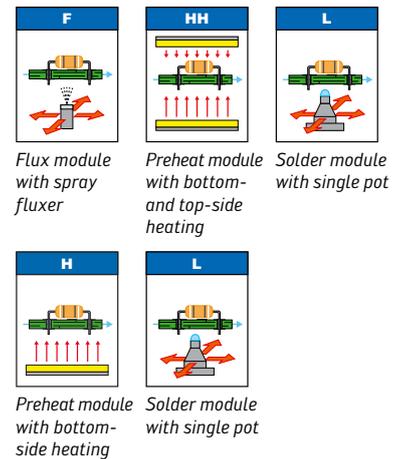
## VERSAFLOW 4 CORE PRO

### Configuration:

- Programmable conveyor width adjustment
- Increased PCB bottom-side clearance, 80 mm
- Pressure monitoring of flux storage tank
- Stainless steel spray head, 130 µm
- Preheating with bottom-side IR emitters and top-side convection heater in front of solder module 1
- Failure monitoring for IR emitters
- Automatic solder wire feeder
- Nozzle activation
- VERSACAM, solder module 1
- High-performance PC for VERSACAM
- Preheating with bottom-side IR emitters in front of solder module 2
- Extension for a second solder module
- Automatic solder wire feeder, module 2
- VERSACAM, solder module 2
- Video monitor
- SMEMA inline interface for infeed
- SMEMA inline interface for outfeed
- Kurtz Ersä CONNECT BASIC one-year license
- Accessory package for VERSAFLOW 4 CORE EDITION

### Options:

- Solder module 1 with top-side convection heating
- Top-side convection heater in front of solder module 2
- Solder module 2 with top-side convection heating



# VERSAFLOW 4 CORE EDITION – technical data

Dimensions (basic machine)	with 1 solder module	with 2 solder modules
Length	2,600 mm	4,200 mm
Width	1,785 mm	1,785 mm
Height	1,700 mm	1,700 mm
Weight	1,500 kg	1,900 kg
Power consumption	approx. 35 kW	approx. 50 kW
Type	inline	
PCB loading	manual/automatic	
<b>Electrical data</b>		
Power	5-wire system, 3 x 230/400 V, N, PE	
Power tolerance range	±6 %, -10 %	
Frequency	50/60 Hz	
Rated power	22 kW	
Rating	max. 45 A	
<b>Conveyor system</b>		
Type	Roller conveyor	
PCB width	50 – 508 mm	
PCB length	127 – 508 mm	
Clearance from PCB edge	3 mm	
PCB top-side clearance	max. 120 mm	
PCB bottom-side clearance	max. 80 mm	
Conveyor speed	0.2 – 15 m/min	
PCB weight	8 kg	
<b>Flux module</b>		
Type	precision spray flux system	
Positioning system	2 axis, servo-motor driven	
Flux storage tank	1.8 l	
Positioning speed	1 – 400 mm/s	
Flux speed	20 mm/s	
Accuracy	±0.15 mm	
Spray width	2 – 8 mm (130 µm)	

<b>Vorheizen</b>	
Type	bottom-side IR, top-side convection
Power	12 kW per IR emitter, 5 kW convection
Temperature	200 °C
<b>Nitrogen technology</b>	
Nitrogen supply	to be supplied locally
Nitrogen injection	N2 cover over the solder bath
Required pressure	max. 6 bar
Consumption	1.5 m³/h per pot
Particle cleanliness	5.0 (recommendation)
<b>Miniwave solder module</b>	
Solder wave height	max. 5 mm
Clearance from PCB edge	min. 3 mm
Solder volume	approx. 14 kg (Sn63Pb) approx. 13 kg (lead-free)
Solder temperature	max. 330 °C
Warm-up time	75 min to 280 °C
Positioning speed	x/y; 2 – 200 mm/s
Soldering speed	10 mm/s
Positioning accuracy	±0.15 mm
<b>Compressed air</b>	
Compressed air supply	to be supplied locally
Required pressure	max. 6 bar
Consumption	< 5 m³/h
<b>Exhaust rating</b>	
Exhaust stacks	2 pcs., OD 150 mm
<b>Exhaust volume</b>	
per stack	300 m³/h
<b>Environmental specs/noise level</b>	
Ambient temperature	15 – 35 °C
Noise level	< 65 dB (A)



Premium services from the world market leader

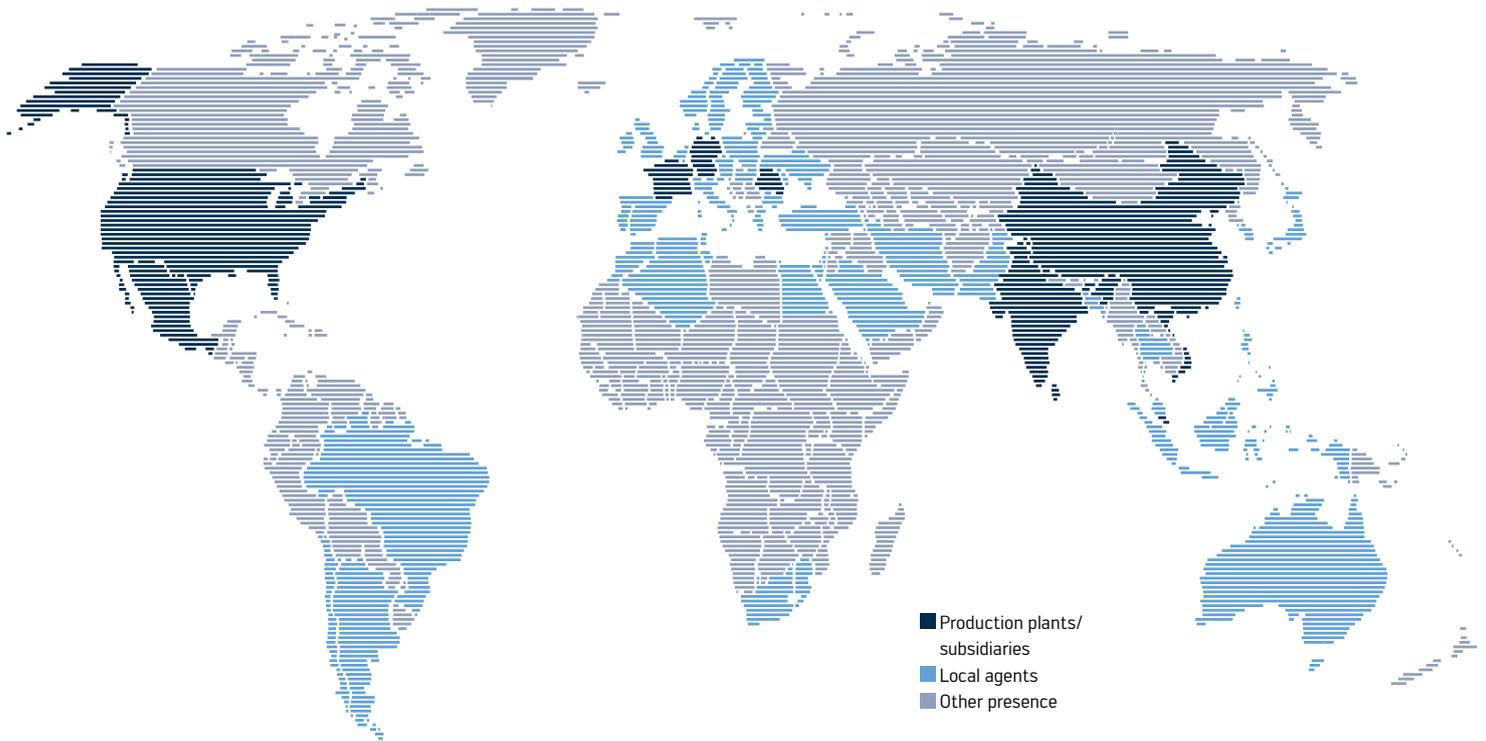
We are always there, wherever you need us.

further information online:



# ELECTRONICS PRODUCTION EQUIPMENT

Worldwide presence



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