

N-Wave 330

Wave soldering system for high requirements!



The nitrogen wave soldering system for medium size applications

The ERSA N-Wave 330 is a microprocessor controlled nitrogen wave soldering system meeting highest requirements concerning solder quality and PCB purity. It represents state-of-the-art technology and can be operated with lead-free solders and VOC-free fluxes.

The intelligent low-maintenance spray fluxer is an integrated part of the basic system. Automatic recognition of the PCB size, flux deposition according to component requirements and flux supply from the original tank are only some of the ERSA ESF spray fluxer's features. Due to its modular design, the preheating zone can flexibly be made up of convection heaters, IR emitters or fast acting dynamic heaters. All units can be controlled independently.

Preheating zone, solder module and transfer conveyor of the N-Wave 330 are covered with a complete nitrogen tunnel. The entire process zone is optimally visible through heat insulated safety glass windows. The nitrogen tunnel's special design provides a homogenous N₂ atmosphere -

an optimum prerequisite to obtain perfect solder quality at the lowest possible nitrogen consumption.

Innovative new solder nozzles (e.g. ERSA PowerWave) allow for a range of computer-programmable adjustments to application and flow properties. These nozzles also ensure an optimum wave contact time, even at higher conveyor speeds. Both solder nozzles can be quickly and easily removed from the solder bath via quick couplings. The entire solder module is made of stainless steel and can be raised with a motor for maintenance purposes. To process solder pallets the N-Wave 330 is equipped with a chain conveyor which is guided on both sides.

The N-Wave 330 is an inline wave soldering system and available with the complete peripheral equipment necessary for the integration in an automatic production line. A PC interface together with the ERSAsoft software provides increased user-friendliness and enables complete visualization and documentation of all process parameters.

Features ERSA N-Wave 330

● Standard ○ Option

Spray fluxer / maintenance unit for compressed air	●	Refill stack for solder bars	●
Nitrogen option including armatures and supply lines	●	Interchangeable solder pots	○
Residual oxygen monitoring and control	○	Intervall operation of all aggregates	●
Medium wave preheaters	●	Chain system	●
Short-wave ceramic heaters	●	PC interface and ERSAsoft	○
Dynamic preheater / convection preheater	○	PC swing arm complete with Pentium PC	○
Lead-free double wave solder module with complete nitrogen cover	●	Barcode reader / synchronous code	○
SMD solder nozzle / final solder nozzle	●	Interior hood lighting / status indication light	●
Power Wave	○	Exhaust control / Emergency-Stop button	●
Automatic solder bath retraction	●	Peripheral equipment / board handling systems	○
Solder level monitoring / solder bar feeder	○	Microprocessors control	●



ERSA product range

Soldering tools

- NEW DIMENSION
- PROFI-LINE
- IR-Rework
- CLEAN-AIR

Soldering systems

Wave soldering

- ETS-line
- EWS-line

- N-Wave-line

Reflow soldering

- HOTFLOW 2/12
- HOTFLOW 2/14
- HOTFLOW 2/20
- HOTFLOW 2/24
- Hotflow line
- ERS 250
- ERS 260

Selective soldering

- VERSAFLOW
- VERSAFLOW line
- Highspeed
- Multiwave
- ECOSELECT 250
- ECOSELECT 350
- Place & Solder
- EAS-line

Process optimization

- EPOS 1

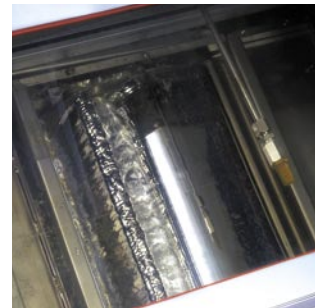
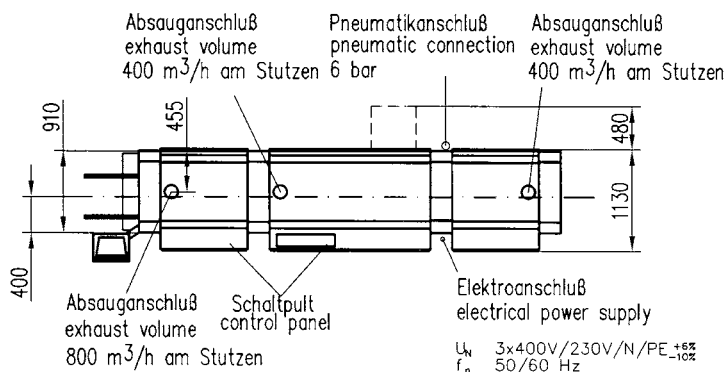
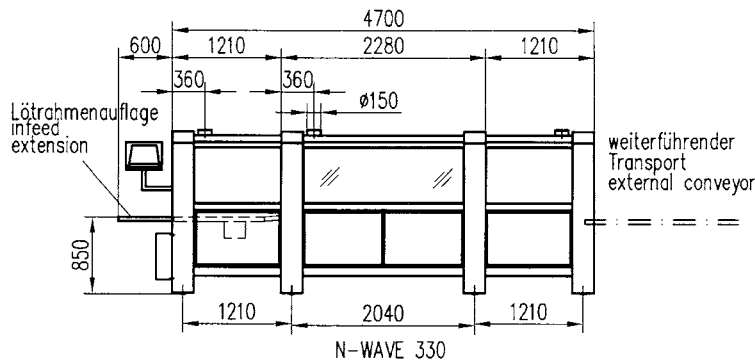
Inspection systems

- ERASCOPE
- ImageDoc Software

Other services

- Know-how seminars
- In-House trainings
- Test soldering
- Installation and maintenance assistance
- Process support

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Working width:

With solder pallet conveyor: 330 mm (13")
 With finger conveyor: up to 300 mm (13")
 (further working widths on request)

Solder module:

Type: double wave solder module
 Solder volume: approx. 390 kg (860 lb.) SnPb 64\36
 approx. 335 kg (739 lb.) lead-free alloy
 Warm-up time: approx. 2.5 h

Preheating length: 1,000 mm (39.4")

Conveyor system:

Conveyor speeds:
 with solder pallet conveyor:
 0.3 - 2.5 m/min (1 - 8 ft/min)
 with chain conveyor: 0.3 - 2.5 m/min (1 - 8 ft/min)
 Conveyor angle with solder pallet conveyor: 7°
 Conveyor angle with finger conveyor: 7°

Dimensions:

Length: 4,700 mm (185")
 Width: 1,130 mm (44.5")
 Height: 1,820 mm (71.7")
 Weight: 1,300 kg (2,866 lb.)

Paint:

RAL 7035 / RAL 7016

Nitrogen technology:

Nitrogen specification:
 approx. 35 m³/h (1,236 ft³/h) at 6 bar (87 PSI)
 Nitrogen consumption: 15 - 20 m³/h (424 - 706 ft³/h)

Exhaust rating:

Exhaust stack: \varnothing 150 mm (6")
 Exhaust rating: 800 m³/h (28,251.5 ft³/h) at the fluxer
 Exhaust rating: 400 m³/h (14,125.7 ft³/h) at the outfeed

Electrical data:

Voltage: 5-wire-system, 3 x 400 V, N, PE
 Power tolerance range: + 6%, - 10%
 Frequency: 50 or 60 Hz
 Power consumption: 21 - 40 KW
 Max. fuse rating: 3 x 80 A (slow blow)

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