PSE 300 HD

PowerSpray®
CWA®Drying
ClosedLoop
WaterFree
WEEE Compliant

Fully automatic single chamber PowerSpray®-system with 2step process (cleaning / rinsing, drying)

Cleans Screens, stencils, solder carriers, misprints from SMD paste, flux, varnish, oil, dust, grease

Capacity: Screens, stencils, frames and carriers up to a size of 780 x 840 mm (31" x 33")

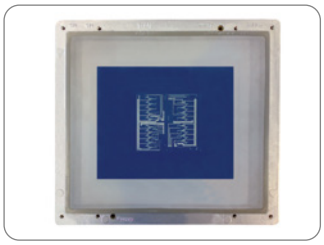
Part number: 0905PSE3HD-2

ENERSAVE EASOTECH SAFEGAR

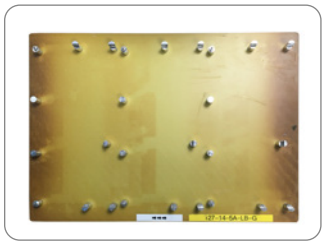
Certifications:
This water free operating system was certified in its basic version for its energy saving processing and for the standard integration of comprehensive safety features.

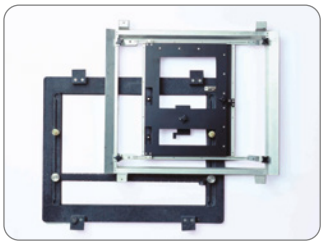
- Mono-tank compact system with two tank function and communicating detergent
- Waterless / independent, no water / waste water connection necessary
- Comfortable push one button operation
- Fully automatic 2step process: cleaning / rinsing, drying with HotSpeed warm air
- Vertical rotor system with two asynchronous spray rotors for thorough wetting (no blind spots)
- Optimally suited (with option DeSealing) for the cleaning of coating carriers sealed with **kolb** CarrierSeal®
- Process and service intervals PLC controlled, event issuing and software control via 3,5" touch screen
- Process sections made of electrolysis and high temperature resistant elements
- Safe installation close to the production line possible; no special protection required
- Extremely compact - maximum capacity on a very small footprint

Key applications


Screens

Stencils


CarrierSeal® sealed coating carriers


Solder carriers

The **kolb** PSE economy line is a quality series of advanced cleaning systems, which focuses on all essential criteria for a qualified cleaning process and therefore stands for attractive purchase prices.

kolb PSE 300 HD is an extremely compact first-rate performance PowerSpray® system designed and manufactured in Germany for smaller quantities with very short cycle times due to an intelligent 2step process with HotSpeed warm air drying. PSE 300 HD delivers best possible cleaning of screens, stencils, misprints and solder frames, today a prerequisite for reproducible quality in production, the reduction of expensive production stand-stills and as well for high customer satisfaction.

Ideally suited as a cost-effective system especially for the easy, quick and thorough cleaning of coating residues from carriers protected with the innovative **kolb** CarrierSeal® sealing.

The cleaning system can be operated with all common electronics cleaning supplies (detergents / chemistry, etc.) which are approved by the manufacturer.

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Part number: 0905PSE3HD-2

Application overview

Optional suitable

- Assembled PCBs
- Hybrids
- Misprints

Most suitable

- Stencils
- Screens, PumpPrints
- Misprints

Optional suitable

- Solder carriers
- Solder masks
- Coating carriers

Not suitable

- ESD Boxes
- Containers
- Magazines

Not suitable

- Condensation traps
- Filters
- Steel sheets

Optional suitable applications can also be optimally realized with the appropriate options.

Cleaning / rinsing (key process 1): From the system tank a communicating cleaning and rinsing liquid is sucked by a magnetically coupled pump unit and routed with a controllable volume flow into the ASYNCHRO® spray rotors with patented PUSHFORCE® nozzles. Their geometry ensures a comprehensive and thorough cleaning, even in inaccessible and critical aereas. The liquid is continuously filtered in circulation, so that the system progressively enters the rinsing process after removing the contamination.

Drying (key process 2): Drying is carried out by a HotSpeed warm air unit with fan and heating coil in a single air duct. The residual moisture on the product is evaporated at 40 - 45 ° Celsius (104 - 113 °F).

Cycle time: < 30 min., depending on contamination and detergent

Maintenance: The system has two large maintenance doors on the right and left side. The maintenance room contains, among other things, the pump-off unit, the optional decalcification cartridge with the mixing unit and the optional re-dosage unit with space for a 25 l detergent canister. The tank levels as well as pressure values and maintenance cycles are monitored by the PLC and displayed on the monitor.

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Main standard features

- PowerSpray® technology bundle: magnetically coupled S-Power pump unit, twofold ASYNCHRO® volume-spray rotorsysterm with PUSHFORCE® nozzles
- Magnetic coupled pump unit
- EATON Programmable Logic Controller (PLC)
- High resolution 3.5" touch display
- Full flow coarse filter (process chamber)
- HotSpeed warm air drying
- ClosedLoop reprocessing of cleaning and rinsing fluid
- Safety features: safety interlock on the process chamber door, overheating protection for all heating and drying elements, end switches for all motor-driven valves and drives, personnel protection insulation
- Front cover made of stainless steel, side and rear covers in painted steel
- Process sections made of electrolysis resistant elements

Main options

- Cascaded filter system / Sediment filter for cleaning / rinsing tank
- DeSealing prefix filter unit for the cleaning of coating carriers sealed with **kolb** CarrierSeal®
- Drip & storage reservoir
- Exhaust ontrol
- Full stainless steel housing

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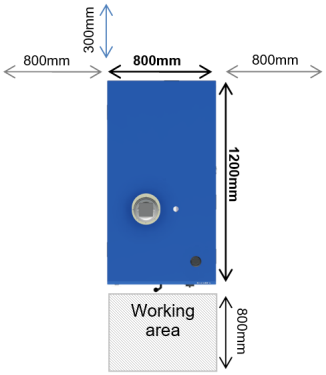
Technical data

Technology base	**kolb** PowerSpray®
Capacity	Screens, stencils, frames, carriers up to 80 x 840 mm (31" x 33")
Process chamber dimensions	W 350 ▪ D 980 ▪ H 920 mm (W 13.77" ▪ D 38.85" ▪ H 36.22")
Tank volume	ca. 75 - 100 l
Power supply	400 V AC, 16 A, CEE plug / 3 Ph / 50 or 60 Hz
Power consumption	2.5 kW
Control system	PLC (Eaton E4 XV102)
Temperature load	up to 55 °C (131 °F)
Filter system	up to four stages - 1. Prefix filter 2. Full flow coarse filter < 2 mm (0.08"), 3. Sediment filter, 4. 20“ fine filter (1 - 100 µm - process dependent)
Exhaust connection	Ø 160 mm (6.3"), exhaust capacity 200 - 300 m³ / h (7,063 - 10,595 ft³ / h)
Footprint	800 x 1,200 mm (31.49" x 47.24")
Operating condition room temperature	20 - 35 °C (68 - 95 °F)
Operating noise	63 dB (A)
Empty weight	330 kg (728 lbs)

Top view



Front view

- Recommended maintenance area
- Space for connections

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