PSE 300 2HD

PowerSpray® · ClosedLoop · WEEE Compliant · RoHS Compliant

Fully automatic two-tank economy system with two separate circuits and ASYNCHRO® double rotor system

Cleans screens, stencils and PumpPrints from SMD paste, SMD adhesive, soldering support substances, oil & dust

Capacity: Stencils, screens up to 780 x 840 mm (31" x 33")

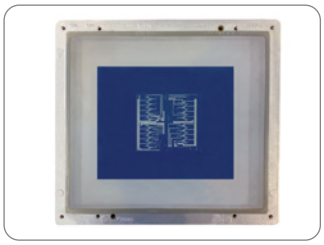
Part number: 0905PSE31HD2

ENERSAVE · WATERSAVE · EASOTECH · SAFEGAR

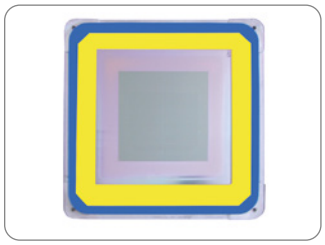
Certifications:
This system in its basic version was certified for its energy and water-saving processing, for easy operability and for the standard integration of comprehensive safety features.

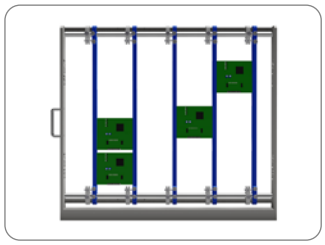
- Two-tank system with two separate circuits
- Comfortable push one button operation
- Fully automatic 3step process: cleaning, rinsing, HotSpeed warm air drying
- Vertical rotor system with asynchronous spray rotors for thorough wetting (no blind spots)
- Short cycle times due to placing the cleaning goods close to the spray rotors
- Water-free operation possible: Due to the separate double tank configuration the system can operate with suitable cleaning / rinsing detergents for rinsing
- Process and service intervals PLC controlled, event issuing and software control via 3,5" touch screen
- Safe installation close to the production line / screen printer possible, no special protection required
- Extremely compact - maximum capacity on a small footprint

Key applications


Screens

Stencils


M-TeCK stencils


Misprints (unmounted)

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 2HD is a fully automatic system for reliable precision cleaning of screens, stencils, PumpPrints or other flat products. It removes thoroughly contaminations such as SMD-paste, SMD-adhesive, flux residues, stabilizer materials, flux, oil, grease or dust.

PSE 300 2HD is a German engineered and manufactured machine with ClosedLoop water reprocessing and a two-tank and two separate circuits configuration which ensures short cycle times and makes this system the perfect economic choice for the cleaning of screens and stencils.

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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PSE 300 2HD

Fully automatic two-tank economy system with two separate circuits and ASYNCHRO® double rotor system

Part number: 0905PSE31HD2

Application overview

Optional suitable	Most suitable	Optional suitable	Not suitable	Not suitable
Assembled PCBs	Stencils	Solder frames	ESD Boxes	Condensation traps
Hybrids	Screens, PumpPrints	Solder carriers	Containers	Filters
Misprints	Misprints	Solder masks	Magazines	Steel sheets

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

Cleaning (key process 1): From the cleaning tank (A) the cleaner liquid is sucked by a magnetically coupled pump unit and routed with a controllable volume flow through a separate circuit into the ASYNCHRO® spray rotor nozzles. Their geometry ensures a comprehensive and thorough cleaning, even in inaccessible and critical aereas. After the washing procedure, the valve switchover of the process chamber undocks the cleaning circuit until the next process run.

Rinsing with tap water (key process 2): From the rinsing tank (tank B) the water is pumped through the separate second circuit into the spray rotors. Tap water has (compared to DI / DM water) the advantage of lower surface tension and thus flushes also critical points as low standoffs and appertures more efficient.

Drying (key process 3): 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 °C (104 - 113 °F).

Cycle time (approx. 30 min.) depending on medium selection or degree of contamination

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 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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PSE 300 2HD

Fully automatic two-tank economy system with two separate circuits and ASYNCHRO® double rotor system

Part number: 0905PSE31HD2

Main standard features

- PowerSpray® technology bundle: magnetically coupled S-Power pump units (tank A, tank B), twofold ASYNCHRO® volume-spray rotorsystem with PUSHFORCE® nozzles, "Option100" softwareprogram (100 freely selectable programs)
- EATON Programmable Logic Controller (PLC)
- High resolution 3.5" touch display
- Full flow coarse filter (process chamber)
- Sediment filter for cleaning tank (A)
- HotSpee warm air dryer
- ClosedLoop reprocessing of cleaning and rinsing fluids
- Safety features: safety interlock on the process chamber door, overflow alarm for all tank sections, 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

- Automatic re-dosage unit for 25 l detergent container
- Drip & storage reservoir
- Exchange for rinse water and pump out unit
- Exhaust control
- Status light fivefold to display the current process state

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PSE 300 2HD

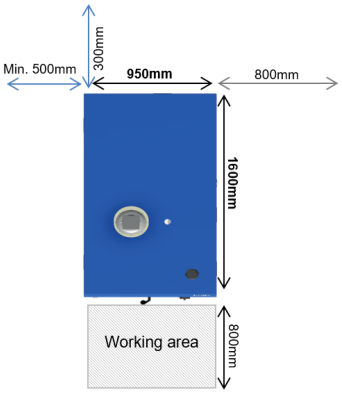
Fully automatic two-tank economy system with two separate circuits and fourfold ASYNCHRO® rotor system

Part number: 0905PSE31HD2

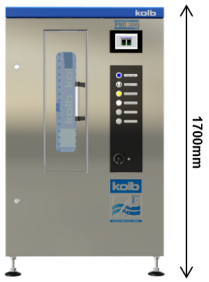
Technical data

Technology base	**kolb** PowerSpray®
Capacity	Stencils up to 780 x 950 mm (31" x 37,5")
Process chamber dimensions	W 350 • D 980 • H 920 mm (W 13.78" • 38.58" • H 36.22")
Volume tank A (cleaning)	75 l
Volume tank B (rinsing)	75 l
Power supply	400 V AC, 16 A, CEE plug / 3 Ph / 50 or 60 Hz
Power consumption	ca. 4 - 9 kW (depending on options)
Control system	PLC (Eaton E4 XV102)
Temperature load	up to 55°C (131 °F)
Filter system	up to three stages - 1. Full flow coarse filter < 2 mm (0.08"), 2. Sediment filter inside the tank, 3. 20“ fine filter (1 - 100µm - process dependent)
Supply connection 1 (tap water)	connection for 1/2" hose, 30µm water filter (prov. by customer: inlet water quality < 350 µS conductance value (< 10° dH)
Rinse water drain connection	(with integrated pump out system) connection for 1" hose
Exhaust connection	Ø 160 mm (6.3"), exhaust capacity 200 - 300 m³ / h (7,063 - 10,595 ft³ / h)
Footprint	950 x 1,600 mm (37.4" x 63")
Operating condition room temperature	20 - 35 °C (68 - 95 °F)
Operating noise	63 dB (A)
Empty weight	570 kg (1,257 lbs)

Top view



Front view



• Recommended maintenance area
• Space for connections

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