

## PSE 300 VS

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

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

Capacity: Screen, stencil, carrier, washing frame up of 950 x 780 mm (37.5 "x 31")

Part number: 0905PSE3VS-2

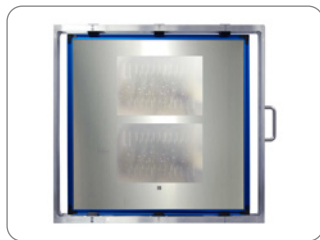


### Certifications:

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

- \* Mono-tank compact system with two tank function
- \* Waterless / independent, no water / waste water connection necessary
- \* Comfortable push one button operation
- \* Fully automatic 2step process: cleaning / rinsing, drying with CWA®-supercharger compression drying
- \* Vertical rotor system with two asynchronous spray rotors for thorough wetting (no blind spots)
- \* 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
- \* Certified for solar cell production
- \* Extremely compact - maximum capacity on a very small footprint

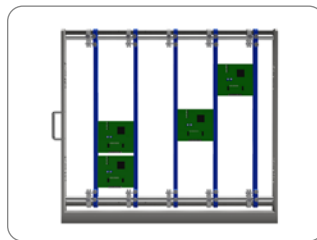
### Key applications



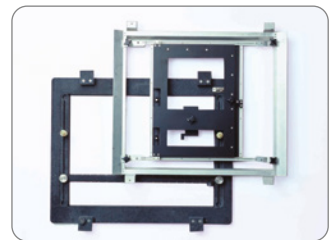
Screens



Stencils



Misprints



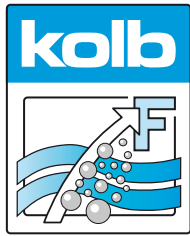
Solder carriers

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 VS 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 patented high performance supercharger drying.

PS 300E VS 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.

**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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### Application overview

				
Not suitable	Most suitable	Optional suitable	Not suitable	Not suitable
Assembled PCBs Hybrids Misprints (mounted)	Stencils Screens, PumpPrints Misprints (bare boards)	Solder frames Solder carriers Solder masks	ESD Boxes Containers Magazines	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 areas. The liquid is continuously filtered in circulation, so that the system progressively enters the rinsing process after removing the contamination.

**Drying** (key process 2): The purified products are dried with the patented CWA® (Compressed Warm Air) technology. The built-in special compressor compresses the ambient air. At the same time it collects the kinetic energy (frictional heat) of the paddle wheel in the unit, then presses the heated and compressed air into the rotor nozzles which were already used for cleaning and rinsing. There it blows off (pressure) and evaporates (heat) the residual moisture. This method is energetically and constructively highly efficient, as it uses the "waste heat" of the compressor rotation and the compressed air as driving power for the rotors. In addition, a system equipped with CWA® technology requires no additional hardware and no external compressed air connection for the MediumWipe® process.

**Cycle time:** < 18 min., depending on contamination and detergent

**Maintenance:** The system has a removable panel on the right side. In the maintenance area among others the pump-out set is available. Tank levels as well as pressure values and maintenance cycles are monitored by the PLC. The tank level is also easily controllable through a window in the system front.



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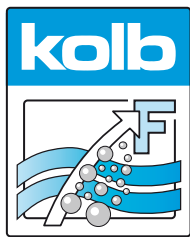


### Main standard features

- ☐ PowerSpray® technology bundle: magnetically coupled S-Power pump unit, twofold ASYNCHRO® volume-spray rotorsystem with PUSHFORCE® nozzles
- ☐ Magnetic coupled pump unit
- ☐ EATON Programmable Logic Controller (PLC)
- ☐ High resolution 3.5" touch display
- ☐ Full flow coarse filter (process chamber)
- ☐ CWA®-supercharger compression 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
- ☐ Drip & storage reservoir
- ☐ Exhaust control
- ☐ Full stainless steel housing
- ☐ Noise insulation



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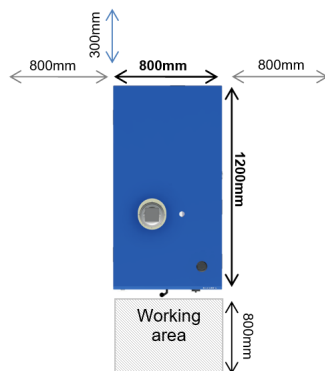
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### Technical data

Technology base	<b>kolb PowerSpray®</b>
Capacity per process cycle	Screen, stencil, carrier, washing frame up to 950 x 780 mm (37.5 "x 31")
Process chamber dimensions	W 350 • D 980 • H 920 mm (W 13.77" • D 38.85" • H 36.22")
Volume tank	75 - 100 l
Power supply	400 V AC, 16 A, CEE plug / 3 Ph / 50 or 60 Hz
Power consumption	3 kW
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 - 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	75 dB (A)
Empty weight	330 kg (728 lbs)

Top view



- Recommended maintenance area
- Space for connections

Front view

