

PS09 HY

Single-chamber PowerSpray 5-7Step universal use cleaning system for products up to 820 x 736 mms, 32" x 29". For the cleaning of mounted PCBs, DCB-hybrid substrates, misprints, PumpPrint stencils, screen-stencils, solder frames and carriers from flux, SMD-adhesive, SMD-paste.

Part No. 090509-HY

High end universal system



The situation

Das PS09 HY is a multifunctional high-end system, which not only solves sophisticated solvent-free* fine-cleaning tasks but also delivers best ultrafine-cleaning abilities in the field of PCB's. According to requirements this „all in one“-system is the optimum completion of a high value adding production chain. Whether it is waterbased cleaning of PCBs, DCBs or DCB-hybrid substrates, or screen-stencils or PumpPrints, or carriers and masks: The PS09 HY can deliver best results for any purpose.

The advantages of PS09 HY

- Fully automatic 5-7 stage process with cleaning, MediumWipe®, rinsing with tap water, DI-clear rinsing / 1, drying, DI-clear rinsing / 2, compressed AirJetDryer
- Individual process selection possible by SPS.
- Programmable twin-elevator for both DI-clear rinsing and compressed AirJetDryer.
- PP double tank system for temperatures up to 55°C (with option heater).
- One push-button operation.
- XL-Power pumping system for cycle cleaning TA and separately for rinsing TB.
- Hemispherical sliding door with window into the illuminated process chamber.
- Installation close to the production possible. No special protection necessary.
- Water-free operation possible. Separate double tank system in PP allows for rinsing the use of water / rinsing detergent as per process requirements.
- Ideally applicable for the efficient cleaning of PumpPrint stencils.
- Made of stainless steel, process sections made of electrolysis resistant elements.
- Process and service intervals PLC-controlled and monitored.
- 3 -stage double fine filtration 10µm both for cleaning and rinsing.
- Noise < 74 dB (A) with insulation: 70 dB(A).

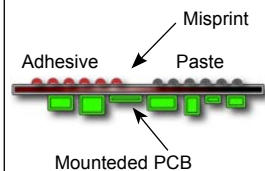
Process duration

Tentative process cycle times of PS09 HY:

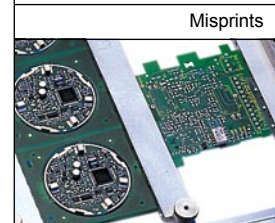
10 - 12 minutes for stencils,

15 - 22 minutes for PumpPrint stencils,

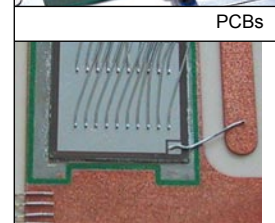
25 - 35 minutes for mounted PCBs depending on product and requirement and depending on the degree of contamination such as paste or adhesive as well as the thickness and hardness of such contamination.



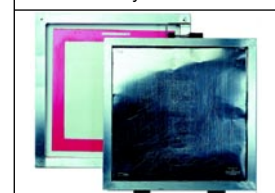
Mounted PCB



Misprints



DCB-hybrid substrates



Screen-stencils, PumpPrint



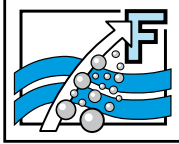
Solder carriers

Applications

Kolb Cleaning Technology GmbH
Karl-Arnold-Str. 12 · D - 47877 Willich
Further information: www.kolb-ct.com

Tel. +49 (0) 2154 9479 - 38
Fax +49 (0) 2154 9479 - 47
e-mail info@kolb-ct.com

*Solvent = organic hydrocarbon, under normal conditions volatile, flammable and risk of explosion.

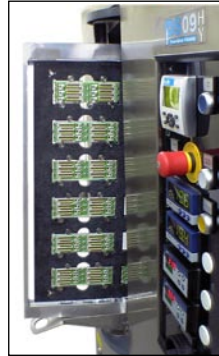


PS09 1-chamber 2-tank universal system

Sliding door



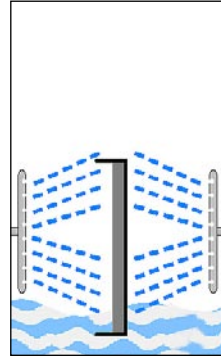
Loading



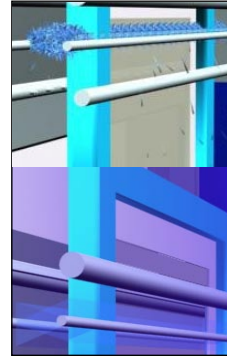
Maintenance



Step 1, 2, 3, 5



Step 4, 6, 7



Function

The PS09 HY will be loaded through the hemispherical sliding door. The retractable drawer will be pulled-out of the process chamber by the operator to load the products to clean. After loading the retractable drawer will be pushed inwards, the hemispherical sliding door will be closed and - after the start of the process - automatically locked. The fully automatic 5 - 7Step process will now run down with the preselected cycle times. The process status and the applicable cycle time will be shown in the graphic display at the front side of PS09 HY. Additionally PS09 HY enables an installation close to the production lines and as such it represents a vital element in the value-added chain.

Attention: Cleaning only with waterbased detergents certified by the manufacturer!

Control / Setting

PS09 HY will be controlled by a PLC. All cycle times as well as the many process combinations of up to 7 steps can be freely adjusted and dedicated to three basic cleaning programs. For the operator a 3-stage program selector switch enables the easy selection of the set cleaning programs for instance for

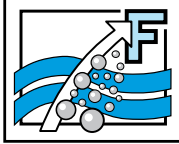
1. mounted PCBs
2. Misprints
3. Stencils

Service

In the development of PS09 HY special care was taken to achieve user friendly, easy and quick maintenance and service. The system has a service access with door at the left hand side. In this service area there are the fine filter units, the pump-out set, the optional dosage unit (container contents of 25 l max.) as well as the (optional) tank for the automatic dosage of an additive. Furthermore there is space for an optionally available DI-water cartridge. Easily accessible from the left hand side behind the cover door are likewise the tanks for detergent (TA) and rinse water (TB) for manual filling and servicing. The levels of both tanks are easily visible through illuminated inspection openings in the covers. The level of both tanks will be controlled automatically by the PLC which will indicate min-level or max-level with a respective warning. This PLC likewise controls the filter pressure of the fine filtration as well as the service and the maintenance cycles of PS09 HY. The PLC shows further information / incidents / remarks in the display to ensure a comfortable and easy handling for the operator and the maintenance personnel.

Kolb Cleaning Technology GmbH
Karl-Arnold-Str. 12 · D - 47877 Willich
Further information: www.kolb-ct.com

Tel. +49 (0) 2154 9479 - 38
Fax +49 (0) 2154 9479 - 47
e-mail info@kolb-ct.com



PS09 1-chamber 2-tank universal system

Status light



Re-dosage



Heating/pH/DI



Reservoir



Exhaust

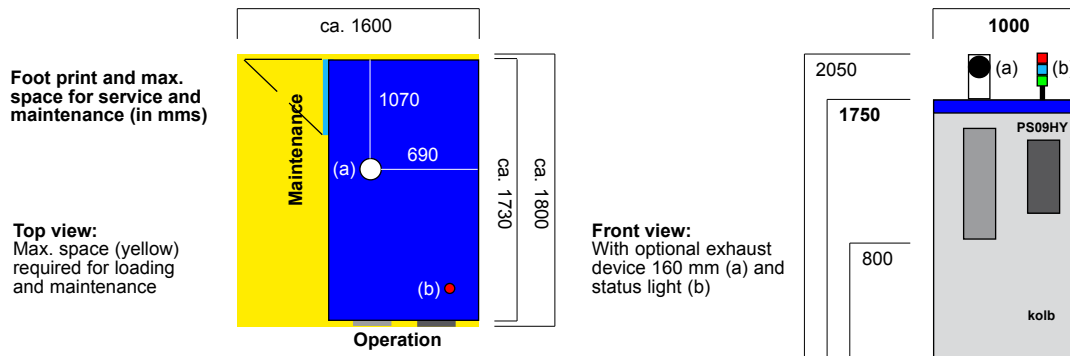


Options/accessories for PS09

- Status light for system status monitoring from the distance.
- Exhaust control with motor driven flap valve to reduce high suction / too high consumption.
- Autom. re-dosage for rinse water tank and cleaning tank incl. dosage of necessary additives (option).
- Autom. water exchange for the rinse tank (necessary for the installation and use of DI-clear rinsing).
- pH-value control for both rinse water and cleaning tank.
- Temperature - adjustable detergent heater for the cleaning and for the rinse water tank.
- DI-water system for DI-clear rinsing with integrated DI-cartridge.
- Reservoir with screwed and sealed front and overflow switch.
- Washing frames: various dimensions and tailor-made solutions upon request.

Technical data

Power supply	:	400 V AC, 16 A CEE / 3Ph / 50 or 60 Hz
Power consumption / control system	:	SPS (K&M) / ca. 4,2 KW - 9kW (depend. on option)
Compressed air-only with AirJetDryer (Option):	:	> 7-8 bar 1/2" - 14 mm hose (1000 - 1200 l / min.)
Noise	:	< 74 dB (A), with option insulation: 70 dB (A)
Weight/ambient temperature	:	ca. 540 kg / min. / max: ca. 20°C / 50°C
Tank contents	:	TA ca. 75 l (cleaning), TB ca. 75 l (rinsing)
Exhaust	:	160 mm (locally provided capacity 200-300m3 / h.)
Max. dim. carriers / stencils	:	820 x 736 mm, 32" x 29" (standard: 736x736 mms)
Connection water supply (Option)	:	3/8", hose connection 14 mm
Connection water supply/DI (Option)	:	3/8", hose connection 25 mm
Connection rinse water drain (Option)	:	3/4", hose connection



Kolb Cleaning Technology GmbH
 Karl-Arnold-Str. 12 · D - 47877 Willich
 Further information: www.kolb-ct.com

Tel. +49 (0) 2154 9479 - 38
 Fax +49 (0) 2154 9479 - 47
 e-mail info@kolb-ct.com