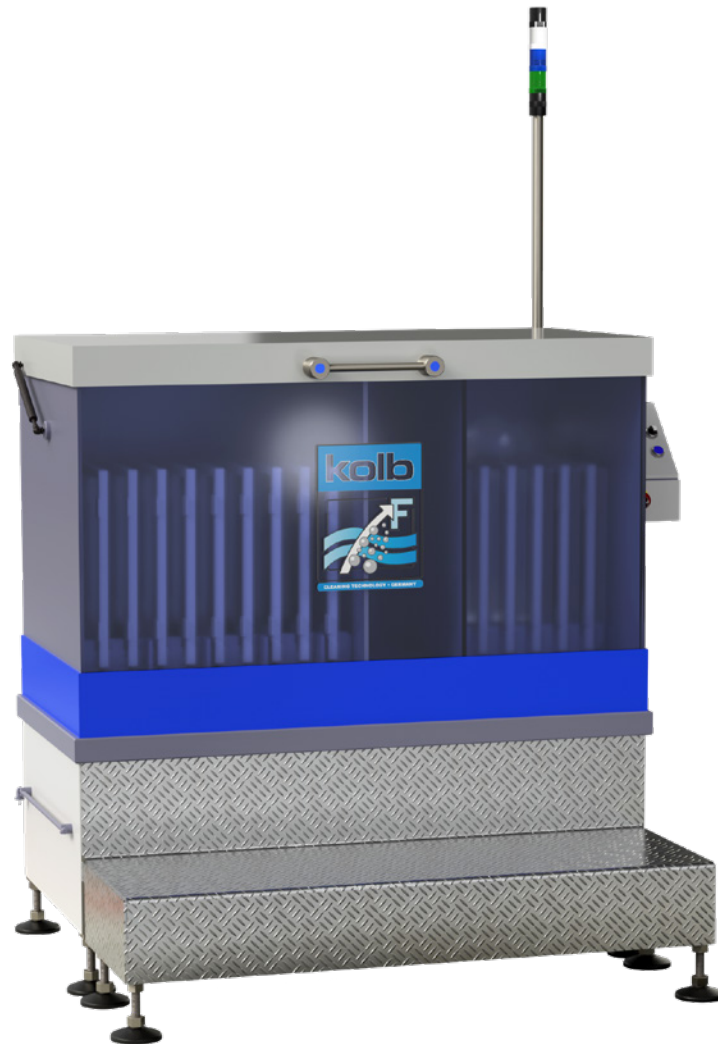


TECHNICAL INFORMATION



AF04

Semi-automatic system with AirFlow® air-in-immersion technology for maintenance cleaning



AF04

CLEANING TECHNOLOGY

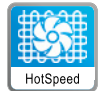
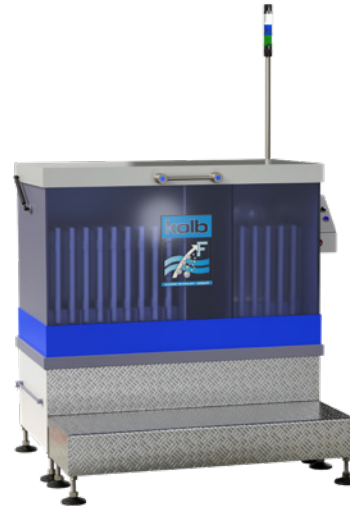
Made in Germany

Semi-automatic system with AirFlow® air-in-immersion technology for maintenance cleaning

Cleans carriers, pallets, condensation filters of virtually all manufacturers from flux, condensate, oil, dust, grease

Usable chamber dimensions: W 580, D 610, H 470 mm (W 22.83", D 24", H 18.5")

Part number: 090004-AF



Certifications:

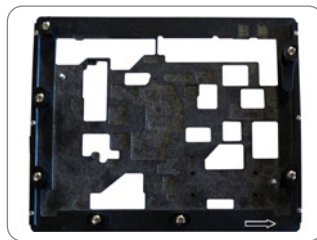
This system in its basic version is certified for its energy and water saving processing, and for the standard integration of comprehensive safety features.

- * Semi-automatic three-chamber-system
- * Average process time: 60 min/approx. 9 min per carrier
- * Ready for operation (plug & work), incl. cleaning fluid for the first filling
- * Viable price, low operating cost, high economic efficiency
- * PLC controlled
- * Solder-frame and carrier fixture customized free of charge
- * Special system sizes on demand
- * Easy maintenance
- * Safe installation close to the production line possible; no special protection required

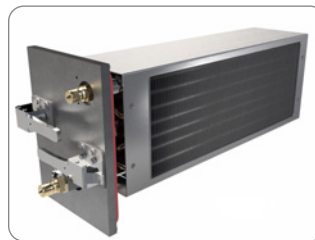
Key applications



Solder frames, carriers



Solder pallets



Condensation filters / Coolers



Machinery parts

The AF04 operates in three-chamber mode, which enables extremely short cycle times. The system is therefore able to carry out the cleaning, rinsing and drying processes optimally and in parallel in the shortest possible time. It cleans condensate traps, solder frames, carriers, squeegees, spatulas and machine parts of flux, condensate, oil, dust and grease.

The short cycle times enable the fastest possible reuse of the production equipment. Depending on the size, type and contamination of the cleaning goods, the system cleans 6 - 9 solder frames at a time. The process times can be programmed via the PLC control for cleaning and drying and can be preset using a selector switch.

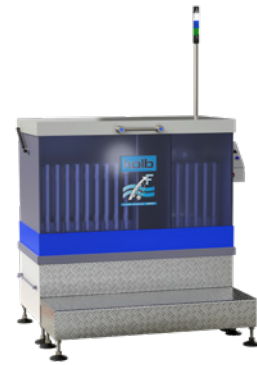
The cleaning system can be operated with all common electronics cleaning supplies (detergents/chemistry, etc.) which are approved by the manufacturer.




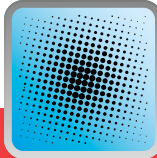
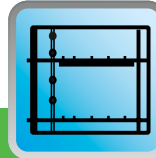


AF04

Semi-automatic system with AirFlow® air-in-immersion technology for maintenance cleaning

Part number: 090004-AF



Application overview

				
Not suitable	Not suitable	Most suitable	Not suitable	Most suitable
PCBAss, Hybrids Power Electronics Misprints	Stencils Screens Misprints (Bare boards)	Solder frames Solder carriers Solder masks	ESD Boxes Containers Magazines	Condensation traps Filters Steel sheets

Cleaning: A custom made fixture in the system holds the goods to be cleaned in an optimum position during cleaning process at ambient temperature with a PLC-controlled AirFlow® process. The AirFlow® technology is an air-in-immersion process. It differs from common spray-in-immersion applications, as the goods to be cleaned here are actively submerged by the cleaning fluid using compressed air. This whirling technology guarantees a permanent all-over active flushing without dead spots so that the contamination is fast and efficiently cleansed off.

Rinsing with tap water: After cleaning the parts are submerged into the rinse chamber which is filled with normal tap water to remove all cleaning fluid residues. For information: Tap water has (compared to DI-/DM-water) the advantage of lower surface tension and thus flushes also critical points as low standoffs more efficient.

Drying: The cleaned parts are placed in the drying chamber to dry under ambient conditions.

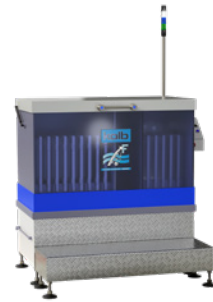
Maintenance: The system needs very little maintenance. The service intervals are PLC controlled and indicated. Filter and cleaning fluid change according to requirements needs to be done after approx. 300 - 400 cleaning cycles e.g. when cleaning average contaminated solder-frames. Rinse water has to be changed when pH-value is over 9. An automatic rinse water exchange system is available as an option.



AF04

Semi-automatic system with AirFlow[®] air-in-immersion technology for maintenance cleaning

Part number: 090004-AF



Technical data

Technology base	kolb AirFlow[®]
Capacity	6 - 9 solder frames up to 610 x 470 mm, 24" x 18,5" or 4 condensation traps
Usable chamber dimensions (cleaning)	W 580 • D 610 • H 470 mm (W 23" • D 24" • H 18.5")
Usable chamber dimensions (rinsing)	W 200 • D 610 • H 470 mm (W 7.9" • D 24" • H 18.5")
Usable chamber dimensions (drying)	W 380 • D 610 • H 470 mm (W 215" • D 24" • H 18.5")
Volume cleaning chamber	approx. 175 l
Volume rinsing chamber	approx. 60 l
Electrical supply	230 V AC, 16 A/50 or 60 Hz
Power consumption	2 kW
Control system	PLC (Siemens Logo)
Filter system	coarse filter > 1 mm
Supply connection 1 (tap water)	connection for 1/2" hose
Supply connection 2 (compressed air)	4 bar (58 psi) - 100 l / min, 8 mm (0.31") hose
Rinse water drain connection	connection for 1" hose
Footprint	W 1,433, D 1,247 mm (W 56.3", D 49.1") - including VA-step/platform
Operating noise	60 dB(A)
Empty weight	120 kg (265 lbs)