

AF04

3-chamber cleaning system with AirFlow® technology.

For the cleaning of e.g. condensation traps, 6-9 solder frames and carriers up to 610 x 470 mm, machine parts and mechanical parts (milled and pre-manufactured) from flux condensate, flux, oil, grease, dust etc.

Part No. 090504

Plug & Work system



The situation

Clean production tools in the electronics producing industry are vital to achieve the highest production quality. Manual cleaning - still largely common - does not achieve such a standard and it is very often accompanied with offensive odours as well as hazardous exhausts. The kolb AF04 operates with compressed air and water-based cleaning detergents which are solvent-free* and neutral in scent. It can therefore be operated closest possible to the production lines.

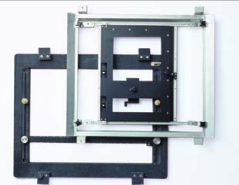
The advantages of AF04

- Reduced maintenance and service, PLC controlled.
- High cleaning efficiency.
- Short cleaning cycles (15-20 minutes).
- Hot Speed air dryer (approx. 35°C).
- Low maintenance required.
- No extra safety area necessary.
- Can be installed in the production area.
- No special air ventilation systems required.
- Noise < 60 dB (A).
- Storage of cleaning fluid under the system.
- Process chambers made of electrolysis resistant PVC .
- PLC controlled with freely adjustable process parameters (cleaning and rinsing).
- Temperature display.
- Complies with CE regulations.
- Lockable emergency off switch.
- Process shut down when system lid is opened.
- Status signal tower.

General maintenance features of the AF04

- PLC controlled and indicated service intervals.
- Cleaning fluid change according to requirements after approx. 300-400 cleaning cycles when cleaning normal contaminated solder-frames.
- Change rinse water when pH-value is over 9 pH.
- Integrated coarse filters hold back residues >1 mm.
- Optional automatic rinse water change system available

System must be only operated with certified cleaning fluids!



Solder frames



Condensation traps



Pallets, trays



Small parts cleaning



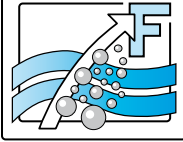
Cage for small parts

Applications

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 Further information: www.kolb-ct.com

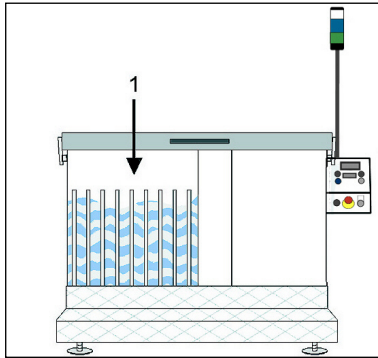
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*Solvent = organic hydrocarbon, under normal conditions volatile, flammable and risk of explosion.

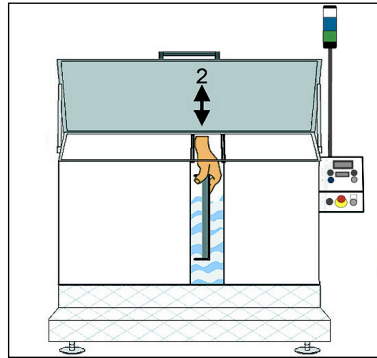


AF04 three chamber AirFlow[®]-system

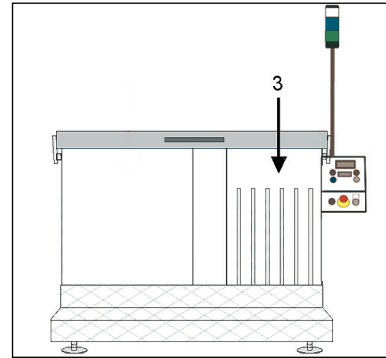
Cleaning



Rinsing



Drying



The kolb AF04 is a three chamber system which enables short cycle times. The system is therefore capable within a short time of parallel process cleaning, rinsing and drying. Short cycle times enable quick reuse of production tools which together with the capability of placing the system in the production area is the best argument for a quick return on investment. The complete cleaning cycle in the AF04 takes according to size and type of contamination approx. 15- 20 minutes when cleaning of 6-9 solder-frames simultaneously.

Cleaning

A fixture in the system holds the good to be cleaned in an optimum position during cleaning process with AirFlow technology at ambient temperature.

Rinsing

After cleaning the parts are submerged into the rinse chamber which is filled with normal tap water to remove all cleaning fluid residues.

Drying

The cleaned parts are placed into the drying chamber which is equipped with a HotSpeed dryer (two fan type) that dries at approx. +35°C.

Technical data

Mains power supply	:	230 V AC / 16 A; 50 or 60 Hz
Power dissipation	:	approx. 2 kW
Ambient temperature (min.)	:	approx. +20° Celsius
Noise	:	< 60 dB (A)
Compressed air supply	:	approx. 6 bar, 100 l / min
Weight	:	approx. 1200 daN (empty)
Cleaning chamber capacity	:	175 l (cleaning fluid mixture)
Rinse chamber capacity	:	60 l (tap water)
Max. solder- frame size	:	610 mm x 470 mm
Water inlet	:	metal 3/8" detachable (hose stem Ø 14 mms)
Outlet connection (3 x: clean, rinse, dry)	:	metal 3/4", detachable (hose stem Ø 27 mms)
Overflow connection	:	PVC Ø HT 50 mms, detachable
Dimensions of cleaning chamber	:	W 580, D 610, H 470 mms
Dimensions of rinse chamber	:	W 200, D 610, H 470 mms
Dimensions of drying chamber	:	W 380, D 610, H 470 mms
System dimensions	:	W 433, D 1247, H (incl. signal tower): 1810 mms

Certifications:

This system in its basic version was certified for its energy and watersaving processing.

