

AF08 4Mod

Four-module universal cleaning system for maintenance cleaning with AirFlow®-Technology. Cleans flux management units as well as solder carriers / frames from flux residue, condensate, oil, dust, grease etc.

Part No. 090508-AF-4M

Universal maintenance cleaning



Picture shows AF08 3Mod

The situation

Clean production tools in the electronics producing industry are vital to achieve the highest possible production quality. Manual cleaning cannot achieve this high standard. Modern reflow-systems are equipped with flux management units (cooling units, filters, heat exchangers, filter panels) that in production are subject to contamination (flux, colophonium). Thorough cleaning helps to re-gain their proper functionality. In a cleaning chamber with AirFlow®-Technology all immersion type of maintenance cleaning can be done. The total cleaning process will be accomplished with a separate rinse chamber and a drier chamber. This qualifies kolb AF08 4M as a state of the art and versatile universal cleaning system for flux management units.

The advantages of AF08 4M

- Plug & Work System (connect, fill start).
- High cleaning efficiency.
- Short cycle times (15 / 30 / 45 minutes, cycle times freely selectable via PLC).
- No explosion protected area necessary.
- Cleaning module 1.
- Cleaning module 2 (different products or a different cleaning detergent).
- Rinse module for rinsing with water.
- Drier module with 4-way HotSpeed unit.
- Skimmer filtration with pre-installed exhaust.
- Permanent 3-stage filtration.
- Robust steel framework.
- Process chambers made of PVC, i.e. no electrolysis possible at weld seams.

The service- and security features of AF08 4M

- PLC control and monitoring of cleaning process and maintenance intervals.
- Filter pressure control by PLC.
- Full CE-conformity.

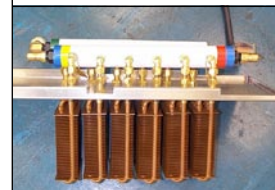
The general maintenance of AF08 4M

- Change of the saturated cleaning detergent mixture as per individual requirements.
- Cleaning of coarse filter, change of fine filters.

System must be operated only with qualified 2-stage cleaning detergents!



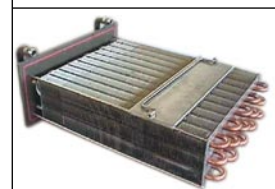
Soltec



BTU



ERSA



Seho

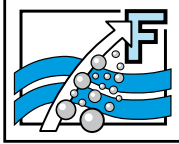


rehm

Applications

W. Kolb Fertigungstechnik 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



AF08 4Mod

Cleaning 1



Cleaning 2



Rinsing



Drying



Crane system



The working principle*

kolb AF08 4M 4-chamber cleaning system consists of an AirFlow® Cleaning module 1 as well as an AirFlow® cleaning module 2, a rinse module and a drier module. Parts to be cleaned (cooling units, filters, plates, carriers) are positioned on the immersion basket on top of the heavy-duty air system when the lid is opened. The goods are completely submerged in the detergent and they will be cleaned with the AirFlow®-Technology during the pre-set cycle time.

Filtration: The removed contamination ascending to the surface by the air flow will be directed to the skimmer filtration and via a 3- stage loop- filtration (coarse filter > 1mm, filter 1 >100 µm filter 2 >25 µm) where they will be filtered out. The saturation of the filter stages will be controlled and indicated via PLC.

3 different cycle times (factory preset 15 / 30 / 45 min.) can be freely programmed in the PLC. After the end of the cleaning cycle in cleaning module 1 and/or module 2 the products will be placed into the rinsing module for proper rinsing and then into the dryer module where they will be dried using the installed 4-way HotSpeed unit.

Kolb AF08 4M has the following elements

- Module 1: Cleaning chamber 1 base module for internal cleaning in the cleaning chamber only.
- Module 2: Cleaning chamber 2 for different products/ different detergent.
- Module 3: Rinse chamber with filtration loop and automatic rinse water change with pump-out unit.
- Module 4: Dryer chamber with 4-way HotSpeed unit.

Technical data

Power supply/power dissipation	:	400 V AC, 16 A CEE; 50 / 60 Hz approx. 5,5 kW
Ambient temperature (min)	:	approx. 20 °C
Noise	:	< 65 dB (A)
Compressed air supply	:	approx. 6-10 bar, 110 / l min.
System weight	:	approx. 910 kg (empty), 1570 kg (filled)
chamber contents	:	M1 approx. 220l, M2+M3 approx. 320l
Max. product size	:	900 mmx450 mmx310 -610 mm(L x B X H)
System dimension	:	L: 2600mm, W: 1250mm, H: 1.000mm,

W. Kolb Fertigungstechnik 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

*Patent technology. All rights for changes reserved that lead to technical improvement.