

## AF03

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

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

Usable chamber dimensions: W 385, D 460, H 480 mm

Part number: 090503-AF

## CLEANING TECHNOLOGY

Made in Germany

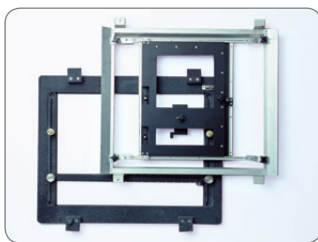


### Certifications:

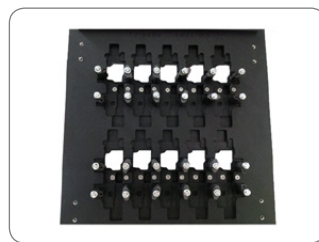
This system in its basic version was certified for its energy and water-saving processing.

- Semi-automatic two chamber system
- Ready for operation (plug & work), incl. cleaning fluid for the first filling
- Viable price, low operating cost, high economic efficiency
- Solder-frame and carrier fixture customized free of charge
- Special system sizes on demand
- Easy maintenance
- Storage of cleaning fluid under the system

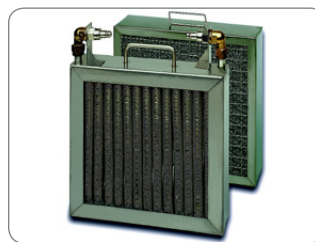
## Key applications



Solder frames, carriers



Solder pallets



Condensation filters



Machinery parts

**kolb AF03** is a basic two chamber semi automatic system including drip tray and storage cabinet for condensation traps and cleaning fluid containers. It cleans condensation traps, solder-frames, carriers and machine parts from flux, flux condensation, oil, dust, grease etc.

With AF03 **kolb** has created a system with a great cost / value ratio that can be called a "clean" alternative for small manufacturers, where the purchase of a bigger, more complex and thus much more expensive system is economically not viable, but manual cleaning is no longer appropriate.

**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

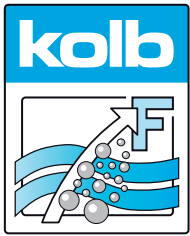
|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
| <b>Not suitable</b>   | <b>Not suitable</b>   | <b>Most suitable</b>  | <b>Not suitable</b>  | <b>Most suitable</b>  |
| Assembled PCBs<br>Hybrids<br>Misprints  | Stencils<br>Screens, PumpPrints<br>Misprints                                      | Solder frames<br>Solder carriers<br>Solder masks                                  | ESD Boxes<br>Containers<br>Magazines   | Condensation traps<br>Filters<br>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 the 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. 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 onto the stainless steel drip tray where they dry at ambient temperature. The drip water is either collected in a container or the outlet can be connected to the waste water line.

**Maintenance:** The system needs very little maintenance. Besides emptying the drip water container filter and cleaning fluid change according to requirements needs to be done after approx. 150 - 200 cleaning cycles e.g. when cleaning average contaminated solder-frames. Rinse water has to be changed when pH-value is over 9.



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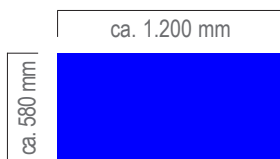
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### Technical data

|                                      |   |
|--------------------------------------|---|
| Technology base                      | <b>kolb AirFlow®</b>                              |
| Capacity                             | 4 - 6 solder frames or up to 2 condensation traps |
| Usable chamber dimensions (cleaning) | W 385, D 460, H 480 mm                            |
| Usable chamber dimensions (rinsing)  | W 220, D 460, H 480 mm                            |
| Volume cleaning chamber              | approx. 90 l                                      |
| Volume rinsing chamber               | approx. 30 l                                      |
| Power supply                         | not required                                      |
| Power consumption                    | none  |
| Filter system                        | Coarse filter > 1 mm                              |
| Supply connection (compressed air)   | 4 bar (100 l / min.)                              |
| Rinse water drain connection         | 3/4", hose connection 27 mm                       |
| Footprint                            | 580 x 1.200 mm (incl. storage step)               |
| Operating noise                      | 52 dB (A)   |
| Empty weight                         | 75 kg   |

#### Top view:

Space requirement  
cleaning system



#### Front view:

