

PLEASE NOTE: The system is identical to the existing AF15 system. There was only a name change for organizational reasons.

# AF20

## One chamber dipping automat



**Fully automatic one chamber dip & drum system for maintenance cleaning with AirFlow® technology.** Cleans condensation traps of virtually all manufacturers from condensate as well as bulk good (with washing drum option) from flux, oil, dust, grease and many more.

**Part No 090520-AF**

### The situation:

In electronic manufacturing clean production tools are the basic requirement for high quality production standards. Up-to-date reflow-soldering systems as well as solar process ovens very often have flux management systems (cooling unit, filters, heat exchangers, containers / plates) which during operation will be subject to contamination (flux / colofonium). Such units as well as lathe parts, milled parts, die cast components or other bulk good have to be cleaned thoroughly, to ensure functionality with the necessary quality.

### The advantages of AF20:

- High cleaning efficiency.
- Short cycle times.
- Fully automatic process: cleaning - rinsing - warm-air drying.
- Available with washing drum for bulk good.
- Available with rotation unit for up to 5 cleaning baskets.
- Customized carrier fixture available on demand.
- Loading and unloading in an empty process chamber.
- Cleaning circulation with separate fine skimmer-filtering (standard).
- Rinsing circulation with separate fine skimmer-filtering (standard).
- Maintenance and operation events PLC controlled and displayed.
- Stainless steel tubeframe base rack with rugged casing made of stainless steel.
- Process relevant sections are made of electrolysis resistant elements.
- Simple and quick maintenance.
- Plug & Work system (connect, fill, start).
- **Certified for solar cell production.**

### Service and safety features of AF20:

- PLC control and monitoring of cleaning process and maintenance intervals.
- Filter pressure controlled by PLC and pressure differential display.
- Security shut-down with open cleaning module.

### General maintenance AF20:

- Detergent change according to requirement / usage frequency.
- Cleaning of coarse filter, fine filter change.

**Cleaning only with detergents certified by the manufacturer!!**



Rehm filters



Soho filter



Soltec filter



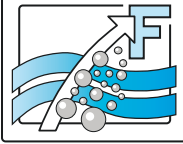
ERSA oven



Machine parts

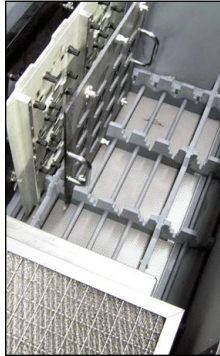
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# AF20 - One chamber dip & drum automat

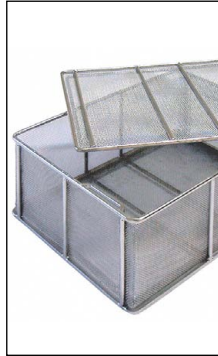
**Process chamber**



**Washing drum**



**Washing basket**



**Drying**



**Control panel**



**Function\***

In the fully automatic kolb AF20 dip & drum system the goods are cleaned, rinsed and dried in one single process chamber / washing drum which is empty during the loading (no contact to the detergent). After placing frames or filters into the chamber it is pressure flooded with fine filtered cleaning fluid from a separate tank (tank A) through a PLC-controlled process. After the goods are cleaned with the successful AirFlow®-technology, the likewise filtered rinsing media, e.g. water, is pumped into the process chamber from another tank (tank B). After the goods are pressure rinsed and the rinse media is pumped out they will be dried with a triple HotSpeed warm air dryer unit, integrated in the covering cap of the system.

**Options / accessories**

- Washing drum for bulk good.
- Rotation unit for up to 5 cleaning baskets
- Automatic re-dosage and concentrate mix-unit.
- Automatic water change for the rinsing tank (tank B).
- pH-value measuring and process control for the rinsing circuit.
- DI- / VE-water treatment for the rinsing circuit.
- Status light for the different process stages.
- Heater for cleaning tank (tank A) 2 KW.
- Exhaust control with motor driven automatic flap valve to prevent high consumption.
- Reservoir with overflow control (Part No 090517-3).
- Preparation for connection to AA 200 - sewage water preparation.

**Technical data**

Power supply / power consumption	:	400 V AC, 16 A CEE; 50 / 60 Hz ca. 3 kW
Minimum ambient temperature	:	app. 20° C
Noise emission	:	< 59 dB (A)
Compressed air connection	:	ca. 6-10 bar, 110 l / min.
Weight	:	app. 460 kg (empty), 910 kg (filled)
Contents	:	Tank A: Cleaning app. 225 l, Tank B: Rinsing app. 225 l
Usable chamber dimensions	:	810 mms x 435 mms x 520 mms (L x W x H)
Maximum space required app.	:	LL: 2.330 mm, W: 1.540 mm, H: 1.430 mm
Connection water supply (Tap water)	:	3/8", hose connection 14 mm (by customer: inlet water quality, < 350 µS conductance value (< 10° dH) or option descaling unit)
Exhaust connection (prov. by customer)	:	160 mms Ø, 200 / 300 m³ per hour

**Certifications:**

This system in its basic version was certified for its energy and watersaving processing, for easy operability and for the standard integration of comprehensive safety features.



\* = patent-protected / All rights for changes reserved that lead to technical improvement.