

# M-EVO SERIES

# Expertise makes the difference: The new M-EVO series from MATTHES

The MATTHES cleaning systems in the M-EVO series are compact single-chamber systems for the ultra-fine cleaning of electronic components such as e.g.

- Unprinted and printed circuit boards
- Misprinted circuit boards
- Holders and tools in electronics

In keeping with the concept of technical evolution, the new model series surpasses its predecessor – the tried-and-tested E series – in a number of different areas. M-EVO 1, M-EVO 2 and M-EVO 3 feature even more reliable technology, are easier to use and can be integrated even better into existing processing environments due to their compact design.

Fully automatic constant measurement, control and topping up of the cleaning media guarantee a consistently high level of process reliability and quality.



#### PROFITRONIC+

Control system for the cleaning machines is Industry 4.0 ready, with an Ethernet interface

#### PerfectTouchControl

Glass surface of the operating and programming unit is resistant to chemicals

#### PerfectSpeedSensor

Spraying arm monitoring Reliable cleaning performance due to monitoring of the spraying arm speed

#### PerfectFlow

Ultrasonic control of dosing volume independent of media and temperature Reproducible cleaning quality thanks to precise dosing of all media

#### **PerfectPureSensor**

Integrated conductivity measurement module for monitoring the final rinsing phase

#### PerfectDoc 1

Complete logging and documentation of all cleaning processes ensures highly reliable traceability of the processes

#### PerfectHepaDrying

Optimal drying results, free of unwanted particles and suspended matter from the ambient air

PerfectLiveControl<sup>2</sup> powered by



Digital measurement of the concentration in real time, live monitoring and automatic topping up of the media feed Fully automatic compensation of process-related deviations that could negatively influence the concentration of the cleaning bath. Water and cleaning concentrates are added in real time and ensure optimal process reliability.

#### Other features

- Steam condenser (without exhaust air)
- Siemens controller with SIMATIC HMI touch panel<sup>2</sup>
- Complete stainless steel piping of the MRS module (Matthes Recycling System)
- Compartment for 4 x 5 l canisters
- Sensors for automatic basket/trolley recognition
- Program fail-safe function
- 2 redundant sensors for controlling and monitoring the temperature
- Miele waterproof system to protect against leak damage
- Remote maintenance capability

<sup>&</sup>lt;sup>1</sup> Optionally available <sup>2</sup> Feature of the M-EVO 3

# M-EVO SERIES Feature matrix

FEATURES	M-EVO 1	M-EVO 2	M-EVO 3
MIELE INDUSTRIAL CLEANER	R		
PerfectTouchControl			
PerfectSpeedSensor			
PerfectFlow			
PerfectPureSensor			
PerfectLiveControl <sup>2</sup>	_	_	
PerfectDoc <sup>1</sup>			
PerfectHepaDrying			
3 Dosing Pumps			
Pedestal			
Tank Unit, Heated, Isolated			
Liquid Level Indicator			
Floor Tray			
Circulating Pump			
Filtermodul / Recycling 5 $\mu$			
Filtermodul / Backflow 25 μ			
Levelswitch, Dry-Running-P	rotection 🖊		
Levelswitch , Minimum	_	_	
Levelswitch , Maximum	_	_	
Switchbox with Central Powersupply and Main Swit	tch		
Temperature Lock			
Light Beacon RED / GREEN			
Process Controll Unit	_		
Siemens Control			
Siemens Text-Display			_
Siemens HMI-Touch-Display	_	_	

# M-SBC / M-SBC-R

# Screen/stencil cleaning in electronics

The **M-SBC** is a compact system for the effective cleaning of stencils and misprints. This unique stencil cleaning system with adjustable vertically oscillating spraying arms is suitable for cleaning and drying your stencils and screens. It offers the following advantages:

- Short cleaning times due to the optimal application of the cleaning chemicals via the adjustable lifting movements of the spraying arms
- Highly efficient drying with concentrated airflow (Air Knife)
- Environmentally friendly and closed-loop system
- Recommended for cleaning adhesive or soldering paste from SMT stencils
   Suitable for cleaning sensitive screens and stencils thanks to the low-pressure

spraying nozzles (< 1 bar)

- ullet User-friendly loading of the stencils in the system
- Space saving and compact
- Easy to maintain
- Control system: SPS with 5.1" touchscreen

This system has been optimised and approved for the use of MPC<sup>®</sup> cleaning media (Micro Phase Cleaning)

#### **Dimensions**

1,250 mm (D) x 950 mm (W) x 1,850 mm (H)

#### Technical data

- Holder: 740 x 740 mm
- Control system: 5.1" touchscreen with SPS
- Weight: 360 kg
- Power supply: 400 V, 3 phase, 50 Hz
- Volume of washing tank: 57 litres
- Cartridge filters
  - Size of fine filter pores: 5 µm
  - Size of coarse filter pores; 20 um
- Stainless steel design

#### **Features**

- Economical
- Ecological
- Energy efficient
- Sustainable
- Compact design





### Without doubt the cleanest solution

MATTHES has firmly established itself as a long-standing partner for the electronics sector. We understand your business – and know that guaranteeing reliable subsequent processing and fault-free end functionality are of fundamental importance to you. We support these important criteria with meticulously designed, sector-specific cleaning solutions. In this process, we take into account the intricate design and sensitive technology of your sometimes highly expensive components, as well as your tight timelines and the need for efficiency and cost-effectiveness.

We plan your cleaning solutions completely according to your requirements, rely on tried-and-tested machine technology from global brand manufacturers and also develop individual solutions for you where desired.

- Special electronics expertise
- 50 years of experience
- More than 3,000 systems worldwide
- Training
- Manufacturer-independent maintenance service

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