

MAFAC

Parts Cleaning. Systems and Solutions.



Clean operations.

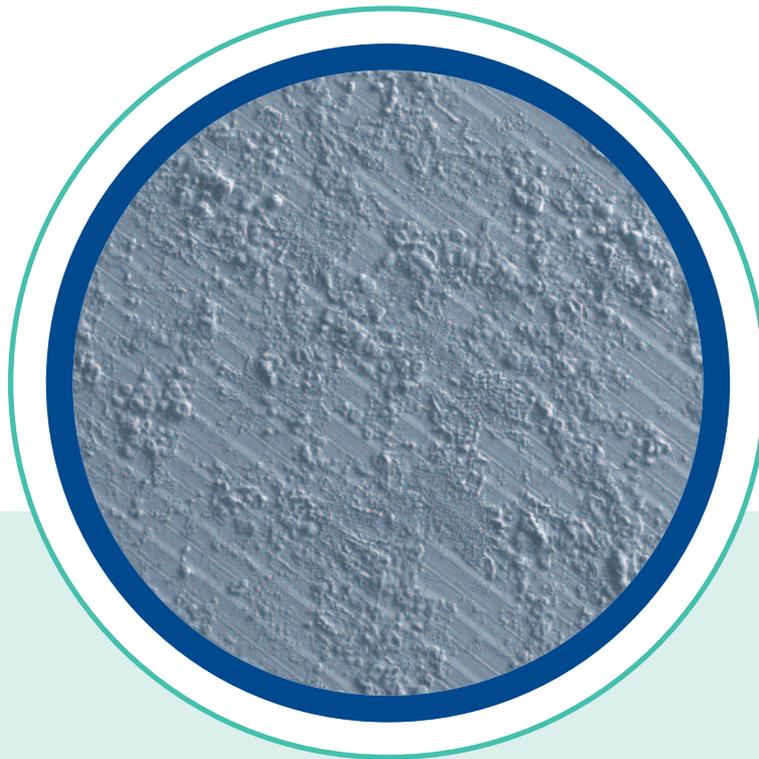


Machinery
Systems
Accessories

Process solutions in parts **cleaning**.

Aqueous cleaning and process technology.





Industries:

- Automotive
- Hydraulic engineering
- Mechanical engineering
- Aerospace
- Electrical industry
- Automation technology

Sample applications

- Bulk materials, batches, individual workpieces
- Ferrous and non-ferrous metals
- Plastics

Our element:

Aqueous parts cleaning

Today's cleaning tasks in manufacturing and in surface technology are primarily solved by using aqueous cleaning systems. Aqueous component cleaning has been the business of the German company MAFAC for more than 30 years now. Based on our environmental responsibility and strongly focusing on the markets' requirements, we have been specialising in the development of a standard range of compact parts cleaning systems. By offering customised process solutions including fully automated plants, we set quality standards worldwide. All our cleaning systems are marked by patented process technologies, value-adding option packages and high energy efficiency.

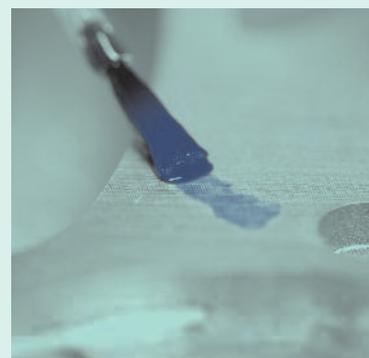
MAFAC M₂P:

The basis for reliable cleanliness

Stable processes are the pre-requisite in achieving both particulate and surface cleanliness demands. Perfect precision adjustment of crucial process parameters, e.g. mechanical loading, process times, process temperatures and detergent additives, provide for clean and cost-saving solutions. Against this background, MAFAC's M₂P philosophy offers considerable benefits with its perfect synergy of machine, man and process.

Customer-specific cleaning trials and detergent cleanliness analysis

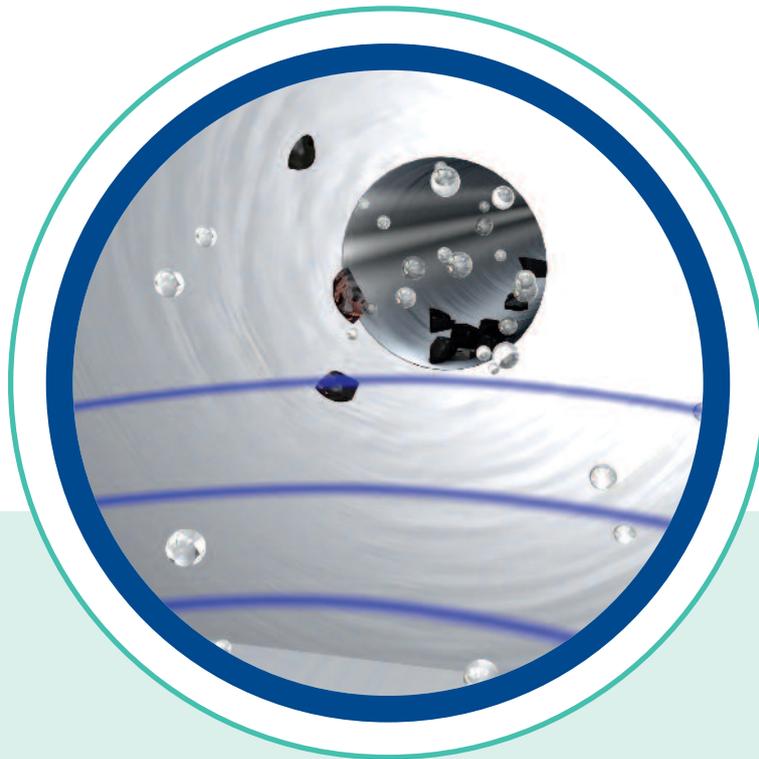
At our showroom in Alpirsbach, we offer you the service of customised cleaning trials including documentation, reporting and qualified proposals for process optimisation. In addition, MAFAC's application experts are at your disposal for detergent cleanliness analysis.



MAFAC PALMA

Spray and flood cleaning perfectly combined.





Spray-flood cleaning system

Selected technical data:

Dimensions:

w 2250 x h 2050 x d 2300 mm

Weight: net 2030 kg

Wash tank 1: 720 litres

Wash tank 2: 600 litres

Special features: Ultrasonic cleaning

Cleaning chamber 100% floodable

Drying systems:

Rotating hot air pulse blower system

Vacuum drying system

Filter systems: Fine filtration of wash

solution on return to tank and on the

pressure side of pump

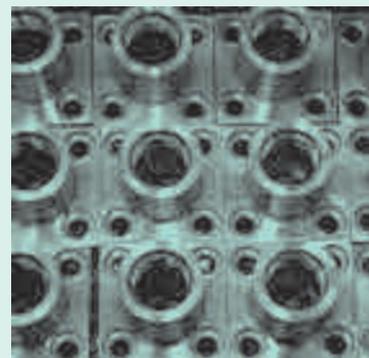
The MAFAC PALMA offers ideal features for process-safe cleaning of sensitive parts with complex shapes. During the wet phase, the operations spray and flood cleaning can be individually combined. Thus high-end cleaning results are achieved. A special quick-flood system allows for full flooding of the cleaning chamber within only 30 seconds.

Optional: Ultrasonic unit for ultrafine cleaning

For applications with very high cleanliness demands, e.g. in the watch-making industry, medical technology and in precision engineering, the system can be equipped with an optional ultrasonic unit. The power layout of the ultrasonic process is perfectly aligned to customer-specific requirements by vernier adjustment. If needed, the PALMA can be equipped with a third tank, e.g. for the integration of an additional rinsing bath within the process.

Energy efficient: Rotating hot air flow drying system

Based on the patented basket-spray frame-rotation, MAFAC has invented a special hot air flow drying system which operates within the rotating system. It is especially designed for high-quality full body drying of complex-shaped parts, in particular for parts with recessed areas, e.g. narrow bevels and undercuts. As a result, process times are reduced while efficiency is increased significantly, due to the enhanced drying performance.



MAFAC JAVA

Compact system for high-quality parts cleaning.





Spray-flood cleaning system

Selected technical data:

Dimensions:

w 1500 x h 2050 x d 1700 mm

Weight: net 1300 kg

Wash tank 1: 460 litres

Wash tank 2: 270 litres

Special features: Ultrasonic cleaning

Cleaning chamber 50% floodable

Drying systems:

Rotating hot air pulsed blower system

Vacuum drying system

Filter systems: Fine filtration of wash

solution on return to tank and on the

pressure side of the pump

Excellent cleaning results with the MAFAC JAVA are achieved by operating the standard feature of spray-flood cleaning. The partial flooding of the cleaning chamber is carried out simultaneously to the spray cleaning of parts, supported by the patented rotation of the cleaning system and the holding basket. Flood cleaning operations are especially effective for components with areas that cannot be reached directly by the cleaning detergent due to undercuts and hidden contours.

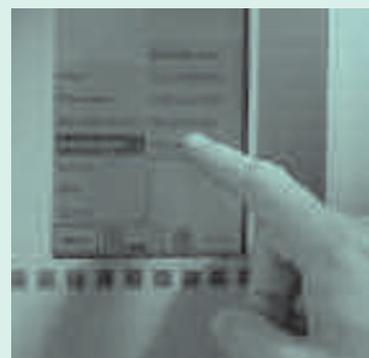
Reduced secondary process times, effective bath care

The JAVA significantly contributes to the reduction of secondary process times by its high-performing quick-draining

operation. Effective bath care is guaranteed by a standard coalescing oil separator.

User-friendly touch panel control

The MAVIATIC visual display software, developed in-house by MAFAC specialists, offers excellent ease of use in Windows „Look&Feel“. It is based on a standardised touch screen control system which is generally adaptable to the entire MAFAC model range.



MAFAC ELBA

Versatile spray cleaning with a powerful dual wash tank system.





Spray cleaning system

Selected technical data:

Dimensions:

w 1400 x h 1850 x d 1800 mm

Weight: net 950 kg

Wash tank 1: 475 litres

Wash tank 2: 300 litres

Drying systems:

Rotating pulsed air blast system

Stationary hot air drying system

Filter systems: Fine filtration of wash

solution on return to tank and on the

pressure side of the pump

The MAFAC ELBA is your reliable partner in mastering the versatile requirements of industrial parts cleaning.

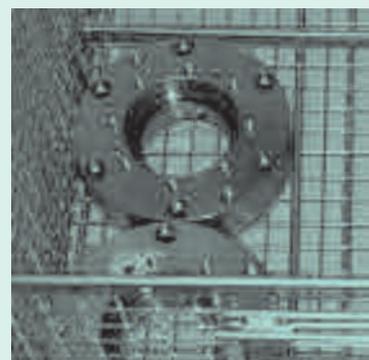
The well-proven dual wash tank system is compact, powerful, eco-friendly and can be used flexibly for a wide range of cleaning applications.

Proven worldwide in a wide variety of industries

ELBA cleaning systems provide for clean results after machining processes. Companies in the car industry and their suppliers, end users in the electronics industry and in machine shops benefit from the MAFAC ELBA's advantages as do electro-plating, hardening and coating shops. Bulk materials, single workpieces, as well as batches of stainless steel, mild steel, cast iron, non-ferrous metals or even plastics are cleaned reliably.

Wide range of cleaning processes and programs

The dual wash tank technology, in combination with unique process technologies, offers a wide range of options for efficient pre- and post treatment processes. According to your specific demands, the two wash tanks can be used, for example, for washing and rinsing. By offering a rotating pulsed compressed air blast drying system or a stationary hot air drying system, MAFAC provides for high-quality options in drying technology meeting customers' individual system requirements.



MAFAC KEA

Compact and clean are the featured strengths of this mini spacer.





Spray cleaning system

Selected technical data:

Dimensions: w 950 x h 1500 x d 1200 mm

Weight: net 480 kg

Wash tank: 320 litres

Drying system:

Stationary hot air pulse blower system

Filter system: Fine filtration of wash solution on return to tank and on the pressure side of the pump

With a minimum of space, the MAFAC KEA offers high-end technology for a wide range of applications. Discover the numerous benefits of this compact single tank cleaning system, designed for decentralized use.

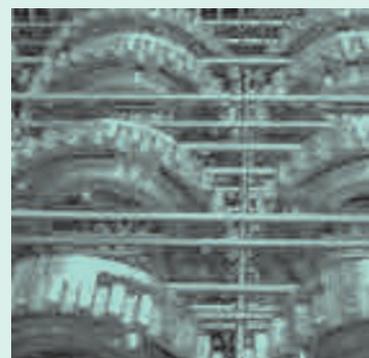
The basis for reliable cleaning results with the KEA is MAFAC's unique invention of the spray cleaning process with counter- or co-rotation of the holding basket and spraying frame. The special design of the spraying system including flat beam jets as well as full beam jets allows for impulsed on-the-spot cleaning of components and for surface cleaning. The cleaned parts are dried by a stationary hot air pulse blower system using two alternating pipes for the blowing process.

Intelligent bath care

Long and reliable bath life of the KEA is ensured by MAFAC's coalescing oil separation system, which utilises a floating suction device within the wash tank. For further enhancement, an additional fine filter can be installed, as an option, for removal of the smallest particles.

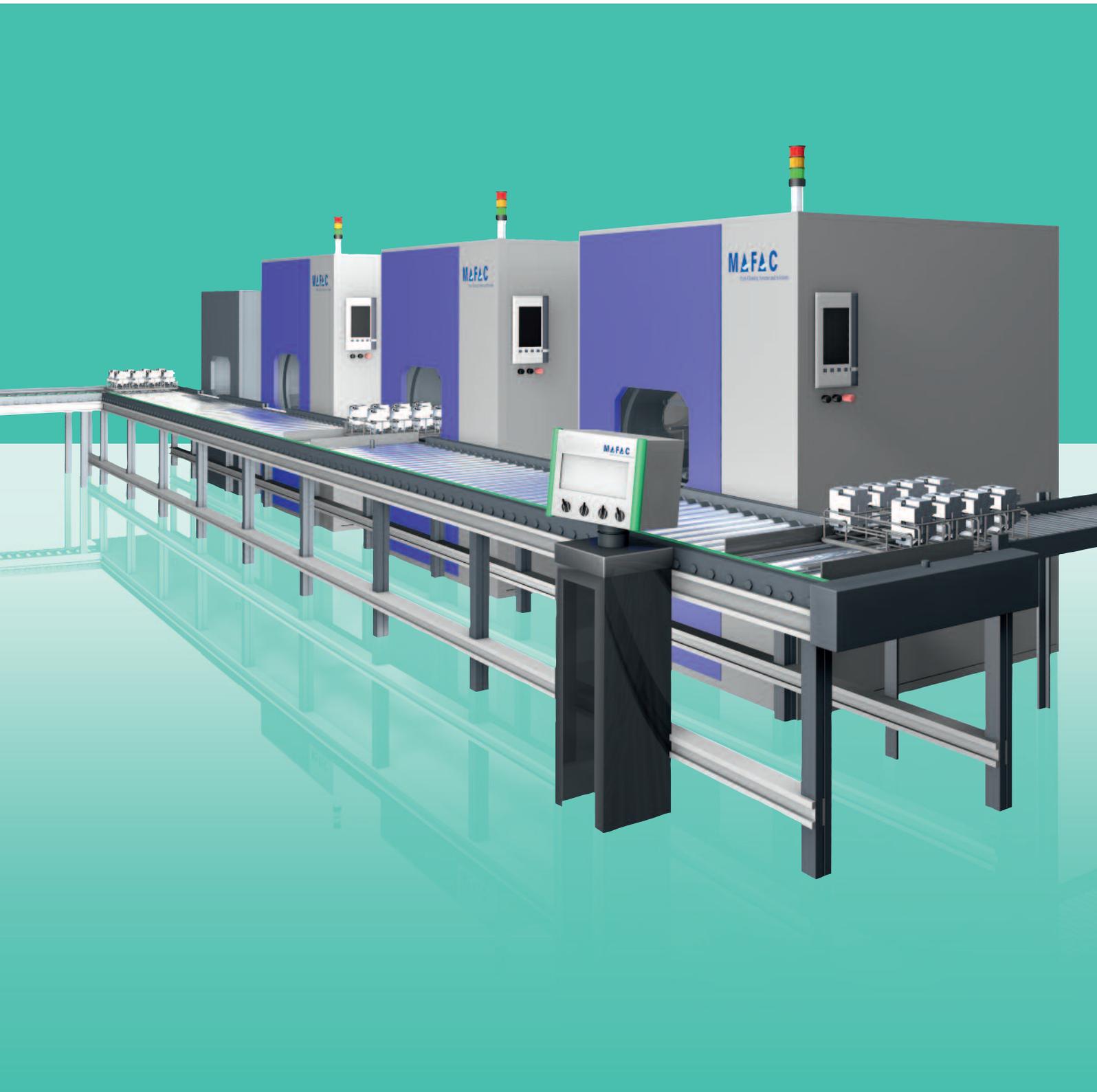
Compact, space-saving and quiet

Despite its space-saving design, the KEA's wash tank holds a considerable volume of 320 litres. Another user-friendly aspect is its reduced noise level. With figures of only 64 to 71dB(A) the system is exceptionally quiet.



MAFAC system solutions

Customised systems for fully automated parts cleaning.





Fully automated systems:

- Development and project management
- Tailor-made process solutions
- Innovative plant concepts
- Basket handling and transfer systems

Are you interested in integrated system solutions for fully automated parts cleaning? MAFAC is your expert partner in this range, too. Our very experienced project team can develop tailor-made process solutions according to your specific requirements.

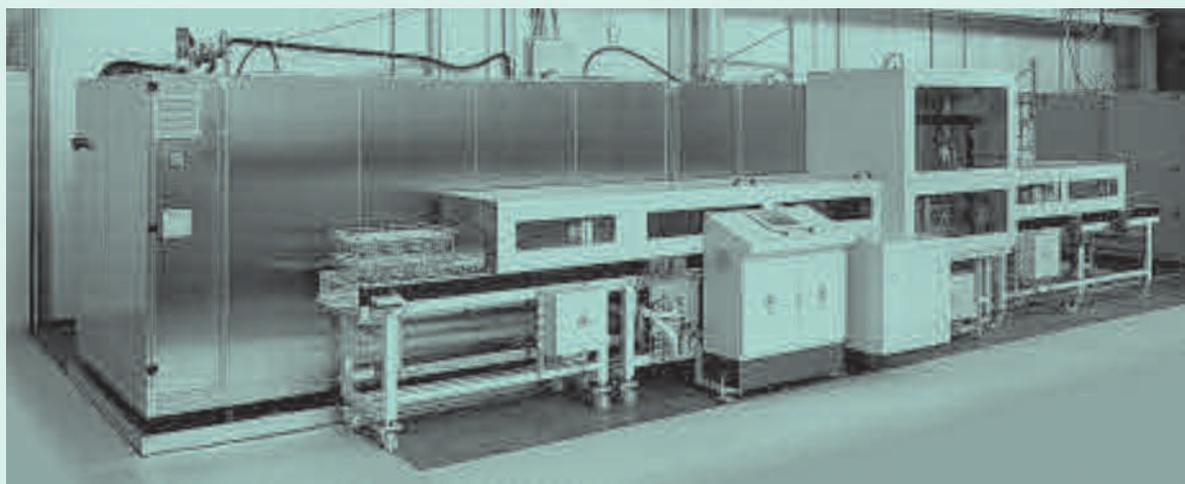
Multi-station cleaning processes for maximum efficiency

Based on our tried and tested MAFAC cleaning systems, we develop and produce automated solutions to the highest technical standards. All from a single source and adaptable across our range. The linking of several stand-alone machines to implement a comprehensive plant concept is the basis

for multi-station cleaning processes with maximum efficiency. Intelligent system configuration ensures a sustainable reduction of cycle times.

High repeatability due to perfect functional interaction

Our patented machine and process technology is enhanced by high-quality peripheral devices. Based on a clever combination of transfer systems, handling operation and robotics we guarantee safe processes and thus high repeatability of the cleaning results.



Accessories

For optimised cleanliness.

Work baskets



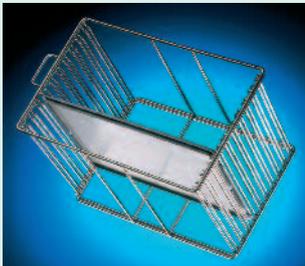
Euro standard basket

- to hold workpieces
- with adjustable height lid
- various mesh sizes
- stainless steel pickled and electropolished



Multiple basket frame

- to accept a number of smaller sized baskets for bulk materials
- flexible solution: several baskets with different dimensions and mesh sizes can be used
- incl. clamping cover to hold the baskets in place



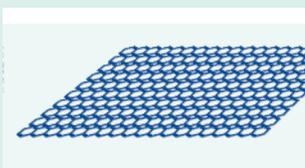
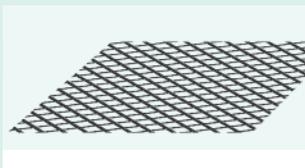
Customised baskets/fixtures

- to hold sensitive components
- suitable for single workpieces as well as batches



Compartment rods

- for quick and easy fixing of components inside the basket



Shelving and plastic inserts

- for singling of parts and interlayer for improved parts protection for separating parts and/or interlayering for improved part protection

Process optimisation



Complete demineralising unit

- to improve water quality and thus the related rinsing results
- reduces staining



Stationery rinse cycle (with additional tank) for „total loss rinsing“

- Benefits: improved consistency, no traces of detergent residue, perfectly clean surfaces

Maintenance of wash tanks



Filter cartridges and bags for our standard filter housings

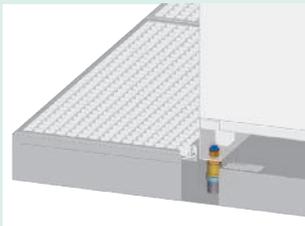
- available in various filter grades and diverse filter materials

Detergent concentration test kit

- for improved process reliability



Safety and cleanliness



Collecting pan with leveling elements

- for more safety in accordance with WHG



Drip tray

- protects floors against minor leaks

Handling



Load trolley MOBILO

- for loading of MAFAC cleaning systems and for in-house transport of work baskets
- height-adjustable

Drain pump for waste water

- user-friendly device for draining of wash tanks





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Cleanliness in brief:

MAFAC ranks among the world's market and technology leaders in aqueous parts cleaning.

Their success story started in 1968, when the MAFAC factory, newly founded by Ernst Schwarz, focused on the production of belt grinding machines for the metal working industry. Soon enough, the family business recognised the potential in industrial component cleaning. So the development and production of the first cleaning systems started in 1974, and strategic development continues to this day, driven by continuous innovation. With the launch of the SF 60.40, the world's first compact cleaning system to incorporate the patented process technology of integrated spray-flooding was created and MAFAC set new standards in aqueous cleaning. Based on the unique process feature of co- or counter-rotation of the holding basket and the spraying frame, MAFAC offers a wide range of compact cleaning systems as well as integrated system solutions for highly diversified industries, e.g. for the most demanding of cleanliness requirements.

Please contact us:

