



PURE TECHNOLOGY.

MECHANICAL FILTRATION SYSTEMS

For coolants
as single position or mass extraction

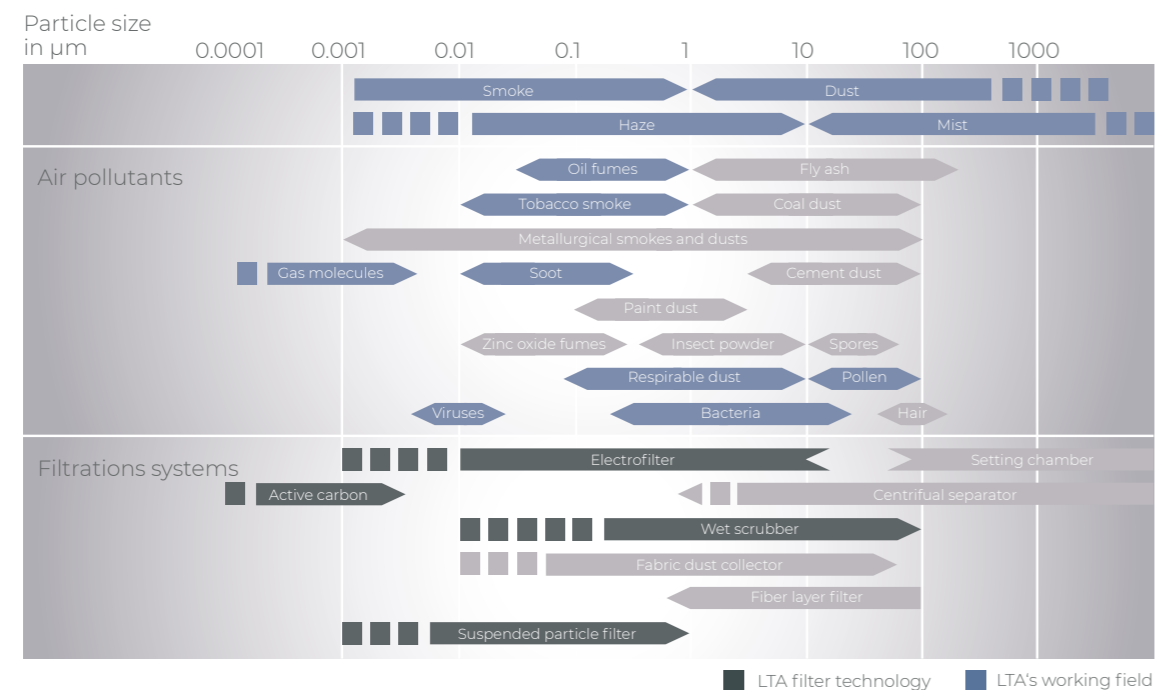
M 60-CMP | M 150-CMP | M 250-CMP | M 400-CMP
M 120 | M 240_MV | M 200 | M 400 | M 600



LTA LUFTECHNIK. DEVELOPING THE FUTURE OF AIR FILTRATION.

With LTA Lufttechnik at your side, you can solve practically any filtration task. Our trained experts carry out research, development and production – with over 40 years of experience and in-depth understanding of customer requirements. This results in technological milestones for companies and groups around the world.

Why not turn our advanced knowledge into a lasting benefit for yourself? We will support you throughout the entire product life cycle, from advice and planning to installation and commissioning, through to professional services.



As a global full-range supplier, we produce solutions for compact filtration systems and plan and set up filtration systems for large extraction systems. We specialize in emulsion and oil mist, as well as dust and chip extraction, for particles ranging in size from 0.001 to 100 μm . Utilizing our expertise in the field of piping systems, flow simulations, safety technology and turn-key solutions, we create a whole range of added value for our customers across the entire life cycle of a system.

OUR FILTRATION SYSTEMS

<p>ELECTROSTATIC FILTRATION SYSTEMS FOR COOLANTS</p> <p>As single position or mass extraction</p>	<p>MECHANICAL FILTRATION SYSTEMS FOR COOLANTS</p> <p>As single position or mass extraction</p>	<p>MECHANICAL FILTRATION SYSTEMS FOR DUST AND SMOKE</p> <p>As single position, mass or central extraction</p>	<p>AIR PURIFIER VIRUS CLEANER VC 60</p> <p>Against viruses, bacteria, pollen and other germs</p>
<p>ELECTROSTATIC FILTRATION SYSTEMS FOR COOLANTS</p> <p>As mass or central extraction</p>	<p>MECHANICAL FILTRATION SYSTEMS FOR COOLANTS</p> <p>As mass or central extraction</p>		

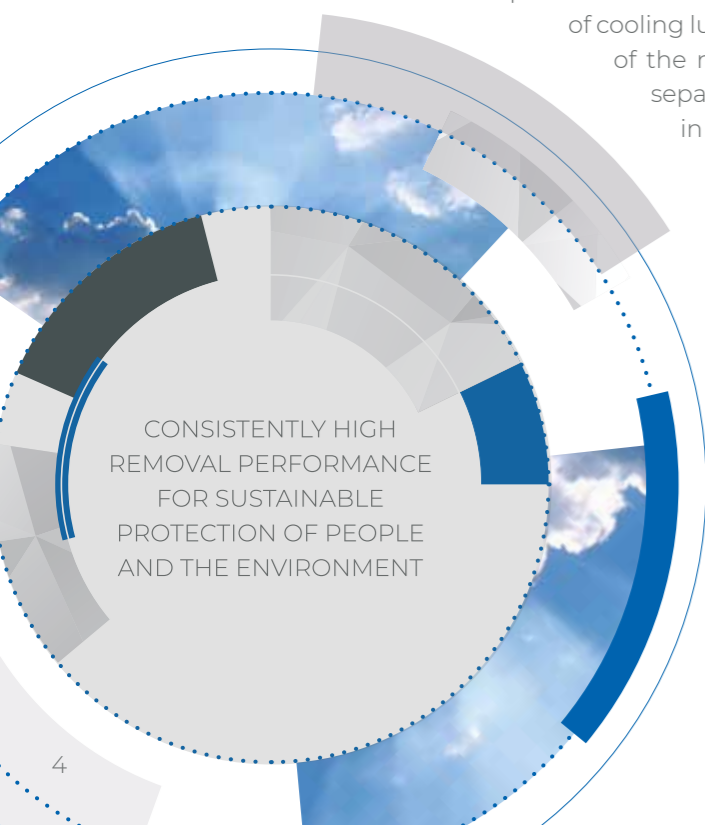
MECHANICAL FILTRATION SYSTEMS

For coolants as single position or mass extraction



The mechanical cooling lubricant filters for emulsion and oil mist are low-maintenance and budget-optimized air filters for industry and trade. In mechanical filtration systems for cleaning and extracting emulsion and oil mist, the polluted air is cleaned using various mechanical filter elements.

Coarse particles are separated in the first stage of the air filter by a pre-filter. The pre-filter works on the principle of inertial separation and protects against foreign bodies. The pre-cleaned air flows through the main filter, in which the air is cleaned of cooling lubricant particles. Depending on the density and design of the main filter elements, smaller and smaller particles are separated. The process of particle separation is described in the following four ways: Sieving effect, inertia effect, barrier and diffusion effect. An optional post-filter can be installed, e.g. for smoke or an activated carbon version for odours. The cleaned air is distributed to the environment via the fan of the filtration system.



Our filter elements and their efficiency are **tested and confirmed according to DIN**. By the practiced quality system, **we continuously guarantee a high and consistent quality** of our systems. The **safety-related components** were also approved by the **IBExU** and have proven themselves on over 3000 machine tools worldwide.

EXTRACTION CAPACITY

from 600 to 7.500 m³/h

COLLECTION EFFICIENCY

up to 99,995 % (DIN EN 1822)

AREAS OF APPLICATION

- Removal of oil and emulsion mist e.g. in machine tools and processing centers as single position or mass extraction
- Applications with the minimum amount of lubrication
- Special applications such as extraction of plastic, silicone and separating agent vapors
- Collection and removal of soldering, welding and oil fumes
- Extraction of pollutants by cleaning vapors, aquatic surfactants and dielectric

THE ADVANTAGES FOR YOU

- Protection of employees against particulate matter hazardous to health
- Low maintenance costs due to cleanable, reusable filter elements
- Efficient blower for optimal energy balance
- Continuously adjustable for every application
- High availability and process reliability through variable use of different filter elements
- Filtration solutions from a single source: Consultation and project planning, flow simulation and heat recovery, commissioning and service
- Explosion and fire protection at machines with oil-cooled tools
- Compliance with all industrial and authority standards
- Certified according to ISO 9001 and ISO 14001

COMPACT



M 60-CMP

Extraction capacity: 600 m³/h
Dimensions (LxWxH): 710 x 345 x 400 mm
Weight: From 50 kg
Operating voltage: 230 or 400 V



M 150-CMP

Extraction capacity: 1.500 m³/h
Dimensions (LxWxH): 740 x 485 x 555 mm
Weight: From 70 kg
Operating voltage: 230 or 400 V



M 250-CMP

Extraction capacity: 2.500 m³/h
Dimensions (LxWxH): 820 x 650 x 710 mm
Weight: From 105 kg
Operating voltage: 230 or 400 V



M 400-CMP

Extraction capacity: 4.000 m³/h
Dimensions (LxWxH): 820 x 650 x 860 mm
Weight: From 120 kg
Operating voltage: 230 or 400 V

STANDARD



M 120

Extraction capacity: 1.200 m³/h
Dimensions (LxWxH): 800 x 625 x 610 mm
Weight: From 80 kg
Operating voltage: 230 or 400 V



M 240_MV

Extraction capacity: 2.400 m³/h
Dimensions (LxWxH): 800 x 625 x 1.105 mm
Weight: From 170 kg
Operating voltage: 400 V

STANDING DEVICES



M 200

Extraction capacity: 2.500 m³/h
Dimensions (LxWxH): 700 x 700 x 2.000 mm
Weight: From 295 kg
Operating voltage: 400 V



M 400

Extraction capacity: 5.000 m³/h
Dimensions (LxWxH): 700 x 1.400 x 2.000 mm
Weight: From 590 kg
Operating voltage: 400 V



M 600

Extraction capacity: 7.500 m³/h
Dimensions (LxWxH): 700 x 2.100 x 2.000 mm
Weight: From 885 kg
Operating voltage: 400 V

DESIGN TYPES

COMPACT

The low-cost filtration systems M 60 / 150 / 250 / 400-CMP impress with high effective power and reliability for flexible use in space-critical mounting situations.

Due to the compact design and the resulting lower weight, the filtration systems can usually be integrated directly on the machine hood. Piping systems and an additional installation area are thus saved.

STANDARD

The filtration systems M 120 / 240 guarantee long-term and economical use in a wide variety of applications.

They offer the possibility of a modular structure for customer-specific requirements and thus a maximum of individual solutions. With additional options such as customer-specific interfaces, the filtration systems offer a wide range of variability.

STANDING DEVICES

Thanks to ideal flow conditions and variable equipment, a longer service life for the filter elements of the filtration systems M 200 / 400 / 600 can be guaranteed and subsequent costs reduced.

The high-performance standing devices offer the option of being used as a single-user or group extraction system. Due to the modular construction, it is possible to react flexibly to different extraction volumes.

VARIANTS

CMP COMPACT DESIGN

The CMP filtration system is used where the available installation area is limited and there is nevertheless a need for sustainable protection.

MOBIL MOBILE VERSION

The M 120 filtration system is optionally available in a mobile version with an extraction arm for flexible use in all applications.



SELECTION CRITERIA

m³/h WHAT EXTRACTION CAPACITY?

With coolants, a rate of 250 times per m³ and h is assumed as a guide value for air replacement. As an example, there is – for a processing space in the machine of 4 m³ and automated charging – a required effective extraction capacity of approx. 1000 m³/h. In this example, therefore, a filtration system from the M 120 series is required.

MH / MV HORIZONTAL OR VERTICAL?

The M 240_MV filtration systems can be supplied both in horizontal and in vertical designs.

FUNCTIONALITY

TRANSITION PIECE

Depending on the application and desired positioning of the filtration system, the transition piece at the air inlet can be mounted in almost any way.

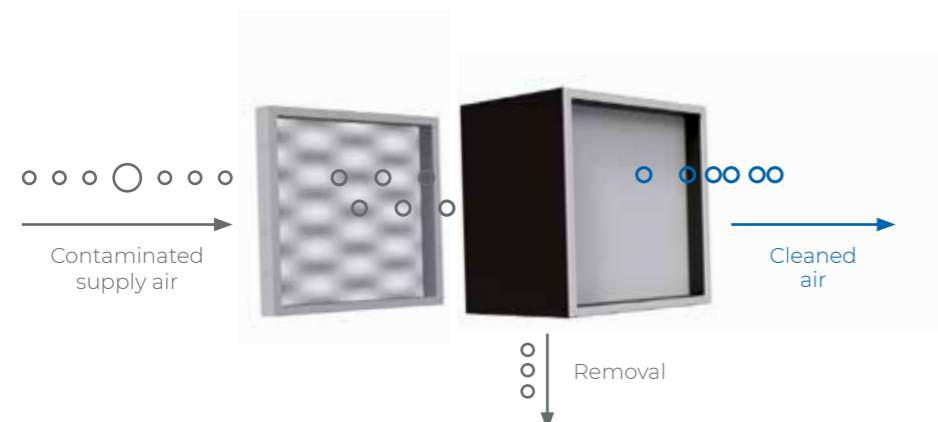
PREFILTER

The contaminated air is suctioned via prefilters. This early stage removes coarse particles. It protects the following filter elements from foreign bodies. The prefilters are adapted to the respective application.

MAIN FILTER

The pre-cleaned air flows through the main filter. Matching the respective process requirements, filter elements are used that ensure the maximum possible particle separation through a sieve effect and/or inertia effect and/or blocking effect and/or diffusion effect.

In a network of filter elements, the main filter achieves the highest separation efficiency. As a rule, this is already sufficient to comply with the legally required limit values in the cleaned air.



1

2

3

5

4

5

4

3

2

Example based on M 200

Example based on M 120

COLOR SELECTION

The LTA standard paint is RAL 7035, light gray. Other colors/paints are always possible.



POST-FILTER (OPTIONAL)

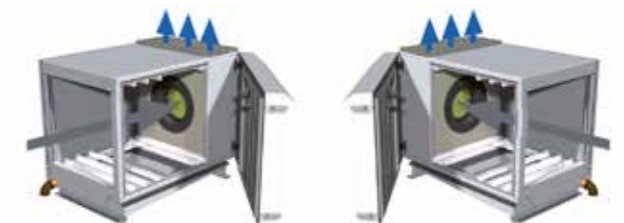
The optional post-filters can, for example, be used against odors, smoke or substances hazardous to health as an additional level of security.

BLOWER

An energy-efficient blower sucks the air current over the connection opening through the air filter and conveys the cleaned air out of the housing.

MAINTENANCE DOOR

The maintenance door can optionally be installed on the left or right side of the filtration system, in order to enable easy access to filter inserts and the control system independently of the positioning of the system.



Right design

Left design

INTERFACES

LTA filtration systems are compatible with all standard machine control systems and regulations:

- Country-specific regulations (e.g. CSA/UL 508 A)
- Customer-specific regulations (automotive)
- Special voltage (110 V–480 V 50/60 Hz)

LTA LUFTECHNIK. YOUR PROFESSIONAL SUPPORT AROUND THE WORLD.

At LTA, we pride ourselves on working closely with our customers in the development of filtration solutions that precisely match actual customer requirements, and in the geographical sense. Our service network spans 7 countries worldwide, so our customers never need to wait longer than absolutely necessary for professional service.

Dedicated employees at all our sites provide professional support on all matters relating to industrial filtration. We ensure optimum availability of your filtration systems and see ourselves as the key to your productivity. Alongside our technical expertise, customers value our excellent availability and constructive collaboration.

24/7/365 LTA SERVICE

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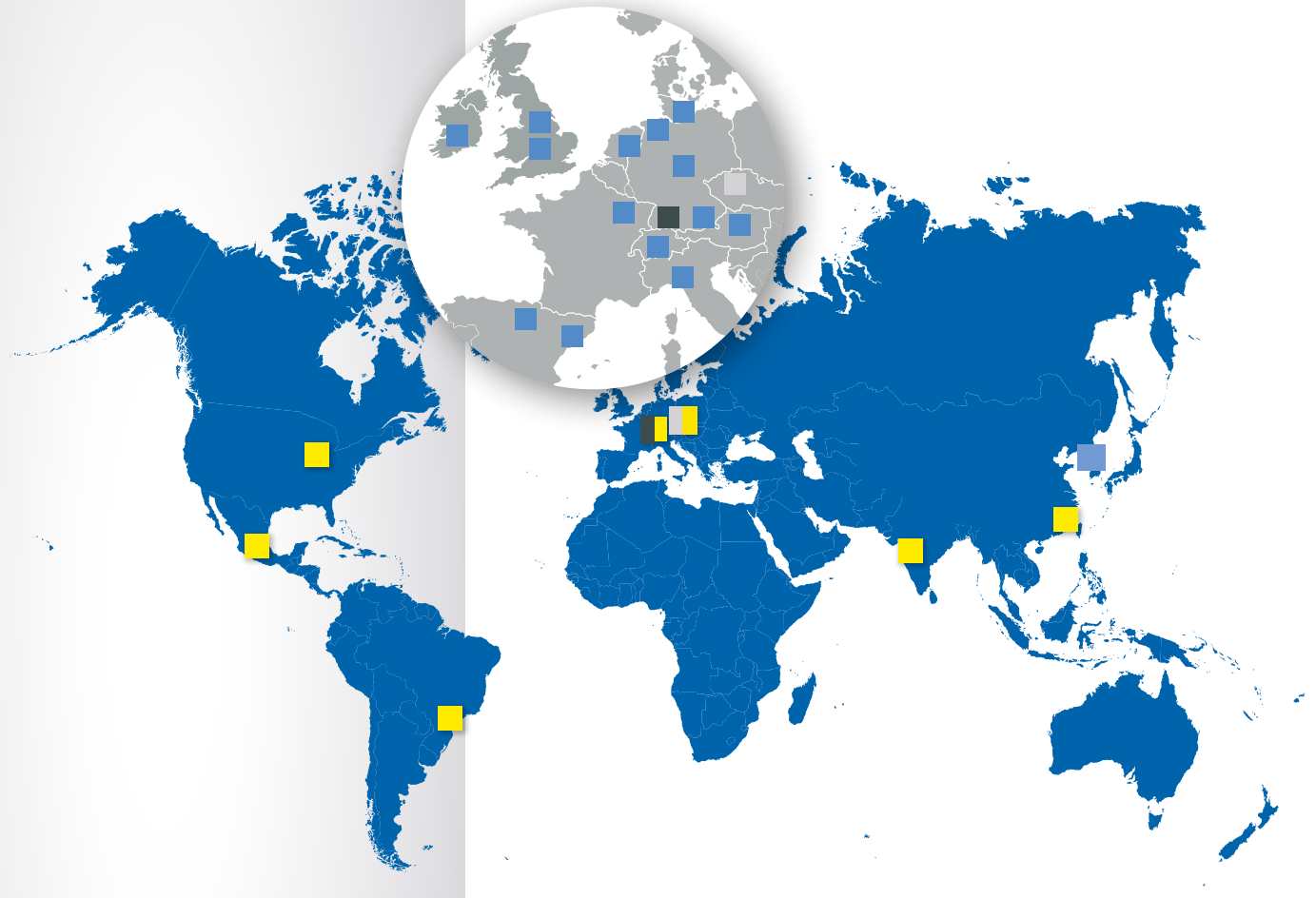
Even more flexible.
Even faster.

**OUR NEW
ONLINE SHOP**



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- Headquarters
- Production
- Agents and partners
- Sales and service locations

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