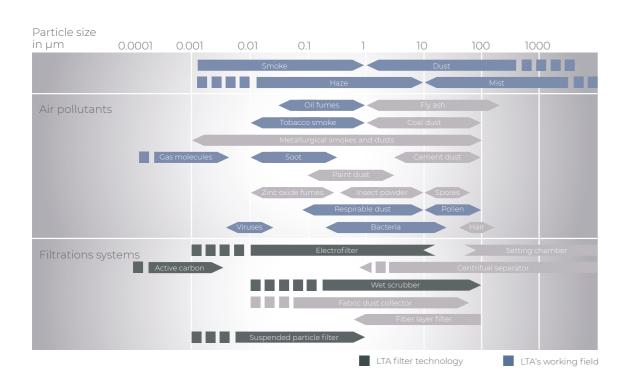


LTA LUFTTECHNIK.

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 μ m. 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

ELECTROSTATIC
FILTRATION SYSTEMS
FOR COOLANTS
As single position or mass extraction

ELECTROSTATIC
FILTRATION SYSTEMS
FOR COOLANTS

As single position or mass extraction

MECHANICAL
FILTRATION SYSTEMS
FOR COOLANTS

As mass or central extraction

MECHANICAL
FILTRATION SYSTEMS
FOR COOLANTS

As mass or central extraction

MECHANICAL
FILTRATION SYSTEMS
FOR DUST AND
SMOKE

As single position, mass or central extraction

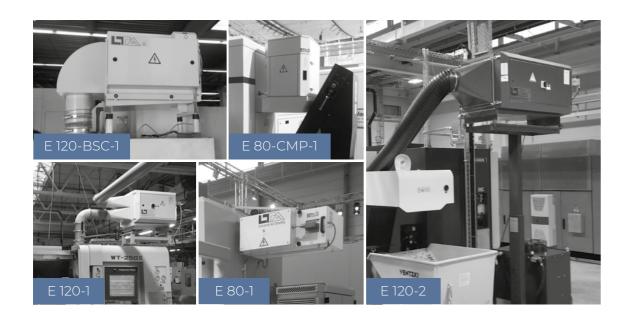
AIR P
VIRUS
Again
poller

AIR PURIFIER
VIRUS CLEANER VC 60

Against viruses, bacteria,
pollen and other germs

ELECTROSTATIC FILTRATION SYSTEMS

For coolants as single position or mass extraction



Electrostatic filtration systems for oil and emulsion mist are the ideal solution to sustainable production in industry and trade. The prefilters and main filters are completely washable and therefore reusable. As extremely flow-optimized solutions, the electrostatic filters for coolant mist stand for a long service life, as well as long-running and consistently high performance. All applicable industrial and authority requirements are fulfilled without compromise.

Filtration systems E 80 to E 720 are suitable for installation on systems and machines or for local extraction of several machines. The widely diversified range with numerous thought-out variants and options offers the right filtration system for every application. A compact design, paired with easy installation and minimum maintenance effort, makes the filtration systems of the LTA the ideal companion for sustainable protection of people and the environment.

CONSISTENTLY HIGH
SUCTION POWER
FOR SUSTAINABLE
PROTECTION OF PEOPLE
AND THE ENVIRONMENT

Our products and their efficiency have been **tested and confirmed by two independent institutes**. 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 800 to 7200 m³/h

COLLECTION EFFICIENCY

up to 99,8 %

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

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
- · Flow-optimized and filter elements without loss of pressure
- 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

5



E 80-CMP-1

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

 $800 \, \text{m}^3/\text{h}$ 500 x 500 x 610 mm From 58 kg 230 or 400 V



E 80-1

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

 $800 \, \text{m}^3/\text{h}$ 855 x 595 x 310 mm From 68 kg 230 or 400 V



E 120-BSC-1 / E 120-BSC-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

800 x 660 x 610 mm/1130 x 660 x 610 mm From 85 kg/from 110 kg 230 or 400 V



E 120-1 / E 120-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

800 x 625 x 610 mm/1130 x 625 x 610 mm From 100 ka/from 130 ka 230 or 400 V



E 120-HCIP-2 / E 240-HCIP-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

1200 m³/h / 2400 m³/h 1285 x 640 x 910 mm/1245 x 1280 x 945 mm 190 kg/400 kg 400 V



E 240-1 / E 240-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

2400 m³/h 800 x 1105 x 610 mm/1130 x 1105 x 610 mm From 170 kg/from 230 kg 230 or 400 V



E 480-1 / E 480-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

 $4800 \text{ m}^3/\text{h}$ 800 x 1105 x 1170 mm/1130 x 1105 x 1170 mm From 340 kg/from 460 kg 400 V



E 720-1 / E 720-2

Extraction capacity: Dimensions (LxWxH): Weight: Operating voltage:

800 x 1105 x 1730 mm/1130 x 1105 x 1730 mm From 510 kg/from 690 kg 400 V

VARIANTS

COMPACT DESIGN

The E 80-CMP filtration system is used where the available installation area is limited and there is nevertheless a need for sustainable protection. The compactly built filtration systems offer high performance and reliability for use in all situations where space is critical. The air filter can be mounted directly on the machine without accessories.

BSC

ENTRY AIR FILTER

The E 120-BSC-1 and E 120-BSC-2 filtration systems are cost-effective, single-stage or two-stage entry air filters, which manage without an interface with the machine, but nevertheless offer all positive properties of the electrostatic filtration systems.

SELE-CLEANING

The E 120-HCIP and E 240-HCIP filtration systems have inbuilt cleaning automation, through which a consistently high collection efficiency and a constant operating reliability with minimum maintenance effort is achieved. The special feature of the cleaning system is cleaning without chemical additives or aqueous solutions, but only with the coolants used in the machines.

MOBILE VERSION/MAGNESIUM

The E 120 filtration system is optionally available in a mobile version with an extraction arm for extracting welding fumes, as well as in a magnesium design that is approved for processing magnesium with emulsion and oil.



SELECTION CRITERIA

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 E 120 series is required.

ONE OR TWO STAGES?

Single-stage air filters (e.g. E 120-1) can be used for coolant pressures of up to 40 bar. For pressures above 40 bar, the two-stage variants (e.g. E 120-2) of the electrostatic filtration systems are recommended for industry and trade.

HORIZONTAL OR VERTICAL?

The E 80-1, E 240-1 and E 240-2 filtration systems can be supplied both in horizontal and in vertical designs.

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.

6

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)

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

2

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.

IONIZER

3

In the ionizer, the arriving, neutral particulate matter is given a positive charge by means of an electric field and thereby prepared for removal in the collector.

COLLECTOR

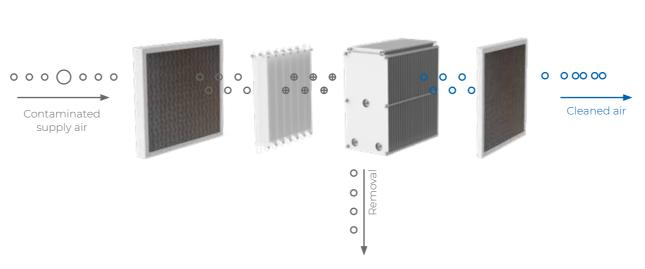
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In the collector, the particles that have been given a positive charge in the ionizer are diverted and removed via collector plates (negative charge). The oil or the emulsion is collected and fed back into the coolant circuit of the machine tool.

NEUTRALIZATION FILTER

5

The electrical charge of the air is neutralized.



Collection

Post-filtration

3

Ionization

Prefiltration

8

LTA LUFTTECHNIK.

YOUR PROFESSIONAL SUPPORT AROUND THE WORLD.

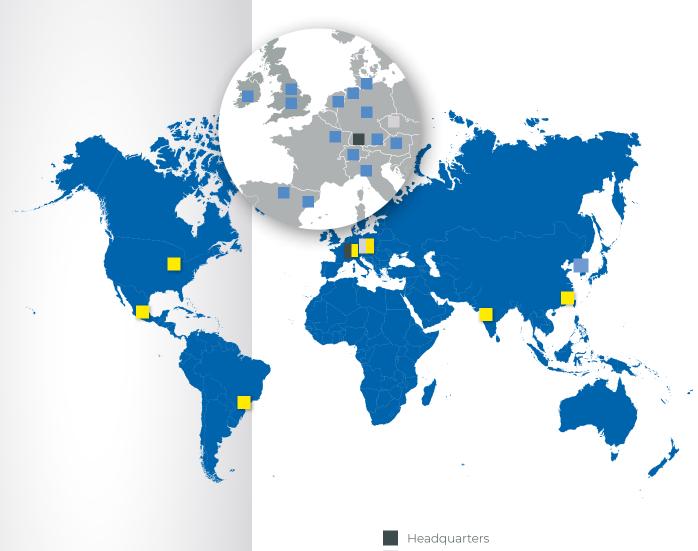
At LTA, we pride ourselves on working closely with our customers in the development of filtration solutions that precisely match actual customer requirements, and in the geographical sense. Our service network spans 7 countries worldwide, so our customers never need to wait longer than absolutely necessary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









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