

CLEAN AIR IS OUR WORK

LTA
Industrial Air Cleaning



AC 1000

LTA – your specialist for filtration solutions

LTA AIR FILTERS

Clean air pays dividends

With its extensive filtration concepts and a wide range of individual solutions, LTA offers the right filtration system for every kind of environmental condition. No matter what your field of business, we can transform your specific needs into pure air. At the same time, we will make the available thermal energy work for you. Whether you are a large-scale operation or a craft enterprise – all LTA systems can be adapted with the utmost flexibility to different areas of application.

The LTA product portfolio encompasses the following fields:

- Oil and emulsion mist filters (compact units and large-scale plants with separate fan units)
- Dust filters
- Safety technology for oil-cooled machine tools

Wet separation

Wherever oil or emulsion mist is involved, LTA shows its strength with custom-built air purification systems. This includes solutions for grinding, turning and milling machines or for machining centers in the exhaust or recirculation mode.

Dry separation

When extracting dust and chips during dry grinding and when capturing and separating solder, welding and oil fumes, LTA concepts offer a range of user-friendly solutions.

ESP or mechanical filtration systems

Working in close cooperation with machine and plant engineering firms, LTA pursues two strategies for machine tool extraction.

Electrostatic precipitation (ESP) systems are the preferred choice for capturing aerosols. Not only are they extremely effective (up to 99%* for a new unit), but they use fully regenerable filter elements with virtually no pressure loss. This allows for the minimization of output of the exhaust fans, while the only waste disposal costs are for water to wash the filters. Another benefit of electrostatic precipitation is that only a minimal amount of coolant is lost through transition into the vapor phase.

Where an electrostatic filter is only suitable with restrictions, we tend to revert to "custom-tailored" mechanical filtration systems. The aim here is to enhance the flow conditions in such a way that optimum extraction is achieved using only a low-volume flow. This optimization ensures that aerosols are reliably captured using minimal energy, while maximizing the service life of the filter elements.



LTA air filters comply with the Energy-Related Products Directive (ErP).

Through the ErP guidelines, the European Union commits to reducing carbon emissions by at least 20 % by the year 2020.

* Separation of > 99 % refers to a particle size of < 1 µm. The values are measured and confirmed by the independent Institute ILK Dresden.

OIL AND EMULSION MIST FILTERS

AC 1000

- ESP or solid matter filter
- Effective suction capacity: up to 800 m³/h
- Can be mounted directly at the machine
- Very low energy consumption
- Option: Free-standing design

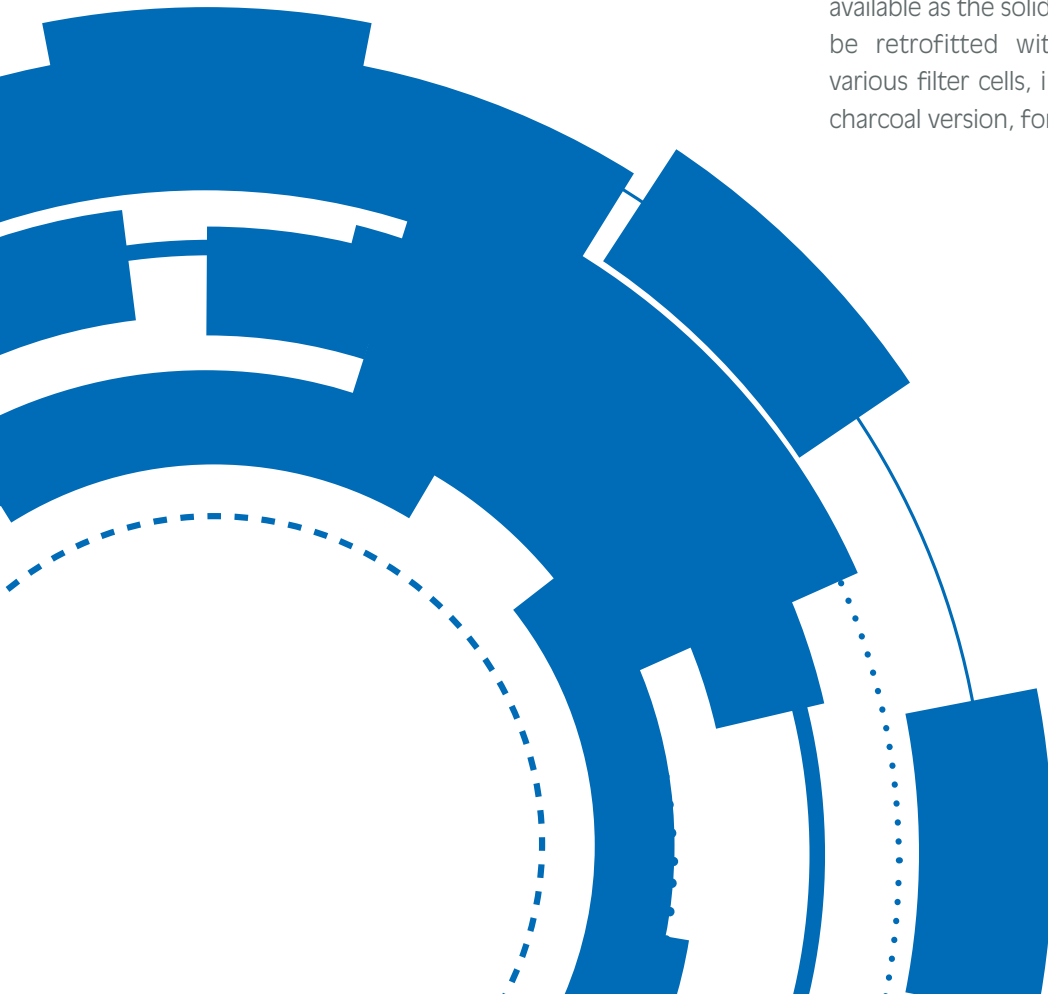
Like the AC 500, the **AC 1000** is also characterized by its compact design and can be mounted directly on the machine. It also comes as either a horizontal or vertical version.

The pre-filters of the AC 1000 are integrated in the housing with fully washable filter elements. The air filter can be used for both oil and emulsion. The collector cell is compatible with our AC 3000 and AC 8000 – AC 24000 models, which makes maintenance simple and economical.

With an energy consumption of just 0.5 kW, an excellent rate of filtration of > 99 % and a noise level of 75 dB(A), the AC 1000 is extremely energy efficient and environmentally friendly. As the electronics are fully integrated into the air filter, no special electrical cabinet is required.

It can be powered with either single-phase or as an option three-phase current. The filtration system is designed for an effective flow rate of up to 800 m³/h, making it suitable for internal coolant pressures up to a maximum of 20 bar and a maximum machine interior of 4 m³.

In addition to the ESP version, the AC 1000 is also available as the solid matter filter AC 1000 Solid. It can be retrofitted with an optional afterfilter with various filter cells, i.e. for smoke or, in the activated charcoal version, for odors.



Technical data

Designation	AC1000	
Design	ESP	
Variant	230 V	400 V
Fan output (m ³ /h)	1,315	1,950
Suction capacity up to (m ³ /h)	800	800
Connection (V, Hz, kVA)	230, 50-60, 0.6	400, 50, 0.45
Standard pressure (PA)	490	780
Noise level appr. (dB (A))	75	75
Dimensions L x W x H (mm)	830 x 595 x 310	845 x 595 x 310
Weight appr. (kg)	68	68

